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A LEGAL PERSPECTIVE ON DIGITAL TRADE: KEEPING THE INTERNET NEUTRAL

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The issue of internet neutrality, while a subject of heated debate in developed countries across the world, has more recently become a matter of intense discussion in emerging economies like India. A recent order by the Indian telecom regulator has prohibited the 'zero-rating' of data services by telecom providers - a practice largely acknowledged to be a violation of the net neutrality principle. This move has put brakes on the roll out of Facebook's recent 'Free Basics' initiative that aims to provide free but limited data services to poor sections of the Indian population. While the traditional discourse on net neutrality has largely remained in the domain of technology law, this paper analyses trade-related implications of the Indian decision, making a case for net neutrality from a trade and development perspective. It is argued that the international trade law framework constitutes an important source of anti-trust safeguards governing the trade of internet-based services. An open and neutral internet is key to preventing concentration of market power in the digital economy, ensuring ease of entry to small and medium-sized internet-based business owners in India.

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I. INTRODUCTION

Trade and development have long been linked, but traditional approaches have centred largely on improving market access to developed country markets for goods from developing countries.[1] While an important aspect of trade and development, this focus overlooks both the potential for emerging growth sectors

[1] Katrin Kuhlmann, *Reframing Trade and Development: Building Markets through Legal and Regulatory Reform*, THE E15 INITIATIVE 1 (Nov. 2015), *available at* http://e15initiative.org/wp-content/uploads/2015/09/E15-Finance-Kuhlmann-final.pdf .

and need to address supply side constraints in developing markets themselves. Services are becoming increasingly important, and now that the internet is gradually taking over as the silk route of the modern world,[2] the fact that many people in the developing world do not have access to the internet poses an enormous barrier to market entry and access.[3] In addition, newer thinking around trade and development has highlighted the significance of legal and regulatory reform, which is inherent in all aspects of trade and development, along with efforts to addresses *market inequalities that are inclusive of smaller enterprises*.[4] Such an approach recognizes the trade-offs that are central to market regulation – between market efficiency and growth, sustainability and short-term gains, and most significantly, inclusivity and exclusivity towards newer market entrants.[5]

These trade-offs have been put in the spotlight by recent developments in the telecom market resulting from a new initiative spearheaded by Facebook that aims to improve internet access for the poor in the developing world. Facebook's business model has been viewed by some as presenting domestic telecom regulators with a choice – seemingly one between expanding internet access and upholding net neutrality.[6] This paper will explore net neutrality from the perspective of regulatory issues concerning digital trade, balancing the trade-offs between the expansion of internet access, and efficient, inclusive and non-discriminatory regulation of the internet, both of which will be increasingly central to trade and development going forward.

II. IS THERE SUCH A THING AS A 'FREE (BASICS) LUNCH'?

A. Facebook's Offer

Facebook's CEO, Mark Zuckerberg has highlighted the stark reality that two-thirds of the world's population remains excluded from the internet.[7] The challenge to bring the next five billion people online has been taken on by a global

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[2]Anupam Chander, *Principles for Trade 2.0*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 17, (Mira Burri & Thomas Cottier eds., 1st ed. 2012).

[3]*See generally* Mark Zuckerberg, Is Connectivity a Human Right? 2, https://scontent-iad3-1.xx.fbcdn.net/t39.2365-6/12057105_1001874746531417_622371037_n.pdf.

[4]Kuhlmann, *supra* note1, at 1–6.

[5]Katrin Kuhlmann & Cheikh Sourang, *The Role of Law and Regulation in Scaling Up African Value Chains*, Occasional Paper 12 (Nov. 2015) (on file with authors).

[6]Pedro Henrique Soares Ramos, *Towards a Developmental Framework for Net Neutrality: The Rise of Sponsored Data Plans in Developing Countries*, The 42nd Research Conference on Communication, Information and Internet Policy 1, 17 (Mar. 31, 2014).

[7] Mark Zuckerberg, *Mark Zuckerberg on a Future Where the Internet Is Available to All*, THE WALL STREET JOURNAL (Jul. 7, 2014), http://www.wsj.com/articles/mark-zuckerberg-on-a-future-where-the-internet-is-available-to-all-1404762276.

partnership comprising Facebook, Ericsson, MediaTek, Nokia, Opera, Qualcomm and Samsung called Internet.org.[8] Internet.org collaborates with mobile network carriers in developing countries to offer a free mobile application providing access to select web-based services.[9]

This initiative is already active in forty-nine countries,[10] but has been subject to a vociferous public debate in India on the issue of net neutrality.[11] At the heart of this debate have been some difficult, unanswered questions about the scope of net neutrality, choice of certain internet services over others, and Facebook's role as gatekeeper of services accessed through this platform.[12] Internet.org requires service providers to shoulder the burden of data charges for services accessed by consumers at no cost. This has been met with concerns regarding the advantage it gives bigger web-based businesses,[13] especially in light of Facebook's unrivalled position in social media and its excellent advertisement performance.[14] On February 8th, 2016 the Telecom Regulatory Authority of India (TRAI) issued Regulations that effectively prohibited this service from being offered in India.[15]

B. Perspectives on 'Inclusive Development'

It is noteworthy that this debate hinges on different approaches towards creating what both sides understand to be an *inclusive internet*. Mark Zuckerberg has defended the initiative with an explicit statement that 'a reasonable definition of

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[8]Matt Buchanan, *Internet.org's Less-Than-Charitable Plan to Give the Internet to All*, THE NEW YORKER (Aug. 22, 2013), http://www.newyorker.com/tech/elements/internet-orgs-less-than-charitable-plan-to-give-the-internet-to-all.

[9]Dave Smith, *Why Some People Believe Mark Zuckerberg's Plan to Bring Cheap Internet to the World is Majorly Flawed*, BUSINESS INSIDER (Apr. 17, 2015), http://www.businessinsider.com/mark-zuckerberg-internetorg-has-a-few-major-flaws-2015-4.

[10] INTERNET.ORG, *Where we've launched*, https://info.internet.org/en/story/where-weve-launched/ (last visited Sept. 19, 2016).

[11] Ayush Soni, *India Deals Blow to Facebook in People-Powered "Net Neutrality" Row*, THE GUARDIAN (Feb. 8, 2016), https://www.theguardian.com/technology/2016/feb/08/india-facebook-free-basics-net-neutrality-row.

[12]Smith, *supra* note 9.

[13]*Id.*

[14]*Facebook Ads See Strong Engagement in India and Southeast Asia*, EMARKETER (Apr. 18, 2016), http://www.emarketer.com/Article/Facebook-Ads-See-Strong-Engagement-India-Southeast-Asia/1013839.

[15]Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016, Gazette of India, § 3, (Feb. 8, 2016). *See also* Yuthika Bhargava, *TRAI Rules in Favour of Net Neutrality*, THE HINDU (Feb. 8, 2016), http://www.thehindu.com/sci-tech/technology/internet/trai-rules-in-favour-of-net-neutrality/article8209455.ece.

net neutrality must be more inclusive.'[16] Focusing on those without internet access, Internet.Org has been pitched as an introduction to the internet for the poor.[17] This was strongly reflected in its public relations campaign in India that invoked the concept of *digital equality*, and the initiative was re-branded as 'Free Basics.'[18] There is a growing recognition that the digital revolution and the increasing 'datafication' of the world shapes societies and markets, and those excluded from the internet risk political and social exclusion – a new kind of 'voicelessness.'[19] From this perspective, offering the poor some, albeit limited, access to the internet is an effort to include them in the global knowledge economy and enhance economic and human development.[20]

At the same time, opposition to Internet.org has raised concerns of 'walled gardens' that exclude the poor from fair access to the internet and the range of services it offers.[21] One direct charge has been that providing such limited access to services can entrench inequalities and make the unsuspecting poor 'fodder for ad-targeting.'[22] This was indeed one of the considerations of the TRAI that expressed concerns about medium to long term effects associated with allowing Internet Service Providers (ISPs) to shape consumer experiences through a select offering of services.[23] Other concerns raised relate to the social stratification that could be solidified by allowing fragmentation of the internet, as well as possible manipulation for political and economic purposes.[24]

C. Using trade law to balance the trade-offs

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[16] Christopher T. Marsden, *Zero Rating and Mobile Net Neutrality*, *in* NET NEUTRALITY COMPENDIUM: HUMAN RIGHTS, FREE COMPETITION AND THE FUTURE OF THE INTERNET 241, 247 (Luca Belli & Primavera De Filippi eds., 1st ed. 2016).

