

TELECOMMUNICATIONS SERVICES IN THE *TRANS-PACIFIC PARTNERSHIP*: WILL THE MOBILE ROAMING PROVISIONS BENEFIT TOURISTS AND TRADERS?

DANNY KOTLOWITZ* AND TANIA VOON†

The purported solution to international mobile roaming charges agreed by negotiators of the Trans-Pacific Partnership ('TPP') has been hailed as one of the key achievements of the telecommunications chapter, and the treaty more broadly, especially within Australia. Apparent market failure in respect of wholesale roaming rates has posed a challenge that Australia and New Zealand, as well as the European Union and other countries, have been grappling with for several years. The TPP solution is said to hold the key to substantial benefits for both individual travellers and businesses in TPP countries through the lowering of roaming rates. Yet a close examination of the detailed roaming provisions in the TPP raises a number of questions about their interpretation, implementation and broader significance. Technological and commercial developments may mean that roaming charges fall and alternatives to roaming become more pervasive and more effective, rendering the TPP provisions superfluous. The complexity of the provisions and ambiguities in their drafting will in any case make it difficult for them to be applied in a consistent way across TPP countries. While the TPP may deliver some improvements to transparency and cooperation, the substantive mechanisms for reciprocal lowering of roaming rates in the agreed treaty text may offer little reason to get excited. Moreover, the allowance for preferential treatment of particular TPP countries or their suppliers might not withstand a legal challenge in the context of a World Trade Organization dispute.

CONTENTS

I	Introduction: Reason to Get Excited?	2
II	Commercial, Regulatory and Technological Context.....	5
	A Impact of Competition on Roaming Rates	5
	B Unilateral and Bilateral Regulation to Address Market Failure	6
	C Technological and Pricing Innovation and Alternatives to Roaming.....	12
III	The Dual Objectives of the TPP Roaming Provisions: Articles 13.6.1, 13.6.7, 13.21	14
IV	Recognition of Unilateral Domestic Measures: Articles 13.6.2–13.6.3	16
	A Domestic Regulation to Enhance Transparency and Competition: Article 13.6.2	16
	1 Disclosure of Retail Rates: Article 13.6.2(a)	16

* LLM (Toronto); BBusSci (Hons), LLB (Cape Town); Legal Counsel, Corporate Affairs, Telstra Corporation. Email: danny.kotlowitz@team.telstra.com.

† PhD (Cambridge); LLM (Harvard); Grad Dip Intl L, LLB (Hons), BSc (Melbourne); AMusA; Professor, Melbourne Law School, University of Melbourne. Email: tania.voon@unimelb.edu.au. The bulk of this article was written in May 2016. We gratefully acknowledge the generous financial support provided for this independent research by the Australian Research Council pursuant to the Discovery Project scheme (Project No DP130100838) and by Melbourne Law School pursuant to the Major Collaborative Project Fund. We thank the anonymous referee for expert suggestions and the participants in the Second Biennial Conference of the Global Economic Law Network held at Melbourne Law School on 19–20 May 2016 for their comments and questions. The opinions expressed here are our personal views and are not necessarily shared by any employer or other entity. Any errors or omissions are ours.

2	Facilitating Technological Alternatives to Roaming: Article 13.6.2(b)	17
3	Other Possibilities: Disclosure of Wholesale Rates?	18
B	Domestic Regulation of Wholesale Rates in Case of Market Failure? Article 13.6.3	19
V	The Mechanism for Bilateral Wholesale Rate Regulation: Articles 13.6.3–13.6.4	23
A	The Reciprocity Mechanism between TPP Parties: Article 13.6.4(a)	23
B	Extending the Reciprocity Mechanism to Suppliers of TPP Parties: Article 13.6.4(b)	27
C	Commercial Negotiations as a Precondition: Final Sentence of Article 13.6.4	30
VI	Legal and Practical Effects of Bilateral Roaming Arrangements: Footnote 8; Article 13.6.5	32
A	Exemption from MFN and General Telecommunications Provisions: Article 13.6.5	32
B	A ‘Domino Effect’ of Bilateral Arrangements? Footnote 8	33
VII	Plurilateral Transparency: Article 13.6.6	35
A	The Obligation on TPP Parties to Gather and Report Information	35
B	Purpose and Potential Benefits	35
C	Difficulties and Potential Regulatory Costs	36
VIII	Conclusion	37
IX	Annex: TPP Roaming Provisions	39

I INTRODUCTION: REASON TO GET EXCITED?

According to Australia’s Minister for Communications, one of the key benefits of the *Trans-Pacific Partnership Agreement* (‘TPP’)¹ is that it will address the transparency and cost of international mobile roaming (‘IMR’), a prospect he describes as ‘exciting[.]’² The ability of parties to enter into arrangements regarding wholesale roaming services between carriers in their respective countries, the Minister predicts, will ‘deliver great benefits for both Australian businesses and consumers’.³ Such proclamations follow from the apparent push by Australia to use the TPP to provide a ‘solution’ to IMR rates, through the use of bilateral arrangements as already contemplated with New Zealand.⁴ In its national interest analysis of the TPP, New Zealand’s Ministry of Foreign Affairs and Trade described the ‘high cost’ of IMR as ‘a significant practical issue for business and consumers in today’s globally interconnected

¹ *Trans-Pacific Partnership Agreement*, signed 4 February 2016, [2016] ATNIF 2 (not yet in force) (‘TPP’). Except where otherwise indicated, references in this article to the TPP text are to the agreed treaty text released to the public on 26 January 2016, following the ‘legal scrub’ but before signing on 4 February 2016. An earlier draft text before the legal scrub was released to the public on 5 November 2015.

² Commonwealth, *Parliamentary Debates*, Senate, 13 October 2015, 7447 (Mitch Fifield).

³ *Ibid* 7448.

⁴ See Telecommunications Legislation Amendment (International Mobile Roaming) Bill 2014 (Cth) (exposure draft republished 24 June 2015). See also Tania Voon, ‘Discrimination in International Mobile Roaming Regulation: Implications of WTO Law’ (2013) 16 *Journal of International Economic Law* 91, 93–6; Danny Kotlowitz and Tania Voon, ‘Services in the TPP: A Case Study of Telecommunications’ in Tania Voon (ed), *Trade Liberalisation and International Co-operation: A Legal Analysis of the Trans-Pacific Partnership Agreement* (Edward Elgar, 2013) 131, 151–4.

world’ that New Zealand ‘worked actively’ on in the TPP negotiations.⁵ The Canadian government has also made positive statements about the significance of the roaming provisions in the wake of the conclusion of TPP negotiations in late 2015, describing the TPP as including, ‘for the first time in a trade agreement, a dedicated article addressing the high cost of international mobile roaming’.⁶

Perpetuating this positive framing of the TPP’s roaming provisions, Stuart Brotman, a Nonresident Senior Fellow at the Brookings Institution, describes them as representing:

a sound policy approach to rein in international roaming fees. Increased demand for lower priced mobile telecommunications services should help drive more overall trade among the TPP signatories. By doing this at the outset, the TPP’s mobile market should expand at a rapid pace.⁷

But critics of the TPP have expressed scepticism about such claims. Professor Michael Geist of the University of Ottawa observes that the roaming provisions are largely voluntary, concluding that ‘nothing’ in the agreement ‘places countries on the road toward better mobile pricing nor any mandate to ensure more competitive pricing’.⁸ This is yet another case, argues Geist, where ‘promises about [the TPP’s] benefits for consumers prove to be largely illusory upon closer examination of the actual text’.⁹ The suggestion that the TPP addresses roaming for the first time in a trade agreement is also misplaced. In fact, Australia and China agreed on a roaming provision in their 2015 preferential trade agreement (‘PTA’), known as ‘*ChAFTA*’¹⁰ (although, for reasons we explain in part IIB, the *ChAFTA* provision merely encourages cooperation on roaming and is unlikely to have any practical effect).

Nevertheless, the TPP (especially if it enters into force, but even if it does not) may have an important impact on the drafting of other PTAs, including in relation to its roaming provisions. Already very similar language has been included in an agreement signed between Australia and Singapore to amend their

⁵ New Zealand Ministry of Foreign Affairs and Trade, *Trans-Pacific Partnership: National Interest Analysis* (25 January 2016) 66.

⁶ Global Affairs Canada, *Technical Summary of Negotiated Outcomes: Telecommunications Chapter* (1 October 2015) <<https://perma.cc/EPC6-GQBZ>>. See also Australian Government, Department of Foreign Affairs and Trade, *National Interest Analysis — Trans-Pacific Partnership Agreement* [2016] ATNIA 4 (4 February 2016) 11. The Office of the United States Trade Representative (‘USTR’), in contrast, describes the roaming provisions in the TPP as ‘facilitat[ing] the use of alternatives to roaming’ and points out that the US ‘does not regulate mobile services’: USTR, *TPP Chapter Summaries: 13 Telecommunications* (2015) 3.

⁷ Stuart N Brotman, ‘Challenges of Reforming International Mobile Roaming Rates’ on *Brookings: TechTank* (30 November 2015) <<https://perma.cc/3TYQ-RSFN>>. See also David Ramli, ‘TPP Points the Way for Cheaper Global Roaming’, *The Sydney Morning Herald* (online), 7 October 2015 <<https://perma.cc/6YS5-P54L>>.

⁸ Michael Geist, ‘The Trouble with the TPP, Day 40: Mobile Roaming Promises Unfulfilled’ on *Michael Geist* (29 February 2016) <<https://perma.cc/J6BT-9UHK>>.

⁹ Ibid. See also Corinne Reichert, ‘TPP Stops Short of Regulating Global Roaming Rates’ *ZDNet* (online), 6 November 2015 <<https://perma.cc/8R9Y-6C6Y>>.

¹⁰ *Free Trade Agreement between the Government of Australia and the Government of the People’s Republic of China*, signed 17 June 2015, [2015] ATS 15 (entered into force 20 December 2015) (‘*ChAFTA*’).

PTA (currently subject to ratification).¹¹ Australia, and perhaps other TPP parties, might also push for such provisions in the ongoing negotiations towards a plurilateral *Trade in Services Agreement*, currently being jointly led by Australia, the European Union and the United States.¹²

As an unusual example of international sectoral regulation, the roaming provisions in the TPP do warrant close analysis. What is the likelihood that these provisions will benefit consumers by lowering roaming rates or increasing transparency about available rates? Will the roaming provisions in turn benefit service industries such as telecommunications and tourism? Will the provisions be implemented in a consistent way across TPP jurisdictions? What new regulatory burden will governments, making full use of the new measures, impose on domestic telecommunications carriers? The drafting of the roaming provisions in the TPP's telecommunications chapter (ch 13) is complex and precludes easy answers to these questions. This paper examines whether the TPP's novel take on roaming is reason to get excited.