[17] Vindu Goel & Mike Isaac, *Facebook Loses a Battle in India Over Its Free Basics Program*, N.Y. TIMES (Feb. 8, 2016),http://www.nytimes.com/2016/02/09/business/facebook-loses-a-battle-in-india-over-its-free-basics-program.html?_r=0.

[18] Soni, *supra* note 11.

[19] Jonas Lerman, *Big Data and Its Exclusions*, 66 STAN. L. REV. ONLINE 55, 56–60 (2013).

[20] Zuckerberg, *supra* note 3, at 2.

[21] Marsden, *supra* note 16, at 246.

[22] Susan Crawford, quoted in David Talbot, *Around the World, Net Neutrality Is Not a Reality*, MIT TECHNOLOGY REVIEW, Jan. 20, 2014, https://www.technologyreview.com/s/523736/around-the-world-net-neutrality-is-not-a-reality/.

[23] Explanatory Memorandum, Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016, Telecom Regulatory Authority of India, 5–15, ¶ 19 (Feb. 8, 2016).

[24] Ramos, *supra* note 6, at 14.

The Indian Regulator has taken note that Free Basics has the potential to reduce the cost of internet services and improve overall access but may at the same time disadvantage small content providers.[25] Thus, Free Basics' business strategy has implications for small- and medium-sized service providers, invoking antitrust principles associated with trade of services over the internet.[26] This paper will explore the questions of whether net neutrality principles ought to override the considerations of expanding internet access or how these considerations might be balanced, and answers these questions through the application of trade law.

Part III of this paper, describes net neutrality and zero-rating in particular, as well as the regulations issued by the TRAI prohibiting zero-rating in India. Part IV analyses the relationship between internet and trade, particularly the implications of antitrust principles for the trade of internet-based services. Part V analyses the international and domestic frameworks governing trade in services that constitute a legal source in support of a neutral internet for trade. Part VI, puts forth arguments for fair and competitive trade in services through an open internet and elaborates on its political, economic and social consequences for human development, beyond the realm of trade. Part VII concludes noting the significance of net neutrality principles for both the facilitation of trade in services as well as the functioning of social democracy. The paper proceeds on the premise that the internet is a necessary infrastructural service, crucial to a nation's economic growth and development.[27]

III. NET NEUTRALITY, ZERO-RATING AND THE INDIAN REGULATIONS OF 2016

A. The Zero-rating controversy: Innovation vs. access

The net neutrality principle has been a subject of debate with political, social and economic contours about the rules governing Internet Service Providers (ISPs) – the private carriers of a public network.[28] The core principle of net neutrality is that ISPs must not discriminate between the various services, content or applications

[25] *Supra* note 23,¶ 5.

[26] *See* Jennifer A. Manner & Alejandro Hernandez, *An Overlooked Basis of Jurisdiction for Net Neutrality: The World Trade Organization Agreement on Basic Telecommunications Services*, 22 COMM. LAW CONSPECTUS 57 (2014).

[27] *See* Network Neutrality: Competition, Innovation and Non-discriminatory Access,Hearing before the House Committee on the Judiciary Telecom and Antitrust Task Force, 1 (2006).

[28] Robin S. Lee & Tim Wu, *Subsidizing Creativity through Network Design: Zero-Pricing and Net Neutrality*, 23 J. ECON PERSPECT 61, 61 (2009) [hereinafter *Lee & Wu*].

accessed by their subscribers[29] (the terms 'content', 'applications' and 'internet-based services' are used interchangeably from this point forth in reference to the variety of services available on the internet). This is reminiscent of the question of market power and its interference with network access, an issue that has persisted from the time of the telegraph.[30] However, even amongst the proponents of net neutrality, there remains controversy about the kind of actions that are covered.[31] Directly blocking certain content against others or '*negative*' net neutrality violations have been the primary focus of regulation.[32] On the other hand, whether preferential treatment of certain content over others or '*positive*' net neutrality violates the non-discrimination rule has not been established equally conclusively.[33]

A key practice constituting 'positive' net neutrality, i.e. preferential treatment of certain content over others, is zero-rating – the exclusion of select applications from the subscriber's monthly-capped data use.[34] Zero-rating has earned its name because it translates to a sum total of zero costs for the use of such applications by a subscriber.[35] ISPs may charge content providers a fee to zero-rate their content (also often termed as 'sponsored data') with highly distortionary consequences for the internet-based service market.[36] However, even if ISPs do not charge content providers any fee, but pick and choose '*winners*' between applications of a similar class; allowing zero-rating to some and not others has an equally strong anti-competitive effect.[37] It allows more established applications to cement their market position by paying to be zero-rated because of their brand name – an option unavailable to new market entrants.[38]

A strong economic argument has been made based on the theory of two-sided markets to ban ISPs from charging a fee to content providers for zero-rating, wherein prohibiting such an anti-competitive practice is seen as a subsidy to innovation.[39] Renowned net neutrality scholar, Tim Wu, has postulated that

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[29]Marsden, *supra* note 16, at 241.
[30]*Supra* note 27 at 2.
[31]*See* Marsden, *supra* note 16, at 241–43.
[32]*Id.,* at 242.
[33]*Id.,* at 243.
[34]Barbara van Schewick, *"Network Neutrality and Zero-Rating"*Attachment to Barbara van Schewick's Ex Parte in the Matter of Protecting and Promoting the Open Internet, 1 (Feb 19, 2015), https://cyberlaw.stanford.edu/files/publication/files/vanSchewick2015NetworkNeutralityandZerorating.pdf .
[35]Marsden, *supra* note 16, at 242.
[36]Barbara Schewick, *supra* note 34, at 2–4.
[37]*Id.,* at 5–6.
[38]*Id.*
[39]Lee & Wu, *supra* note 28, at 62–63.

allowing the internet to become discriminatory offers ISPs profits by taxing innovation – an economic trade-off central to internet governance.[40] Given their dual role as service providers and infrastructure developers, discriminatory practices by ISPs have a domino effect on healthy competition in the service markets that depend on the internet.[41]

On their part, ISPs have maintained that relaxing the rules against zero-rating will incentivize investment in internet infrastructure.[42] This does not address concerns that zero-rating offers profit-making opportunity to a select few regardless of whether infrastructure is improved.[43] Further, even if infrastructure and internet access are improved – this must be weighed against the distortions imposed on the efficiency of internet-based service markets. [44] While the deployment of infrastructure is a real challenge, allowing exemptions to anti-discrimination rules provides the worst of possible solutions – governments may instead directly subsidize the building of internet infrastructure.[45] In the context of zero-rating being practiced in the U.S. (providing free access to Facebook to underserved communities), it has been pointed out that the choice between free access to the poor or none at all is a false one.[46] ISPs may well give away a comparable amount of bandwidth for access to the entire internet at the same cost as that of providing access to zero-rated content.[47]

B. The Indian context: Facebook's initiative and the TRAI Regulations, 2016

Zero-rated applications pose the newest challenge to the issue of net neutrality.[48] In the context of developing countries such as India, this controversy will likely play out in the area of mobile data access due to the higher concentration of

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[40]*Supra* note 27, at 2.
[41]Id., at 4.
[42]Lee & Wu, *supra* note 28, at 71.
[43]*Id.,* at 72.
[44]*Supra* note 27, at 4.
[45]Tim Wu, *Why Have a Telecommunications Law? Anti-Discrimination Norms in Communications*, 5 J. ON TELECOMM. AND HIGH TECH. L. 16, 45–46 (2006) [hereinafter Wu, *Anti-Discrimination Norms*].
[46]Barbara Schewick, *supra* note 34, at 7.
[47]*Id.*
[48]*Id.,* at 1; *see* Ramos, *supra* note 6, at 5. Telecom regulators in Chile, the Netherlands, Slovenia and Canada have prohibited zero-rating in the past year

mobile as opposed to fixed connections.[49] This is precisely the case of the Internet.org initiative that is modelled on zero-rating in partnership with mobile ISPs.[50] Since early 2015 there have been two zero-rated services active in India – Free Basics and another owned by Airtel, a large Indian mobile ISP.[51]

The TRAI first broached the topic in an open Consultation Paper issued in March, 2015 that reviewed how net neutrality and zero-rating are addressed in the U.S. and the E.U.[52] In its assessment of network discrimination, it explicitly recognized the practice of providing preferential treatment to select services though exclusion from ISP data caps[53] and invited stakeholder engagement in the matter.[54] In response to the growing concerns with this business model in India and simultaneously in Brazil and the U.S., Facebook revised its terms for improved transparency and opened up Free Basics to any content provider, subject to conditions.[55]As per its guidelines issued in September, 2015,[56] the platform will not permit high bandwidth consuming video and images; with no appeal to Facebook's decision nor an independent review of its procedures.[57] Hence, Facebook effectively remains the sole gatekeeper of services accessed through the Free Basics application.[58]

Delving deeper into the matter, TRAI issued a second Consultation Paper in December 2015 specifically on the issue of zero-rating (termed as 'differential pricing/discriminatory tariffs' by the TRAI).[59]This Consultation Paper received an overwhelming response of 600,000 comments[60] which, together with counter-

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[49]Marsden, *supra* note 16, at 245–46.
[50]*Id.,* at 247.
[51]*Id.,* at 251.
[52] Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services, Telecom Regulatory Authority of India, 63–77(2015). In this Consultation Paper the TRAI also addressed the issue of investment in Internet infrastructure and the arguments for and against using zero-rating as an incentive for this.
[53]*Id.,* at 87.
[54]*Id.,* at 112.
[55]Marsden, *supra* note 16, at 251.
[56] FACEBOOK, *Technical Guidelines*, https://developers.facebook.com/docs/internet-org/platform-technical-guidelines (last visited May 1, 2016).
[57]Marsden, *supra* note 16, at 246.
[58]*Id.,* at 247.
[59] Consultation Paper on Differential Pricing for Data Services, Telecom Regulatory Authority of India 2015. The Consultation Paper specifically recognized models through which zero-rating is practiced by platforms allowing a gatekeeping function to the platform manager and ISP – a reference to the Free Basics model.
[60]Soni, *supra* note 11.

comments, were posted on the Regulator's website and followed by a stakeholder meeting in January, 2016.[61]

These events culminated in the 'Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016' (Regulations, 2016) issued by TRAI on February 8, 2016. The Regulations prohibited the application of *discriminatory tariffs* for data services, differentiated on the basis of *content* accessed by customers.[62] Specifically the term 'tariff' was defined to include *free data services* as well.[63] The Regulations exempted from their purview data provided over closed electronic networks[64] as well as that provided in case of public emergencies.[65] A grace period of six months was granted for the existing zero-rated data plans to comply with the Regulations,[66] while imposing a fine of Rs. 50,000[67] per day for contravention of the rules beyond this period.[68]

IV. THE INTERCONNECTIONS: NET NEUTRALITY, TRADE AND THE LAW

A. The Internet and Trade in services

As stated above, a fundamental tenet of this paper is that the internet is public infrastructure, drawing on the theory of 'innovation commons'. [69] From this perspective, the internet as an information network is most significant in its role as a catalyst for other forms of activity.[70] Its spillover effects have been so compelling that information and communications technologies (ICT) have rivalled the creation of language, writing and print as a paradigm shift in knowledge generation and

[61] *Supra* note 23, ¶ 3.
[62] *Supra* note 15, § § 2(g), 3(1).
[63] *Id.,* § 2(m).
[64] *Id.,* § 3(2).
[65] *Id.,* § 4.
[66] *Id.,* § 8.
[67] Rs. 50,000 = 745 USD approximately.
[68] *Supra* note 15, § 5. This is subject to a maximum of Rs. 50, 00,000.
[69] Tim Wu, *The Broadband Debate, A User's Guide*, 3 J. ON TELECOMM. AND HIGH TECH. L. 69, 72 (2004) [hereinafter Wu, *The Braodband Debate*].
[70] Wu, *Anti-Dicrimination Norms*, *supra* note 45, at 16.

distribution.[71] Most significantly, it has shifted the locus of economic activity from analogue to digital markets.[72]

The separation of the internet-based service market from internet infrastructure (fixed/mobile data connections) has led to the flourishing of a range of competitive service markets, unhindered by the distortions of the physical infrastructure market.[73] Telecom services have been the 'backbone infrastructure service' critical to other goods and services.[74] Overall, trade in service sectors varies widely, from business process outsourcing and information technology to health and education services, to name a few, and is facilitated by improvements in ICT, with software and business processing exports alone contributing to 33% of India's exports and 7% of its GDP in 2008.[75]

Improvements in digital technology have also blurred the line of distinction between goods and services[76] with improved services giving impetus to trade in goods and vice versa.[77] Most significantly, improvements in ICT, by lowering the *trade costs* associated with the provision of services, have 'democratized' international trade allowing small businesses and individuals to enter the world trading system on the platform of the internet.[78] Increased internet penetration has been found to correlate positively with increases in the trade of services[79] and the low start-up costs of e-commerce make it particularly important to service providers in developing countries.[80]

B. The governance of Internet-based trade

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[71] Mira Burri & Thomas Cottier, *Introduction: Digital Technologies and International Trade Regulation*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 1, 1–2 (Mira Burri & Thomas Cottier eds., 1st ed. 2012).

[72] Christian Tietje, *Global Information Law: Some Systemic Thoughts*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 45, 53 (Mira Burri & Thomas Cottier eds., 1st ed. 2012).

[73] Wu, *Anti-Discrimination Norms*, *supra* note 45, at 37.

[74] *Aid for Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth* 41 (OECD and WTO, Geneva/OECD Publishing, Paris, Jun. 30, 2015).

[75] Sebastian Saez, *The Strategic Development Role of Trade in Services*, *in* TRADE IN SERVICES NEGOTIATIONS: A GUIDE FOR DEVELOPING COUNTRIES 1, 1 (World Bank 2010).

[76] Burri & Cottier, *supra* note71, at 2.

[77] *Aid for Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth*, *supra* note 74, at 51.

[78] *Id.,* at 42.

[79] *See generally* Changkyu Choi, *The Effect of the Internet on Service Trade*, ECONOMICS LETTERS 102 (2010).

[80] *Aid for Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth*, *supra* note 74, at 50.

Given this background, the WTO General Agreement on Trade in Services (GATS) emerges as the most appropriate source of rules relevant to the trade in services regime in the digital era.[81] In addition, is important to note here that the international governance of digital trade is quite wide in its scope. Other areas of international economic law – particularly investment, finance, and competition law – have important implications for digital trade of both goods *and* services.[82] However, telecommunications was initially conceived of as a *service sector* by the architects of the WTO and has increasingly become a medium for the international trade of services.[83] Hence for the purposes of this paper, the analysis will be mainly limited to WTO law governing trade in services and related agreements pertaining to the regulation of the telecommunications sector in support of service liberalization.

The GATS does not provide a definition of what qualifies as a 'service', but explains 'service delivery' via four modes:[84] 'Cross border delivery; consumption of a service abroad; commercial presence in the territory of another; or the movement of natural persons.'[85] The provision of cross-border trade in services, termed as 'Mode 1', has in practice grown to encompass 'internet-based services', inextricably linking the WTO and its rules to internet governance.[86] Additionally, the significant cross-border implications of ICT's have brought their domestic regulation into

[81]Burri & Cottier, *supra* note 71, at 4; Chander, *supra* note 2, at 17; ARVIND PANAGARIYA, *E-Commerce, WTO and Developing Countriesin* POLICY ISSUES IN INTERNATIONAL TRADE AND COMMODITIES 2000, at 4 (U.N., Study Series No.2, 2000), *available at* https://pdfs.semanticscholar.org/4066/86768bd1672d9ab69043827cf9c65582b48c.pdf; Tim Wu, *The World Trade Law of Censorship and Internet Filtering*, 7 CHICAGO JOURNAL OF INTERNATIONAL LAW 263 (2006) [hereinafter Wu, *Censorship and Internet Filtering*]; *see* Manner & Hernandez, *supra* note 26.