Before turning to the specifics of the TPP's roaming provisions (set out in the annex to this article), we begin by explaining in Part II of this article the commercial, regulatory and technical landscape in which they operate, indicating the competitive market for IMR services and the technological developments that may significantly reduce the provisions' relevance in the near future. We then set out in Part III the dual objectives of the roaming provisions in lowering IMR rates to assist both consumers and businesses (art 13.6.1), and the general approach of the provisions of doing so through voluntary rather than mandatory actions by TPP parties (art 13.6.7). In Part IV, we explain the unilateral domestic steps that the TPP encourages to enhance transparency in retail IMR rates and minimise impediments to alternatives to roaming (art 13.6.2), as well as the recognition that TPP parties may wish to regulate wholesale IMR rates to ensure that they are reasonable (art 13.6.3). Part V of this article addresses the core of the roaming provisions, in art 13.6.4, which allow TPP parties to reach bilateral arrangements on the regulation of wholesale IMR rates, while Part VI reflects on the legal and practical effects of such arrangements, including the potential for violation of existing obligations such as under the *General Agreement on Trade in Services* ('GATS')¹³ of the World Trade Organization. Part VII outlines the information-gathering and reporting obligations in art 13.6.6, highlighting the potential benefits of such obligations as well as the challenges in implementing them.

The commonsense rationale for the TPP's roaming provisions is a concern apparently shared among TPP parties that international roaming is characterised by market failure at the wholesale level and consequent excessive retail rates for consumers. However, that underlying rationale is not clearly reflected in the way

¹¹ *Agreement to Amend the Singapore–Australia Free Trade Agreement*, signed 13 October 2016 (not yet in force) art 8, replacing ch 10 (Telecommunications Services) including new art 11 (International Mobile Roaming).

¹² See Australian Government, Department of Foreign Affairs and Trade, *Trade in Services Agreement* <<http://dfat.gov.au/trade/agreements/trade-in-services-agreement/pages/trade-in-services-agreement.aspx>>.

¹³ *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1869 UNTS 3 (entered into force 1 January 1995) annex 1B ('*General Agreement on Trade in Services*') ('GATS').

the provisions are drafted. Moreover, the complicated mechanisms for reaching bilateral roaming arrangements among TPP parties are difficult to understand and will be even harder to implement. The provisions contain some potential for enhancing transparency through the encouragement of domestic measures and the introduction of disclosure requirements among TPP parties. However, greater benefits for consumers and businesses may flow from both technological innovation and enhanced competition in the relevant markets than from the 'solution' developed by TPP negotiators.

II COMMERCIAL, REGULATORY AND TECHNOLOGICAL CONTEXT

A *Impact of Competition on Roaming Rates*

Article 13.1 of the TPP defines an 'international mobile roaming service' as a:

commercial mobile service provided pursuant to a commercial agreement between suppliers of public telecommunications services that enables end users to use their home mobile handset or other device for voice, data or messaging services while outside the territory in which the end user's home public telecommunications network is located.

As this definition recognises, the possibility of roaming by telecommunications subscribers travelling between two countries requires a roaming 'route', which depends on the existence of commercial arrangements between mobile network operators ('MNOs') in those countries. Typically, three to four MNOs on one side of the roaming route will each wish to negotiate a roaming agreement with three to four MNOs on the other side, and vice versa, leading to a total of 9 to 16 cross-border roaming agreements for a given route. The optimal outcome for each MNO is to secure roaming agreements with all MNOs in the destination country. In this way, if a particular MNO in the destination country has gaps in mobile coverage in that country, one of the other MNOs may be able to fill those gaps, ensuring maximum available coverage when roaming in the destination country.¹⁴ The key negotiation points for reaching these agreements are wholesale pricing (known as Inter-Operator Tariffs or 'IOTs'), the term of the agreement and whether deals can be agreed to reduce the IOTs payable based on committed volumes of traffic. Non-price terms and conditions of international roaming agreements are largely generic, with net settlement payments managed through a third-party clearing house rather than directly between the MNOs.

This commercial context would, ideally, result in competition between MNOs in the destination country for inbound roaming traffic, leading to lower IOTs (that is, wholesale rates) and, in turn, lower retail rates. Competition in the home retail market for the business of outbound roamers will also have an impact on retail IMR rates, but this would tend to be less significant: most individual consumers are likely to choose their mobile provider based on rates and conditions for domestic use (calls, texts, data) rather than for international

¹⁴ See Terje Ambjørnsen, Øystein Foros and Ole-Christian B Wasenden, 'Customer Ignorance, Price-Cap Regulation, and Rent Seeking in Mobile Roaming' (2011) 23 *Information Economics and Policy* 27, 35 (noting that this effect may be reduced in mature markets where several MNOs have full coverage).

roaming. This is a consequence of outbound roaming services being bundled with domestic retail services. Consumers may also be ignorant as to the price effects of choosing one network over another when roaming internationally.¹⁵ Businesses may be more concerned than individuals about the costs of international roaming services used by employees when travelling, due to the more inelastic usage of mobile services for work purposes, but businesses are also more readily able to negotiate favourable IMR rates with their chosen MNO.

B *Unilateral and Bilateral Regulation to Address Market Failure*

Despite the pressure of competition on both wholesale and retail IMR rates, governments, regulators and consumer advocates often consider that retail IMR rates are excessively high, a view that has been supported by economic analysis focused on elasticity of demand and substitutability of alternative services.¹⁶ Retail rates can be expected to be higher for international roaming than domestic mobile services given the added technical complexity of the roaming service, the need to carry some traffic to and from the roamer's destination country, the additional cost of clearing settlement payments, customer management costs specific to roaming, and exchange rate effects.¹⁷ The extent to which IMR rates on some routes exceed domestic mobile rates, however, seems to far exceed those additional IMR specific costs.¹⁸

One reason for the high rates may be that wholesale roaming agreements attempt to 'balance' roaming traffic and hence minimise the net settlement payment, with one supplier exchanging a similar volume of IMR services with another, reducing the relevance of the nominal wholesale price and therefore competition on wholesale pricing.¹⁹ However, many roaming routes are characterised by an imbalance in traveller numbers; for example, in the period from July 2014 to June 2015, seventy per cent more Australians travelled to the US than vice versa, so assuming this to be a reasonable proxy for relative usage it would be difficult to balance traffic between MNOs.²⁰ These features are exacerbated where significant income disparities exist between the two ends of the particular route, for example Australia and Vietnam, as wealthier travellers are more likely to be willing to incur the cost of international roaming services. The volatility of exchange rates and their impact on tourism and trade in turn

¹⁵ Ibid 28.

¹⁶ See, eg, OECD, Working Party on Communication Infrastructures and Services Policy, *International Mobile Roaming Agreements*, OECD Doc DSTI/ICCP/CISP(2012)2/FINAL (3 June 2013) 7, 8; Frédéric Bourassa et al, 'Developments in International Mobile Roaming', (OECD Digital Economy Papers No 249, 28 April 2016) 7. See also Jorge Infante and Ivan Vallejo, 'Regulation of International Roaming in the European Union — Lessons Learned' (2012) 36 *Telecommunications Policy* 736, 742.

¹⁷ Imme Philbeck et al, 'Trans-Tasman Roaming: Service Costs' (Study for the Australian Government, Department of Broadband, Communications and Digital Economy, WIK-Consult, 30 May 2012) 24–41 <<https://perma.cc/39XT-WG8X>>.

¹⁸ Infante and Vallejo, above n 16, 747.

¹⁹ OECD, *International Mobile Roaming Agreements*, above n 16, 9.

²⁰ Australian Bureau of Statistics, 'Overseas Arrivals and Departures, Australia, June 2015' (Catalogue No 3401.0, 7 August 2015) <<https://perma.cc/7HFW-A6H4>>. While there are four national MNOs in the US compared to three in Australia, even assuming roaming traffic was equally spread amongst the MNOs there would still be a significant traffic imbalance on each bilateral roaming agreement, based on short-term traveller numbers for the period.

cause significant changes in roaming traffic from year to year. Lastly, balanced roaming traffic does not necessarily mean balanced costs — the cost incurred by an MNO to supply mobile services in a regional or remote location such as an Australian outback town is far greater than its Singaporean counterpart operating almost exclusively in a dense city environment. There can be good reason for IOTs to be higher in large landmasses such as Canada and Australia. MNOs have adopted simple averaged retail rate structures such as a single roaming rate for a group of destination countries, both to simplify their commercial offer to customers and to hedge the inherent volatility of traveller volumes and exchange rates for specific destinations.²¹

If national regulators identified a market failure for inbound roaming services, they could regulate IOTs imposed by their MNOs on foreign MNOs (that is, at the *wholesale* level) using their price-setting powers. Assuming that lower wholesale pricing was passed on to consumers at the retail level,²² this would still benefit only foreign consumers travelling into the country, not domestic consumers, unless foreign carriers correspondingly lowered their IOTs.²³ Alternatively, or in addition, a regulator might choose to impose caps on or otherwise reduce *retail* IMR rates charged by its MNOs to their subscribers travelling to other countries. But, again, the retail rates charged by a country's MNOs relate directly to the wholesale rates charged by foreign MNOs.²⁴ The regulator has no authority over those wholesale rates. As noted by an Organisation for Economic Co-operation and Development ('OECD') working party, 'retail regulation without addressing the wholesale level may originate margin-squeeze situations, especially for operators that do not have the ability to negotiate lower wholesale prices in other countries'.²⁵ Thus, retail level regulation should be 'a last resort'.²⁶

In Europe, the ineffectiveness of unilateral regulation was overcome by means of centralised regulation binding all member states of the EU. For example, a 2012 EU regulation imposed transparency requirements and price caps in relation to both wholesale and retail roaming;²⁷ it also required wholesale

²¹ See, eg, Telstra's Travel Pass, which offers a flat rate for unlimited voice and text roaming and a specific data allocation, for a fixed period of days (3, 7, 14 or 30), with rates set differently for three groups of countries: <<https://www.telstra.com.au/international-roaming>>; Optus' Travel Pack for a AUD10 per day flat fee to a large group of 'Zone 1' countries: <<http://www.optus.com.au/shop/mobile/international-roaming>>; Vodafone's AUD5 per day flat fee roaming charge for approximately 50 countries: <<http://www.vodafone.com.au/personal/plans/international-roaming>>. (All information correct as at 5 May 2016).

²² But see OECD, *International Mobile Roaming Agreements*, above n 16, 28.

²³ *Ibid* 7.

²⁴ *Ibid* 24.

²⁵ *Ibid* 7.

²⁶ *Ibid* 8; OECD, *Recommendation of the Council on International Mobile Roaming Services*, OECD Doc C(2012)7 (16 February 2012) [10].