[82]Burri & Cottier, *supra* note 71, at 8; *see also*, Johannes M. Bauer, *Regulation, Public Policy, and Investment in Communications Infrastructure*, 34 TELECOMM. POL'Y 65, 21-31 (2010) (for further information on investment regulation as well as fiscal and monetary policy and an analysis of their effects on investment levels in the communications sector).; *See further, supra* note 52 for the TRAI's consideration of the effects of zero-rating on investment in Internet infrastructure.

[83]Wu, *Censorship and Internet Filtering, supra* note 81, at 5; *see also* Sacha Wunsch-Vincent, *WTO, E-commerce and Information Technologies: From the Uruguay Round through the Doha Development Agenda, A Report for the UN ICT Task Force* 6 (Joanna McIntosh ed., Markle Foundation, 2004) (for further discussion on the application of the GATS to the governance of internet infrastructure services as well as electronically traded services)

[84] Wu, *Censorship and Internet Filtering*, *supra* note 81, at 8.

[85]General Agreement on Trade in Services, art. I, April 15, 1994, Marrakesh Agreement Establishing the World Trade Organisation 1869 U.N.T.S. 183 [hereinafter GATS].

[86] *See* Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, WT/DS285/AB/R (7 Apr. 2005); Wu, *Censorship and Internet Filtering*, *supra* note 81, at 16.

international focus.[87] Unlike trade in goods, which often face barriers concentrated at the border, liberalizing trade in services is more complex, and discriminatory barriers often take the form of domestic governmental regulations that regulate all services activity and extend well beyond the border.[88] Thus, the emergence of the internet as a global trading platform has posed new and intriguing questions of how *domestic governance* of the internet may pose barriers to the *international trade* of services.[89]

It is well recognized that the services liberalization agenda pursued by the GATS is only one of the factors involved in creating the conditions necessary for the successful export of services.[90] For instance, India has made extremely limited commitments to service liberalization under the GATS but ranks as one of the world's most competitive service exporters.[91] Domestic regulation of service industries to address human capital and *infrastructure*, and the swift detection of market failures, particularly information asymmetries, is critical.[92] The internet is an extremely important infrastructure facility; net neutrality advocates have long argued that ensuring the ease of entry to service markets supported by the internet is central to its efficiency.[93]

In its assessment of the zero-rating issue, market failure in the internet services sector was one of the foremost considerations of the TRAI as a regulator. TRAI specifically noted that the free but limited internet offered to users who could later 'choose' data services of their preference came with a glaring information gap. Users are left with inadequate information to make their choice – one that is not adequately addressed though disclosures made to a consumer base that is unfamiliar with the whole range of services available on the internet.[94]

C. The shared antitrust basis of trade law and net neutrality

The trade law regime and internet neutrality share some common philosophical and jurisprudential underpinnings. First, both trade law and net neutrality principles serve the end-goal of preventing distortionary market practices in their

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[87]Tietje, *supra* note 72, at 50.
[88]Saez, *supra* note 75, at 3–8.
[89]Wu, *Censorship and Internet Filtering*, *supra* note 81, at 3.
[90]Saez, *supra* note 75, at 13.
[91]*Id.*
[92]*Seeid.,* at 7.
[93]Wu, *Anti-Discrimination Norms*, *supra* note 45, at 38.
[94]*Supra* note 23 ¶ 21.

respective spheres.[95] Secondly, they both employ the principle of *non-discrimination* to achieve this regulatory objective. In trade law, the focus is to prevent discrimination, both between exporting countries as well as between imported and local goods or services.[96] Net neutrality seeks to prevent discrimination between content provided or accessed on the internet.[97]

Illustrating these parallel features of the world trading system and net neutrality, Tim Wu has explored an anti-discrimination framework for the internet modelled on the trade law concept of '*like treatment*'.[98] Recognizing the distortionary market effect of discrimination between like products or services on the basis of the identity of the provider in the telecommunications context, the same rule would prohibit '*like content*' from different providers being treated differently based on the provider's identity.[99] With respect to the Indian case, the TRAI noted the conflict of differential tariffs with the principle of non-discrimination.[100] However, the Regulations of 2016 prohibit discriminatory pricing not just on the basis of identity of the content provider, but of any discriminatory pricing based on content.[101] The TRAI has termed its approach to be 'content agnostic.'[102] The Regulations prima facie appear to prohibit differential pricing and/or zero-pricing for all content or services, differing from trade law to the extent that such discrimination is possible under the GATS.

The international legal provisions related to trade in services, their incorporation into India's domestic framework, and their relevance to net neutrality and the Free Basics debate are discussed in the following section.

V. THE LEGAL FRAMEWORK: TRADE IN SERVICES AND NET NEUTRALITY

A. The General Agreement on Trade in Services

The GATS is uniquely designed as a 'framework agreement' with 'horizontal' commitments that apply to members across the board and 'vertical' commitments

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[95] *See* Wu, *Censorship and Internet Filtering, supra* note 81, at 9; See Barbara Schewick, *supra* note 34, at 1.
[96] Wu, *Censorship and Internet Filtering, supra* note 81, at 9.
[97] Wu, *The Braodband Debate* , *supra* note 69, at 73.
[98] Wu, *Anti-Discrimination Norms, supra* note 45, at 42.
[99] *Id.*
[100] *Supra* note 23, ¶ 2.
[101] *Supra* note 15 § 3
[102] Information Note to the Press, Press Release No.13/2016, Telecom Regulatory Authority of India (8 Feb.2016).

that members commit to themselves, through negotiations.[103] As far as horizontal commitments are concerned, the most favoured nation (MFN) [104] principle prohibits members from discriminating between various foreign service suppliers. It is a general obligation that applies to all measures affecting trade in services, and measures inconsistent with the MFN obligation can be maintained only if they have been specified in a list of MFN Exemptions submitted by the end of the Uruguay Round of negotiations or by the conclusion of extended negotiations on a certain sector.[105] Further, the transparency principle[106] obliges members to publish all laws and regulations affecting the trade of services.[107]

On the other hand, vertical commitments such as each member's trade liberalization commitments with respect to market access[108] and national treatment (i.e., like treatment between local and foreign services in the domestic market)[109] are negotiated separately for every service sector and service mode. These are legally binding once entered into the member's 'schedule of specific commitments'[110] annexed to the GATS.[111]

It was initially unclear whether the GATS would apply to services delivered through electronic means.[112] The WTO Work Program on E-Commerce had reported early on that all four modes of supply may be conducted via electronic media.[113] The WTO Appellate Body in the *US-Gambling* case later confirmed this proposition; wherein an absolute ban by the U.S. on all internet-based online gambling services was tested against its market access commitments.[114] The case further established that internet-based services are categorized as 'Mode 1' (cross border delivery), a critical finding given that commitments made by member states

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[103]Stefan Zleptnig, *The GATS and Internet-Based Services: Between Market Access and Domestic Regulation*, 20 CAMBRIDGE REVIEW OF INTERNATIONAL AFFAIRS 133, 135 (2007); Wu, *Censorship and Internet Filtering, supra* note 81, at 10.
[104]GATS art. II.
[105]*See* GATS Annex on Article II Exemptions.
[106]GATS art. III.
[107]David Luff, *Convergence: A Buzzword to Remain?*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 65, 75–76 (Mira Burri & Thomas Cottier eds., 1st ed. 2012).
[108]GATS art. XVI.
[109]GATS art. XVII.
[110]GATS art. XX.
[111]Zleptnig, *supra* note 103, at 135.
[112]*Id.* at 139. *See also* Sacha Wunsch Vincent, *supra* note 83 (for background information on the WTO Work Program on Electronic Commerce)
[113]*Id.*
[114]Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, *supra* note 86 ; Zleptnig, *supra* note 103, at 139.

for 'Mode 2'[115] are most often more expansive than those under Mode 1. The issue of classification of internet-based services is one that goes beyond mere academic musing – it is a matter of serious implications to the trade liberalization priorities of members and further negotiations between them.[116]