²⁷ *Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on Roaming on Public Mobile Communications Networks within the Union (Recast)* [2012] OJ L 172/10, arts 7–15.

roaming access²⁸ and the separation of sale of regulated retail roaming services.²⁹ The Preamble justified the dual-level regulation as follows:

regulatory obligations should be imposed at both retail and wholesale levels to protect the interests of roaming customers, since experience has shown that reductions in wholesale prices for Union-wide roaming services may not be reflected in lower retail prices for roaming owing to the absence of incentives for this to happen. On the other hand, action to reduce the level of retail prices without addressing the level of the wholesale costs associated with the provision of these services could risk disrupting the orderly functioning of the internal market for roaming services and would not allow a higher degree of competition.³⁰

The Preamble also noted that the price caps and certain other interventions might be transitory: ‘Regulatory obligations on wholesale and retail charges for voice, SMS and data roaming services should be maintained to safeguard consumers as long as competition at the retail or wholesale level is not fully developed’.³¹

More recently, the European Parliament voted to end intra-EU roaming charges altogether by June 2017,³² with a transitional period of lower roaming caps from April 2016.³³ The European Commission calculates that consumer prices across voice, text and data have decreased by over 80 per cent since EU regulation commenced in 2007, stating that the ‘primary beneficiaries’ of the new rules are ‘Europeans who travel in the EU’ but that the rules ‘will also create a better environment for businesses and for innovation’.³⁴

Telecommunications suppliers and their customers falling outside a scheme such as that in the EU (that is, from non-EU countries such as the TPP countries) are likely to be disadvantaged, because they will not typically receive access to the lower rates (potentially leading to conflict with non-discrimination provisions in international trade law).³⁵ Worse still, the pressure on intra-EU IOTs may lead to higher IOTs in connection with inbound roaming from outside the EU, in a process known as ‘waterbed effects’.³⁶ European regulators regard the pricing of IOTs offered to MNOs from outside the EU as a commercial decision for EU MNOs. A similar approach has been adopted by the French regulator, the *Autorité de Régulation des Communications Électroniques et des Postes* (‘ARCEP’), in respect of wholesale voice termination rates: only EU carriers are entitled to the cost-oriented rates determined by the regulator. According to a

²⁸ Ibid art 3.

²⁹ Ibid arts 3, 4. See also OECD, *International Mobile Roaming Agreements*, above n 16, 12–15; Infante and Vallejo, above n 16, 739.

³⁰ *Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on Roaming on Public Mobile Communications Networks within the Union (Recast)* [2012] OJ L 172/10, Preamble para 40.

³¹ Ibid Preamble para 99.

³² European Commission, ‘Bringing Down Barriers in the Digital Single Market: No Roaming Charges as of June 2017’ (Press Release, IP/15/5927, 27 October 2015).

³³ European Commission, ‘Roaming Charges and Open Internet: Questions and Answers’ (Fact Sheet, 30 June 2015, updated 27 October 2015) 1.

³⁴ Ibid 2.

³⁵ See Part VI(A) below.

³⁶ See, eg, OECD, *Recommendation*, above n 26, para 13(a).

2014 ARCEP decision, a French telecommunications provider may charge a non-EU operator any amount up to the reciprocal termination rate that that non-EU operator would charge for termination of voice traffic in the reverse direction, even if that amount is not cost-oriented.³⁷ If Brexit is implemented, UK consumers and operators may find themselves on the losing end of these kinds of EU arrangements as well.³⁸ A recent European Commission decision has recognised that allowing discrimination in wholesale rates based on the country of origin of a call is unacceptable; however, this was in the context of discrimination between calls originating in different EU member states rather than imposing discriminatory rates on non-EU MNOs.³⁹

The TPP's roaming provisions may therefore be understood as an attempt to provide a foundation for coordinated regulation comparable to the EU scheme, even though the TPP is not a fully integrated customs union like the EU. MNOs within TPP countries can be expected to resist coordinated regulation of roaming rates, on the basis that no market failure exists (roaming rates are falling in response to competition and perhaps the threat of regulation). Some MNOs may have commercial incentives to resist more strongly than others. For example, in the absence of regulation, MNOs with a large network of international affiliates (such as, in Australia, Vodafone Hutchinson Australia ('VHA')) may be able to obtain a competitive advantage by lowering retail roaming rates for their customers travelling to particular countries through arrangements with their affiliates. MNOs without international affiliates (such as Telstra) or with only a small network of affiliates, not necessarily in countries where their customers typically travel (such as Optus), have to match the lower rates on the market simply by bearing lower profit margins. MNOs with no affiliates or without affiliates in popular destination countries do attempt to counteract these disadvantages by cooperating with one another — including in a more formalised manner, such as the Bridge Alliance,⁴⁰ of which Optus is a member. However, it is doubtful whether these cooperative arrangements between unaffiliated MNOs would be able to match the IOTs between MNOs that have a direct corporate affiliation with one another. Imposing regulation to lower roaming rates is likely to remove VHA's competitive advantage, as well as its

³⁷ L'Autorité de Régulation des Communications Electroniques et des Postes (ARCEP), *Décision No 2014-1485 de l'Autorité de régulation des communications électroniques et des postes en date du 9 décembre 2014 portant sur la détermination des marchés pertinents relatifs à la terminaison d'appel vocal sur les réseaux fixes en France et à la terminaison d'appel vocal sur les réseaux mobiles en France, la désignation d'opérateurs exerçant une influence significative sur ces marchés et les obligations imposées à ce titre pour la période 2014–2017* (9 December 2014) 51 <<https://perma.cc/5RL5-27DY>>: 'Le cas échéant, les opérateurs désignés comme puissants par la présente décision pourront donc, concernant les appels émis par les utilisateurs finals situés dans des pays extérieurs à l'Espace économique européen, pratiquer des niveaux plus élevés que celui prescrit par l'obligation d'orientation vers les coûts, dans la limite des tarifs pratiqués en retour'.