The scheduled commitments for the telecommunications service sector have 14 sub-sectors, of which the first seven are categorized as 'basic' services while the remaining are categorized as 'value-added' services.[117] The U.S. introduced this dichotomy to the negotiations, distinguishing between services that offer basic transmission of information (e.g., mobile telephone and mobile data services[118]), and those that go beyond that function (e.g., email and online data processing).[119] At the time of the conclusion of the GATS in 1994, Member states' commitments to liberalization of the telecommunications sector were limited to 'value-added' services with the Agreement on Basic Telecommunications Services (BATS) being concluded at a later stage.[120] Zero-rating encompasses ISPs (basic telecom services) engaging in fee arrangements with content providers (value-added telecom services).[121] It is thus necessary to consider Free Basics in light of India's liberalization commitments under both categories of telecom services, in so far as Free Basics encompasses data provision bundled together with other internet-based services.[122]

i. Market Access: GATS Article XVI

Under the GATS, market access for services is often affected by domestic regulations, and hence this is taken into consideration when assessing a member states' commitments.[123] The GATS enumerates quantitative limitations on market access that member states may not impose unless they specified in their schedules (such as limitations on foreign capital, quotas for foreign labour, caps on the value

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[115] Mode 2 is consumption of a service abroad.
[116] Zleptnig, *supra* note 103, at 140.
[117] Wu, *Censorship and Internet Filtering, supra* note 81, at 15.
[118] WORLD TRADE ORGANIZATION, *Coverage of Basic Telecommunications and Value-Added Services*, https://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_coverage_e.htm. (last visited May 1, 2016).
[119] Marco Bronckers & Pierre Larouche, *A Review of the WTO Regime for Telecommunications Services*, *in* THE WORLD TRADE ORGANISATION AND TRADE IN SERVICES 319, 321–24 (Alexander K. & Andenas M. eds., 2008).
[120] *Id.,* at 325; *see* GATS Annex on Negotiations on Basic Telecommunications.
[121] Lee & Wu, *supra* note 28, at 62.
[122] *See* Smith, *supra* note 9.
[123] Zleptnig, *supra* note 103, at 143.

of service transactions).[124] However, the practical challenge of applying this provision to a regulatory ban was illustrated in the *US-Gambling* case, where the prohibition on internet-based gambling services was interpreted as a 'zero quota' and hence a numerical limitation that was found to be in conflict with the U.S. full market access commitment.[125] The reasoning adopted by the Appellate Body in this case has resulted in a *presumption in favour of market access for foreign internet-based services* under Mode 1 commitments.[126]

India has not bound itself to any market access commitments for basic telecommunication services and has made very limited commitments in the basic telecommunications sector in general.[127] It has however, acquiesced to full market access to value-added services under Mode 1.[128] In so far as Free Basics may deem the prohibition of differential tariffs to be a barrier to market access for its value added services, it is significant that the *US-Gambling* case has shifted the burden on member states to justify their regulations in terms of state interest.[129] The WTO panel in *US-Gambling* went beyond the scope of whether US regulation had blocked Mode 1 (cross border supply) to whether the domestic regulation extended to 'any means of delivery included in Mode 1'.[130] This opened a Pandora's box as to what may constitute a barrier to any *means* of service delivery under Mode 1 – a controversy that was not resolved by the Appellate Body.[131] Thus, it may be argued from the perspective of Free Basics that on the basis of India's market access commitments in value-added services (where full market access has been committed to) the TRAI regulations potentially constitute a barrier

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[124]GATS art. XVI:2.

[125] Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, *supra* note 86, ¶¶ 227 - 252; Panel Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services* WT/DS285R (Nov. 10, 2004), ¶¶ 6.329 – 6.355; Zleptnig, *supra* note 103, at 150; *see also* Federico Ortino, *Treaty Interpretation and the WTO Appellate Body Report in US-Gambling: A Critique*, 9 JOURNAL OF INTERNATIONAL ECONOMIC LAW (1) (2006) (for further analysis of the *US-Gambling* case, and its interpretation of Article XVI in particular).

[126]Wu, *Censorship and Internet Filtering, supra* note 81, at 22.

[127]INDIA: SCHEDULE OF SPECIFIC COMMITMENTS (Revised Offer, 2005), Council for Trade in Services (2005); Rajat Kathuria, PROSPECTS FOR THE TELECOMMUNICATIONS SECTOR UNDER THE INDO-EU TRADE AND INVESTMENT AGREEMENT, 43 (Indian Council for Research on International Economic Relations, Oct. 2008); TELECOMMUNICATIONS MARKET SNAPSHOT: INDIA(International Trade Administration, Department of Commerce, U.S.A.).

[128]INDIA: SCHEDULE OF SPECIFIC COMMITMENTS*supra* note 127; Kathuria, *supra* note 127, at 43.

[129]Wu, Censorship and Internet Filtering, *supra* note 81, at 22–23.

[130] Panel Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, *supra* note 125, at ¶¶ 6.280 – 6.287; Zleptnig, *supra* note 103, at 147–48.

[131] Zleptnig, *supra* note 103, at 147-48.

to market access. However, in light of *US-Gambling*, whether these regulations concerning net neutrality that *de facto* prohibit Free Basics' business model constitute a barrier to a *means of service delivery* remains open to debate.

ii. National Treatment: GATS Article XVII

The GATS provision on National Treatment [132] requires 'no less favourable treatment' to foreign service providers than domestic ones. This legal standard of non-discrimination encompasses both de jure and de facto discrimination between foreign and domestic providers of 'like' (i.e., similar) services.[133] In essence, this provision relates directly to the conditions of competition within the domestic market for foreign vis-à-vis domestic service providers.[134] India's commitments in terms of national treatment for Mode 1 mirror those of its market access undertakings with no limitations on value-added telecom services. [135] It is noteworthy that an Indian Parliamentary committee had considered prohibiting Facebook's zero-rated service while permitting another zero-rated service, owned by an Indian company, Airtel.[136] While this would indeed have fallen foul of India's telecom sector commitments, the TRAI regulations make no such arbitrary distinction.[137]

iii. Domestic Regulation: GATS Article VI

The GATS provision on domestic regulation[138] recognizes that national regulatory provisions may have a restrictive impact on services trade even if they comply with market access and national treatment commitments.[139]It requires that 'measures affecting trade in services be administered in a reasonable, objective and impartial manner' [140] while accommodating domestic measures insofar as they do not constitute 'unnecessary barriers to trade in services.'[141] In light of the fragmented

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[132]GATS art. XVII.

[133] Appellate Body Report, *European Communities – Regime for the importation, sale and distribution of Bananas,* WT/DS27/AB/R (9 Sept. 1997) ¶ 234; Zleptnig, *supra* note 103, at 143–45.

[134]Zleptnig, *supra* note 103, at 145.

[135] INDIA: SCHEDULE OF SPECIFIC COMMITMENTS *supra* note 127; Kathuria, *supra* note 127, at 43.

[136]Marsden, *supra* note 16, at 251.

[137]*Supra* note 15 § 3(1).

[138]GATS art. VI.

[139]Zleptnig, *supra* note 103, at 145–46.

[140]GATS art. VI(1).

[141]Zleptnig, *supra* note 103, at 146.

nature of domestic internet governance and its implications for internet-based service trade, the WTO Work Program on E-commerce has recognized that Article VI does indeed apply to e-commerce.[142]

Trade law scholars have argued that the *US-Gambling* case ought to have been decided on the basis of Article VI instead of juxtaposing domestic regulation against market access commitments. This is based on the premise that prohibiting internet-based gambling is not a quantitative limitation on the supply of a service but a regulatory concern as to *how* the service is provided that merely has the *effect* of prohibiting online gambling.[143] Most significantly, the exclusive focus of the *US-Gambling* case on the issue of market access under Article XVI, has risked curtailing the regulatory autonomy of WTO Member States beyond the extent intended by the drafters of the GATS.[144] As applied to the TRAI regulations on differential pricing that *de facto* prohibit the Free Basics service in India[145], the authors believe that an application of Article VI is most appropriate. As has been argued above in relation to the ban on online gambling, the prohibition of zero-rating exemplifies a *regulatory choice* that results in a restriction on the services provided by Free Basics and not a quantitative limitation on market access.