³⁸ Mike Conradi, 'Brexit and Mobile Termination Rates' on *Technology's Legal Edge* (24 June 2016) <<https://perma.cc/WW5M-HS62>>; Stefan Nicola and Aoife White, 'Brexit May Breathe New Life into Roaming Charges Set to Expire', *Bloomberg News* (online), 28 June 2016 <<https://perma.cc/R5ER-5RYS>>.

³⁹ European Commission, 'European Commission Questions Austrian Telecoms Regulator over Discriminatory Setting of Termination Rates, Next Steps on Binding General Decision Announced' (Press Release, 25 July 2016).

⁴⁰ See Bridge Alliance <www.bridgealliance.com>.

incentive to act as price leader, by lowering roaming rates to attract domestic customers. Thus, regulatory intervention could even have the unintended consequence of increasing retail roaming costs for some consumers.

Joint regulation is already contemplated and even implemented in respect of some TPP countries. For example, in 2011, the Telecommunication Regulators Council of the Association of Southeast Asian Nations ('ASEAN') adopted an arrangement to facilitate reductions in roaming charges within ASEAN.⁴¹ In the same year, TPP countries Malaysia and Singapore entered a bilateral agreement for reciprocal roaming regulation (voice and text, at wholesale and retail levels);⁴² in 2014, Singapore did the same for voice, text and data with TPP country Brunei Darussalam.⁴³ In early 2015, the ASEAN Telecommunications and Information Technology Ministers 'encouraged other ASEAN Member States to take appropriate steps to further reduce mobile roaming charges across ASEAN with the view to facilitate the establishment of [a] single telecommunications market'.⁴⁴

Looking beyond the TPP jurisdictions, remarkable results have been claimed for the East African Community ('EAC') 'One Network Area' initiative. The six African countries involved⁴⁵ agreed to cap rates for cross-border voice traffic and to eliminate mobile roaming charges from 2014. According to a World Bank study, inbound roaming calls to Kenya from Rwanda increased by over 950 per cent within three months of commencement of the new regulated IOTs.⁴⁶ This increase reflects the dramatic reductions in retail roaming rates of 83 per cent, the complete elimination of roaming charges for receiving calls, and the high volume of travel across contiguous land borders in the EAC.⁴⁷ Prior to the One Network Area initiative, roaming was extraordinarily expensive relative to incomes and domestic rates, at USD0.93 per voice minute.⁴⁸

⁴¹ See ASEAN, 'Joint Ministerial Statement of the 11th ASEAN Telecommunications and IT Ministers Meeting and Its Related Meeting with External Parties — ICT: Engine for Growth in ASEAN' (Media Release, 9 December 2011) para 9 (referring to the adoption of an 'Addendum on ATRC Intra-ASEAN Mobile Roaming Rates (MRR) to the Record of Intent (ROI), by the 17th ASEAN Telecommunication Regulators Council (ATRC)').

⁴² Infocomm Development Authority of Singapore (now Infocomm Media Development Authority), 'Singapore and Malaysia to Reduce Mobile Roaming Rates' (Media Release, 20 April 2011). The bilateral agreement was effective from 1 May 2011.

⁴³ Infocomm Development Authority of Singapore (now Infocomm Media Development Authority) and Authority for Info-Communications Technology Industry of Brunei Darussalam, 'Brunei Darussalam and Singapore Agree to Reduce Mobile Roaming Rates for Voice Calls, SMS, Video Calls and Data' (Media Release, 10 September 2014). This bilateral agreement was effective from 1 January 2015.

⁴⁴ ASEAN, 'Joint Media Statement of the 14th ASEAN Telecommunications and Information Technology Ministers Meeting and Related Meetings' (Media Release, 23 January 2015) para 3.

⁴⁵ The EAC is composed of Burundi, Kenya, Rwanda, Tanzania and Uganda, and the One Network Area has also been extended to South Sudan.

⁴⁶ Tim Kelly and Christopher Kemei, 'Digital Dividends — One Network Area in East Africa' (Background Note, World Bank, 2016) <<https://perma.cc/A7DY-5Q4Y>>.

⁴⁷ Lukas Musembi, 'Regional Roaming within East Africa — *One-Network-Area*' (Speech delivered at ITU Regional Economic and Financial Forum of Telecommunications/ICT for Africa, Sao Tomé and Príncipe, 2 February 2015) <<https://perma.cc/B4ZV-Y75V>>.

⁴⁸ Ibid.

By contrast, *ChAFTA*'s roaming provision does not contemplate joint regulation but rather that MNOs will cooperate to reduce roaming rates. Article 8.19.5 is a rather soft, aspirational provision with respect to roaming:

The Parties shall encourage their respective telecommunications service suppliers to cooperate to reduce the wholesale rates for [IMR] between the two Parties, with a view to reducing international mobile roaming rates.⁴⁹

This minimalist approach to roaming is unsurprising in an agreement that contains no discrete telecommunications chapter (unlike several other Australian PTAs)⁵⁰ and has only limited telecommunications regulatory obligations contained in five short paragraphs in art 8.19. China's commitments under *ChAFTA* with respect to the telecommunications sector generally fail to improve on commitments already made in other contexts such as the *GATS* (the implementation of which by China has been questionable in some respects).⁵¹ This broader context undermines any possible innovation of the few *ChAFTA* telecommunications provisions, including with respect to roaming.⁵²

As noted above, the Australian and New Zealand parliaments have also proposed legislation to enable coordinated bilateral regulation to lower IMR rates.⁵³ However, the relevant legislation has been in limbo since 2014 and has not yet been tabled. Recognising the potential impact of competition, the regulation impact statement in Australia for the proposed bilateral arrangement with New Zealand notes that in any case 'prices and margins in the trans-Tasman roaming wholesale and retail markets have been trending down since 2009 (particularly for data roaming)', primarily as a result of 'regulatory threat', but also in view of 'other minor factors, such as service alternatives ... market entry

⁴⁹ Nevertheless, even the *ChAFTA* obligation to 'encourage' suppliers to cooperate to reduce IMR rates could be helpful in preventing a party from setting a price floor rather than a price ceiling on wholesale IMR rates, as Vietnam has done. See the discussion of Vietnam in Part II(B) below.