However, the WTO Work Program has not been conclusive as to the precise manner of application of Article VI to e-commerce considerations.[146] The *US-Gambling* case is not instructive on this aspect of the law either but, as mentioned above, it does place the obligation of justifying seemingly trade restrictive domestic regulations on the State. In the *Gambling* case, such justification was found in the public morals exemption to GATS provisions.[147] The TRAI regulations however, are based on considerations of a non-discriminatory tariff framework to prohibit anti-competitive practices as elaborated upon below.[148]

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[142] Council for Trade in Services, *Progress Report to the General Council,* S/L/74 (Jul. 27, 1999), ¶ 11, *available at* http://trade.ec.europa.eu/doclib/docs/2004/may/tradoc_117019.pdf; Sacha Wunsch-Vincent & Arno Hold, *Towards Coherent Rules for Digital Trade: Building on Efforts in Multilateral versus Preferential Trade Negotiations*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 179, 184–85 (Mira Burri & Thomas Cottier eds., Cambridge University Press, 1st. ed. 2012).

[143] Zleptnig, *supra* note 103, at 153–55. *See* Joost Pauwelyn, *Rien Ne Va Plus? Distinguishing Domestic Regulation From Market Access in GATT and GATS*, 4 WORLD TRADE REVIEW (2) (2005), 131 - 170.

[144] Joost Pauwelyn, *supra* note 143, at 168.

[145] Goel & Isaac, *supra* note 17.

[146] Wunsch-Vincent & Hold, *supra* note 142, at 185.

[147] *Id.*

[148] *Supra* note 23, ¶ 1.This is not to say that other arguments – particularly an argument grounded in the right to information cannot be raised to bring the TRAI Regulations under

iv. Business practices: GATS Article IX

While the WTO does not deal with competition law per se, it could be argued that the GATS contains a sweeping antitrust commitment applicable to all members in Article IX.[149] This relates to the business practices of domestic service suppliers, but it does not bind countries to a competition law regime.[150] An exception to this has been made *only in the telecommunications service sector,* wherein parties to the WTO signed the Agreement on Basic Telecommunications (BATS) in 1997 with an agreed set of anti-trust principles contained in its accompanying Reference Paper, thus advancing their commitment to a fair and competitive telecom sector.[151] These anti-competitive safeguards enshrined in the BATS and the Reference Paper, are reflective of key net neutrality principles – particularly transparency, interconnection and non-discrimination.[152]

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the public morality exception – as was the case in *US-Gambling*. However, for the purposes of this paper, the scope of analysis will be limited to considerations of non-discrimination in the tariff framework and its antitrust implications. *See further* Panagiotis Delimatsis, *Determining the Necessity of Domestic Regulations in Services: The Best is Yet to Come* and J. Trachtman, Lesson for GATS VI from TBT, SPS and GATT Treatment of Domestic Regulation (for a discussion on the tests of proportionality and necessity on the balance between international trade liberalization and domestic regulatory autonomy).

[149]GATS art. IX.

[150]Wu, *Censorship and Internet Filtering, supra* note 81, at 13; GATS art. IX, Business Practices states as follows:

'1. Members recognize that certain business practices of service suppliers, other than those falling under Article VIII, may restrain competition and thereby restrict trade in services.

2. Each Member shall, at the request of any other Member, enter into consultations with a view to eliminating practices referred to in paragraph 1. The Member addressed shall accord full and sympathetic consideration to such a request and shall cooperate through the supply of publicly available non-confidential information of relevance to the matter in question. The Member addressed shall also provide other information available to the requesting Member, subject to its domestic law and to the conclusion of satisfactory agreement concerning the safeguarding of its confidentiality by the requesting Member.'

[151] WTO, *Negotiating Group on Basic Telecommunications, Reference Paper,* § § 1.1, 1.2 (Apr. 24, 1996), available at https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm; Wu, *Censorship and Internt Filtering, supra* note 81, at 14; *see also*, Damian Geradin & Michel Kerf, *Levelling The Playing Field: Is The World Trade Organization Adequately Equipped to Prevent Anti Competitive Practices in Telecommunications? in* THE WTO AND GLOBAL CONVERGENCE IN TELECOMMUNICATIONS AND AUDIOVISUAL SERVICES 144 (Geradin and Luff eds., 2004)¶ V(B), *available at* http://kavehh.com/my%20Document/Essex/SGEI/ssrn-id489723.pdf (last visited 12 Jan. 2017).

[152]Manner & Hernandez, *supra* note 26, at 70–72.

B. Annex on Telecommunications

The Annex on Telecommunications (AT) governs the use of public telecom networks recognizing that telecommunications are a necessary infrastructure for trade in services.[153] The provisions of the AT apply only when a member has made liberalization commitments in a given service sector (for example banking or insurance services that require access to telecommunications networks for their functioning).[154] It thus provides an assurance that providers in such a service sector may have access to the necessary telecom networks in the member country,[155] irrespective of whether the member state has undertaken commitments in the basic telecommunications services sector.[156] However given its limited scope, the AT was found insufficient to support the negotiations on liberalization of basic telecommunications services, specifically the protection of a fair competitive environment for foreign service providers vis-à-vis domestic providers.[157]

C. Agreement on Basic Telecommunication Services

The Agreement on Basic Telecommunications ('BATS' or Fourth Protocol to the GATS) was concluded in 1996 with members undertaking specific individual commitments to liberalize a significant number of their *basic* telecommunications services.[158] This included data transmission, cellular mobile services and internet satellite services.[159] It is striking that most participating members in this Agreement undertook additional commitments regarding telecom regulation contained in the accompanying Telecommunications Services Reference Paper (RP).[160] The RP supports the liberalization of the telecommunications sector and prevents abusive, anti-competitive practices by *major suppliers* in Member States.[161] It provides for two important protections relevant to the discussion on net neutrality – competitive safeguards and interconnection.[162] Most significantly, the RP has brought these

[153]Bronckers & Larouche, *supra* note 119, at 325.
[154]*Id.,* at 325–26.
[155]*Id.*
[156]Kathuria, *supra* note 127, at 40.
[157]Bronckers & Larouche, *supra* note 119, at 328; Kathuria, *supra* note 127, at 40.
[158] Luff, *supra* note 107, at 82. Similar to the market access and national treatment commitments, the BATS is a part of the GATS but structured so as to bind members only when they undertake specific commitments, see Wu, *Censorship and Internet Filtering*, *supra* note 81, at 14.
[159]Kathuria, *supra* note 127, at 40.
[160] WTO Reference Paper, *supra* note 151;Bronckers & Larouche, *supra* note 119, at 330.
[161] WTO Reference Paper, *supra* note 151 § 1.1; Luff, *supra* note 107, at 82.
[162]WTO Reference Paper, *supra* note 151 § § 1, 2;Bronckers & Larouche, *supra* note 119, at 330.

safeguards with respect to the telecom sector within the purview of the WTO system and its dispute settlement mechanism.[163]

The first WTO case to delve into issues in the telecommunications sector and interpret the RP was the *Mexico-Telmex* case.[164] The case dealt with the application of a Mexican law that applied uniform rates of termination fees to international phone calls between the U.S. and Mexico.[165] The similarities between phone termination fees (the inclusion of an extra charge to terminate a call made from one telephone service provider to the user of another telephone service) and the zero-rating of internet services is instructive in the discussion at hand. Zero-rating operates in a similar fashion to termination fees, whereby content providers are required to enter into fee arrangements with ISPs to reach out to their customer base.[166] The *Mexico-Telemex* case established that the RP applied to cross border interconnection and found that Mexico's imposition of termination fees violated the terms of the RP of '*cost-orientation*' for its interconnection framework.[167] Additionally, it took an expansive view of the term '*anti-competitive practice*' particularly including within its scope practices relating to price fixing and market sharing arrangements.[168]

The *Mexico-Telmex* ruling has illustrated the potential of the RP for the enforcement of non-discriminatory interconnection and enhanced competition in the voice telecommunication sector.[169] Its application to the internet, however, remains untested.[170] It is increasingly being recognized that issues of interconnection and abuse of market power have posed a threat to net neutrality.[171] In Mexico itself, there has been some evidence of Telmex blocking internet access to VoIP service provider Skype, highlighting the relevance of the RP to the net neutrality issue.[172] Recent scholarship has applied WTO commitments under the

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[163]Bronckers & Larouche, *supra* note 119, at 330.
[164]Panel Report, *Mexico – Measures Affecting Telecommunications Services*, WT/DS204 (Apr. 2, 2004); Rohan Kariyawasam, INTERNATIONAL ECONOMIC LAW AND THE DIGITAL DIVIDE: A NEW SILK ROAD? 79 (Elgar international economic law, Elgar 2007).
[165]Kariyawasam, *supra* note 164, at 79.
[166]Lee & Wu, *supra* note 28, at 62.
[167] Panel Report, *Mexico – Measures Affecting Telecommunications Services*, *supra* note 170 ¶ 7.96 – 7.144 and ¶ 7.160 – 7.216 Kariyawasam, *supra* note 164, at 76–78.
[168] Panel Report, *Mexico – Measures Affecting Telecommunications Services*, *supra* note 170 ¶ 7.230 – 7.238 Kariyawasam, *supra* note 164, at 79.
[169]Rohan Kariyawasam, *Better Regulation for Digital Markets: A New Look at the Reference Paper*, *in* TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM 222, 224 (Mira Burri&Thomas Cottiereds., 1st ed. 2012).
[170]*Id.*
[171]*Id.,* at 223.
[172]Wu, *Censorship and Internet Filtering*, *supra* note 81, at 30.