⁵⁰ For an earlier review, see Tania Voon and Andrew D Mitchell, 'Achieving a Common Market for Telecommunications Services in Australia and New Zealand' (2013) 26 *Australian Year Book of International Law* 149, 175–81.

⁵¹ See generally Tania Voon and Andrew Mitchell, 'Open for Business? China's Telecommunications Service Market and the WTO' (2010) 13 *Journal of International Economic Law* 321.

⁵² The Australian government argues that the specific incorporation in *ChAFTA* of market access for Australian companies investing in specified value added telecommunications services in the Shanghai Free Trade Zone ('SFTZ') provides greater certainty for Australian telecommunications investments in the SFTZ. However, while perhaps providing Australian suppliers with better remedies should China not allow market access as promised under the SFTZ scheme, this does nothing to improve the level of market access. Telstra has noted that market access made available under the SFTZ had already progressed beyond the *ChAFTA* bound commitments, however *ChAFTA* did not allow for improvements in SFTZ access to be automatically included in *ChAFTA*. See Australian Government, Department of Foreign Affairs and Trade, 'China–Australia Free Trade Agreement — Quick Guide: Key Services Outcomes' (Factsheet, 4 January 2016) <<https://perma.cc/J8RQ-4A8C>>; Telstra, Submission No 62 to the Joint Standing Committee on Treaties, Parliament of Australia, *Inquiry into the Free Trade Agreement between the Government of Australia and the Government of the People's Republic of China*, 29 July 2015 <<https://perma.cc/6A89-Q85H>>.

⁵³ See above n 4 and corresponding text.

and market rationalisation'.⁵⁴ We now turn to the possibility of such 'alternatives'.⁵⁵

C *Technological and Pricing Innovation and Alternatives to Roaming*

A number of options are available to travellers to circumvent high retail roaming rates. Together with the downward pressure of competition on wholesale and retail rates, these alternatives to roaming may reduce the need for, and the significance of, the TPP roaming provisions. These alternatives include swapping the subscriber identity module ('SIM')⁵⁶ card in a mobile handset for that of a supplier in the destination country, using a dual SIM handset, or relying on the near-ubiquitous availability of WiFi to use over the top ('OTT') applications such as Skype, Viber, WeChat, Facebook Messenger, iMessage, Facetime, etc. The use of OTT applications has been criticised as being an imperfect substitute for IMR due to the inability of customers to use their domestic mobile phone number to make or receive calls: 'The resultant welfare loss corresponds with the classic description of deadweight loss in the economic lexicon in which neither consumers nor producers benefit'.⁵⁷ OTT applications require at least 3G data networks and either 'smart' phones or 'feature' phones, whereas the use of 2G handsets on GSM networks remains prevalent in many lower-income countries. However, recently the US carrier AT&T extended its WiFi calling application to enable customers to make and receive calls anywhere in the world, using the customers' own mobile numbers and without additional charge, as long as they have WiFi access.⁵⁸ This approach has also been adopted in South Africa by the mobile operator Cell C, which lacks the ability to compete with the attractive roaming offers of the two market leaders Vodacom and MTN, both of which have extensive affiliate operations elsewhere in Africa and internationally.⁵⁹ Thus, the possibility is real for alternatives to roaming to become perfect rather than imperfect substitutes. The Productivity Commission recently took note of the increasing use and substitutability of OTT mobile applications in Australia.⁶⁰

⁵⁴ Australian Government, Department of Communications and the Arts, 'Options-Stage Regulation Impact Statement: Trans-Tasman Mobile Roaming' (24 June 2015) 5–6. See also Australian Government, Department of Broadband, Communications and the Digital Economy and New Zealand Ministry of Business, Innovation & Employment, 'Trans-Tasman Roaming' (Final Report, February 2013) 7–8.

⁵⁵ See also Part IV(A)(2) below.

⁵⁶ The term 'UICC', which stands for Universal Integrated Circuit Card, is often used in technical descriptions as SIMs are a type of UICC. However 'SIM' or 'SIM card' is the colloquial description in general use and for convenience will be used in this article.

⁵⁷ OECD, *International Mobile Roaming Agreements*, above n 16, 7.

⁵⁸ Lance Whitney, 'AT&T Spreads Wi-Fi Calling beyond the US', *CNet* (online), 23 March 2016 <<https://perma.cc/2E2A-TRQR>>. A few caveats apply: while there is no additional roaming charge, regular international calling charges apply as if the call was being made from the US; the service is restricted in several countries such as Turkey and Israel, apparently for security reasons; and the service is currently restricted to the latest Apple handsets, which can support the application, but other handset vendors are likely to support the application in the near term.

⁵⁹ See Cell C, *Stay Connected with Wi-Fi Calling* <<https://www.cellc.co.za/cellc/wi-fi-calling-personal>>.

⁶⁰ Australian Government, Productivity Commission, 'Telecommunications Universal Service Obligation' (Issues Paper, June 2016) 7–8.