RP to enforce interconnection between ISPs amongst WTO member states, ensuring effective competition and upholding net neutrality.[173]

Moreover, in the context of the U.S., it has been argued that its commitment to an open telecommunications sector under the BATS provides the Federal Communications Commission with a jurisdictional basis to implement net neutrality regulations.[174] Specifically, the U.S. commitment with respect to packet switched data (the equivalent of broadband services) requires it to implement a net neutrality regime in furtherance of its obligation of transparency, anti-competitive practices, and interconnection under the BATS and the RP.[175]

India remains unbound to any specific commitments under Mode 1 for basic telecom services and has not accepted the RP in its entirety.[176] This presents an enormous drawback in the application of antitrust principles anchored in the BATS and the RP to the Indian context. However, while India's trade obligations under the GATS are minimal, it has taken steps to liberalize its telecom sector that are not reflected in its international commitments.[177] Although India has not agreed to provisions regarding interconnection in the RP, its domestic regime is entirely in line with the legal principles of the RP.[178]

D. Regional Trade Agreements

While the development of WTO jurisprudence in relation to the Internet has been slow, a number of Regional Trade Agreements (RTAs) such as India-Thailand, India-ASEAN and India-Singapore, have incorporated provisions on e-commerce and ICT.[179] Led by the U.S.'s standard RTA model, an increasing number of RTA's now provide for the application of WTO rules to trade conducted via e-

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[173]Kariyawasam, *supra* note 169, at 224.

[174]Manner & Hernandez, *supra* note 26, at 61; *Cf.* Babette E.L. Boliek, *FCC Regulation Versus Antitrust: How Net Neutrality is Defining the Boundaries*, 52 B.C.L. Rev. 1627 (2011), *available at* http://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=3175&context=bclr (for an overview of the debate about the jurisdictional basis of the sector-specific regulator (FCC) vis-à-vis the antitrust authority (FTC) in the U.S. in the context of net neutrality enforcement. Based on the supreme court decision in *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLP* and the D.C. Circuit's decision in *Comcast Corp. v. FCC*, it concludes that the regulation of net neutrality is likely outside the scope of the FCC's jurisdiction)

[175] Manner & Hernandez, *supra* note 26, at 61.

[176]Kathuria, *supra* note 127, at 43.

[177]TELECOMMUNICATIONS MARKET SNAPSHOT: INDIA, *supra* note 127.

[178]Kathuria, *supra* note 127, at 44.

[179]Wunsch-Vincent & Hold, *supra* note 142, at 192.

commerce, raising the level of complication in matters of the 'spaghetti bowl'[180] to an 'e-spaghetti bowl'.[181] For instance, India's commitments on the legal principles of the RP in the India-Singapore Comprehensive Economic Cooperation Agreement (CECA) are more comprehensive than that of its revised offer to accept the RP at the WTO level, in particular with respect to provisions regarding interconnection.[182] However, even in the CECA India has not committed to the RP provision on cost-based interconnection.[183]

E. India's Domestic Legal Framework

The last layer of regulatory complexity in the 'e-spaghetti bowl' of the internet-based trade of services is India's domestic telecom and competition laws. This is crucial to ensuring an efficient and inclusive market and provides for a level of regulatory intricacy that trade agreements do not encompass.[184] An assessment of India's domestic governance of ISPs against the standard set by the RP, has found that the domestic legal framework has improved progressively since the commitments undertaken in 1997, reflecting full compliance with the RP in 2005.[185] The Indian Competition Act of 2002[186] provides a comprehensive antitrust regime.[187] It specifically addresses issues of abuse of dominant market position that includes the use of discriminatory prices,[188] as reflected in the zero-rated Free Basics model. Additionally, the TRAI Act of 1997 empowers the

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[180]*Id.,* at 193. The term 'spaghetti bowl' was coined by Jagdish Bhagwati to refer to the complexity of trade rules resulting from multiple, overlapping FTA's between WTO members..

[181]*Id.,* at 192; Another potential forum for advancing the rule making for digital trade of services is the TiSA (Trade in Services Agreement) launched in 2013. However, India is not one of the negotiating countries of TiSA. *See also* Mira Burri, *Designing Future-Oriented Multilateral Rules for Digital Trade*, *in* EDWARD ELGAR RESEARCH HANDBOOK ON TRADE IN SERVICES 16 (Pierre Sauvé & Martin Roy eds., Cheltenham, UK: Edward Elgar 2015).

[182]Kathuria, *supra* note 127, at 45, 79.

[183]*Id.,* at 55.

[184]Saez, *supra* note 75, at 11.

[185]Kathuria, *supra* note 127, at 46.

[186]The Competition Act, No. 12 of 2003, INDIA CODE (2002).

[187] The primary issues covered by the Competition Act are anti-competitive agreements (section 3), abuse of dominant position (section 4) and anti-competitive mergers and acquisitions (section 5). *See* T. RAMAPPA, COMPETITION LAW IN INDIA: POLICY, ISSUES, AND DEVELOPMENT 4 (Oxford University Press, Revised and updated 3rd ed. 2014).

[188]The Competition Act 2002, *supra* note 186, § 4; *see* RAMAPPA, *supra* note 187, at 6.

Regulator to take actions that support improved competition and efficiency in the telecom sector.[189]

In its legal analysis in support of the prohibition of differential tariffs, the TRAI made reference to the Unified License Agreement between the Government of India and ISPs.[190] The license provides that 'subscribers shall have access to *all content* available on the internet except that restricted by the licensor/under authority of the law'.[191] The TRAI found that price based discrimination of content would constitute an *indirect restriction* on free access to content on the internet for subscribers.[192] It exercised authority on the basis of its power to notify rates for telecommunications services,[193] recognizing that while tariffs are usually left to market forces, the law did permit intervention to enforce the regulatory principle of non-discrimination.[194] And finally, the TRAI also linked internet use with the right to receive information guaranteed as a fundamental right under the free speech provision of the Indian Constitution.[195]

VI. NET NEUTRALITY AND DEVELOPMENT

As mentioned at the beginning of this paper, the central issue in the controversy surrounding Free Basics has revolved around its implications for small- and medium-sized internet based service providers. The authors have thus far analysed the *legal* case for a neutral internet from the perspective of healthy markets for trade in services supported by the internet. This section will draw the link between net neutrality and a competitive online services market, and economic, social and human *development* in India.

A. Fostering Local Innovation

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[189] The Telecom Regulatory Authority of India (TRAI) Act, No. 24 of 1997, INDIA CODE(1997), § 11(iv); *see* SRINIVASAN PARTHASARATHY, COMPETITION LAW IN INDIA 47 (Kluwer Law International, 3rd ed. 2014). Section 14 provides for adjudication under the TRAI Act by the Telecom Dispute Settlement and Appellate Tribunal (TDSAT), but clause (a) of the same section specifically precludes adjudication on issues of monopolistic or unfair trade practices under the TRAI Act. This dispute settlement function in the telecom sector is thus considered to fall within the purview of the Competition Act of 2002. *See* PARTHASARTHY at 77.

[190] *Supra* note 23, at 5–15, ¶ 24.1.

[191] *Supra* note 23, ¶ 24.1

[192] *Supra* note 23, ¶ 24.1.

[193] The Telecom Regulatory Authority of India (TRAI) Act, 1997 *supra* note 189, § 11 (2).

[194] *Supra* note 23 ¶ 1.

[195] INDIA CONST. art.19 cl.(1)(a) Constitution of India; *Id.,*¶ 24.3.

The End-to-End (e2e) principle is key to understanding the internet as a driver of innovation.[196] This refers to the fact that the internet is by design, an intermediary between *users* and *content providers*, wherein users themselves may take on the role of content providers.[197] The e2e principle thus recognizes that innovation is driven by the contest between the many 'ends' of the network, uncontrolled by any centralized provider of the internet (i.e. ISPs).[198] The practice of zero-rating undermines this arrangement insofar as it introduces fees for content providers on one network to access users on another network, in excess of standard usage fees for internet access itself.[199] This was a major consideration of the TRAI in the formulation of its regulatory response to the issue in India. It reasoned that permitting differential pricing on the basis of content accessed would undermine the very architecture of the internet – a common routing system with different networks that interconnect.[200]

As illustrated above, in the tension between internet access and innovation, zero-rated data plans have been found to correlate with the concentration of market power often discouraging entrepreneurship in domestic IT markets of developing countries.[201] Taking a structural perspective of development, scholars advocating the dependency theory have argued that international power relations have led to a situation of technological dependency of developing countries on developed.[202] By stifling local innovation, zero-rating feeds into the bigger picture of the dependency cycle between developing and developed countries, and this perspective on the issue justifies a ban on zero-rated applications in terms of their long-term cost in perpetuating dependency.[203]

More recent scholarship on development theory has conceptualized development as the expansion of human capabilities, taking a broader view than measures of GDP or technological improvements.[204] In this view, market efficiency is complemented by social support and public regulation to address inequities for improved human development outcomes.[205] However, this development lens accounts for considerations of inequity and market efficiency *simultaneously*,

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[196] Wu, *The Braodband Debate*, *supra* note 69, at 73.
[197] Lee & Wu, *supra* note 28, at 62.
[198] Wu, *The Braodband Debate*, *supra* note 69, at 74.
[199] Lee & Wu, *supra* note 28, at 62.
[200] *Supra* note 23¶ 16 (b).
[201] Ramos, *supra* note 6, at 14.
[202] *Id.,* at 6.
[203] *Id.,* at 16–18.
[204] AMARTYA KUMAR SEN, DEVELOPMENT AS FREEDOM 3 (Anchor Books ed., 2000).
[205] *Id.,* at 7.

recognizing that equity oriented measures impose a cost on market mechanisms.[206] While zero-rating offers a potential solution to the inequity of internet access, as argued earlier, its cost to local market functioning outweighs this. This is best illustrated in recent history by the budget telecom business model that has successfully driven voice connectivity for low-income groups in the developing world.[207] Lower barriers to participation and a competitive market environment enabled by efficient domestic regulation, particularly in South and Southeast Asia were key to achieving this.[208] This approach is informative of the type of regulatory response that may be required to achieve similar results with Internet connectivity that is market efficient and also leads to improved, equitable access.[209]

It is well recognized that many of the benefits of liberalizing trade in services have resulted more from increased competition within service sectors, which have had positive spillover effects for overall competition within economies, than from the access to markets abroad.[210] The preamble of the GATS has described it as "principles and rules for trade in services….as a *means* for promoting economic growth of all trading partners and the *development* of developing countries".[211] The antitrust principles embedded in the GATS together with the Schumpeterian basis of net neutrality, [212] support this development-oriented justification for a prohibition of zero-rating.[213] Indeed, this simultaneous consideration of equity and market efficiency when applied to the Free Basics issue sees the economic effectiveness of the invention of the next path-breaking application (by enforcing competition amongst content providers) against the expansion of the internet to new users.[214] However, given that the e2e principle of internet design sees users and content providers interchangeably, in the words of Tim Wu, "prohibiting zero-rating is a subsidy to the creative and entrepreneurial at the expense of the passive and consumptive".[215] Hence, when viewed through a development lens, whether that of technological dependence or of balancing market-driven growth and equity considerations, there is a strong case against zero-rating.

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[206]*Id.,* at 120.
[207]Rohan Samarajiva, *How the Developing World May Participate in the Global Internet Economy: Innovation Driven by Competition*, WORKSHOP ON "POLICY COHERENCE IN THE APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES FOR DEVELOPMENT" 2 (OECD, World Bank).
[208]*Id.,* at 2–4.
[209]*Id.,* at 2.
[210]Saez, *supra* note 75, at 9.
[211]*See* GATS Preamble; Zleptnig, *supra* note 103, at 135.
[212] Wu, *The Braodband Debate*, *supra* note 69, at 81.
[213]Ramos, *supra* note 6, at 15.
[214]Lee & Wu, *supra* note 28, at 67.
[215]*Id.*

B. Information and development

While our argument in favour of net neutrality has thus far been based on its instrumental role in the development process i.e., its catalytic effect on innovation; there remains much to be said about the intrinsic value of information as a *social good*[216] and the significance of a net neutrality regime that protects it.

The enabling role of free access to information in a participatory democracy is well recognized, and concerns about its commodification have been raised since the 1990's. [217] More recent scholarship on the phenomenon of '*information poverty*' provides a deep analysis on the issue of access to information that takes the debate on zero-rating and net neutrality beyond that of a trade-off between innovation and access. This conception recognizes that connectivity is but one facet of information poverty and is equally concerned with the *content* of information provided as well as the fact that beneficiaries must have the *capability* to process and benefit from such information.[218] In sum, while the expansion of ICT's may create a visible digital divide between technology haves and have-nots, information poverty run deeper than this – encompassing a variety of complex language, cultural and educational barriers.[219] It is the failure to address these underlying systemic disadvantages that prevent singular technology based interventions –as discussed in the context of the Free Basics initiative – from bridging the class divide.[220]

VII. CONCLUSION

In conclusion, this paper has considered the significant role of the internet in economic life, examining a range of rules relating to commercial activities carried on over the internet and their relation to net neutrality. By providing a legal analysis of the TRAI's net neutrality focused regulations in light of India's commitments under the GATS, we have drawn the connection between international trade governance at the highest level and the market activities carried out over the internet on a daily basis. The GATS provisions on market access, national treatment, domestic regulation and business practices as supplemented by the BATS, its accompanying Reference Paper, India's commitments under various RTAs, and India's own domestic legal framework, which provides a foundational

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[216] *See* Orsolya Faludi, *How Relevant Are Schiller's Concerns about Commodification of Information and Class Inequality in the World Today?*, 3 INFORMATION, SOCIETY AND JUSTICE 69, (2010).
[217] *Id.*
[218] Johannes J. Britz, *To Know or Not to Know: A Moral Reflection on Information Poverty*, 30(3) JOURNAL OF INFORMATION SCIENCE 194, (2004)
[219] *Id.* at 192.
[220] Faludi, *supra* note 216 at 72.

legal basis to the TRAI's Regulations. In addition to this legal framework, a deeper exploration of related areas of law such as competition law, would be warranted.

In addition to its economic functions and legal basis, the internet in its role as a source of information occupies an important place in the social sphere. Access to information and hence an open and neutral internet is essential to a healthy and well-functioning democracy.[221] Indeed, on a *balancing test* in the framework of international human rights law, weighing the right to receive information freely against the right to access the internet, the overwhelming need for access may often tip the scales.[222] However, as outlined above, the issue of *access* is but one of the many dimensions of information poverty and cannot be considered the sole consideration from a development perspective.

This paper demonstrates that applying international trade law together with a development lens to the issue of net neutrality has brought to the fore legal principles for an *inclusive market environment*. Such an approach is suited to driving innovation within developing countries and enabling economic growth while ensuring that its spillover has an equity enhancing distributional effect.

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[221] *Id.,* at 69.

[222] *See* Arturo J. Carrillo, *Having Your Cake and Eating It Too? Zero-Rating, Net Neutrality and International Law*, STAN. TECH. L. REV. (forthcoming 2016).