These kinds of technological developments already make it easy for international travellers to avoid roaming charges: a ‘huge number of silent roamers ... switch off their phones when they travel abroad’.⁶¹ As a result, while roaming prices remain high in some areas, ‘pricing innovation has started to change the fusty old world of roaming pricing’, with ‘innovative roaming services from 64 operators in five continents’ recently identified by Ovum Consulting.⁶²

The lengthy gestation period for the TPP roaming text means that it runs the risk of falling behind technology development. While OTT applications are at least implicitly contemplated in the text’s reference to ‘technological alternatives’, there is an equally significant development taking place at present: the conversion of the mobile industry to embedded SIM cards or ‘eSIMs’ that do away with removable physical SIM cards in devices.

The purpose of SIM cards is to authenticate a device with the mobile network and to authorise the parameters of its use. The ability to uniquely identify a device enables mobile service access to the specific MNO with which the user has contracted, and in doing so has become a highly trusted authentication and identity management system, used in particular to verify online payments. However, the physical form of a separate removable physical SIM card has over time become anachronistic: wireless devices, particularly small ‘wearable’ devices, require as much usable internal space as possible to accommodate components and batteries. SIMs in machine to machine (‘M2M’) devices are often intentionally placed in inaccessible positions as part of the manufacturing process and cannot be swapped.⁶³ There is also a high cost to the supply chain for distributing physical SIM cards, and consumers will usually dispose of unwanted SIM cards into landfill with negative environmental impact.

The advent of eSIMs addresses these problems by embedding a secure hardware element in the device, which can be remotely provisioned (as opposed to a traditional SIM card, which is set up prior to sale by the providing MNO). The change we will see in our mobile devices is from a removable SIM that is pre-programmed by the providing MNO, to a non-removable eSIM that can be reprogrammed to support different MNOs. The innovation of remote provisioning, where the SIM profile can be changed from one MNO to another on the same physical SIM, has been in the market for some time already (for example, the ‘Apple SIM’).⁶⁴ There are already consumer mobile devices in the market that contain both a traditional SIM card slot and, additionally, an eSIM built in.⁶⁵

Importantly, an eSIM can simultaneously store mobile identities provisioned by several MNOs — though with only one active identity at a time to ensure

⁶¹ Mark Newman, *Roaming: Death Throes or Rebirth?* (13 April 2016) Ovum Consulting <<https://perma.cc/E7S3-ARTZ>>.

⁶² Ibid. See also Bourassa, above n 16, 21.

⁶³ GSMA Intelligence, ‘Understanding SIM Evolution’ (Analysis Report, March 2015) 7 <<https://perma.cc/FD8S-E3JX>>.

⁶⁴ See <<http://www.apple.com/au/ipad/apple-sim/>>. Examples of similar programmable SIM offers from Chinese handset vendors can be found in Bourassa, above n 16, 33–4.

⁶⁵ For example, recently launched Apple devices: see Ina Fried, ‘Latest iPad Pro Makes It Even Easier to Switch Wireless Carriers’, *Recode* (online), 22 March 2016 <<https://perma.cc/YME2-S6S3>>.

maintenance of the security and unique authentication attributes of mobile networks. Therefore, consumers will be able to switch from an MNO in their home country to a different MNO in a foreign country to which they have travelled, without physically swapping SIM cards. Provisioning of the new mobile identity can be carried out over the mobile network itself, immediately on the traveller's arrival. Although the foreign MNO would assign a different phone number, this could be contracted in advance of arrival, allowing for pre-planning to set up a diversion from a consumer's home number. It is likely this process would in time be automated through a smartphone app, requiring only the affirmative assent of the mobile user by entry of an authentication password. Business travellers, in particular, would benefit by being able to consistently use a specific number in a destination to which they travel frequently. While eSIMs will not render roaming obsolete, they will enable a virtual SIM swap when travelling to a foreign country, making this alternative much easier to use.⁶⁶

III THE DUAL OBJECTIVES OF THE TPP ROAMING PROVISIONS: ARTICLES 13.6.1, 13.6.7, 13.21

The overall objectives of the roaming provisions in the TPP are reflected in art 13.6.1: 'The Parties shall endeavour to cooperate on promoting transparent and reasonable rates for [IMR] services that can help promote the growth of trade among the Parties and enhance consumer welfare'.

Several general principles are encapsulated in this provision. First, the roaming provisions are largely voluntary rather than mandatory, relying on future cooperation and 'endeavour[s]' of the parties. This approach is confirmed by art 13.6.7, which states that '[n]othing in this Article shall *require* a Party to regulate rates or conditions for [IMR] services'.⁶⁷ Thus, obligations under art 13.6 are triggered for a party, with effects for its MNOs, only if it *chooses* to regulate wholesale IMR rates or conditions.⁶⁸ The one exception is an obligation on TPP parties to provide information to each other on retail IMR rates at least annually⁶⁹ (which, as discussed further, may amount to no more than compiling screenshots from MNO websites).

Second, the roaming provisions are intended to cover both: (i) the retail charges paid by consumers to their own MNO for IMR services when they travel outside their home territory; and (ii) the wholesale rates applicable between MNOs to allow IMR by their subscribers (that is, the IOTs). This twofold coverage is apparent from the distinction between the general term 'rates', used

⁶⁶ There are many potential ramifications of eSIMs, particularly balancing opportunities for 'spot market' competition where consumers can switch between mobile identities in real time with the need to maintain the trusted authentication capability of a physical SIM component, which would be at risk from a move to a 'soft SIM' or entirely software based authentication mechanism. These considerations are beyond the scope of this article but the responses of domestic regulators to the technical industry standards settled for eSIMs and their implementation will also have consequences for international roaming.

⁶⁷ TPP art 13.6.7 (emphasis added).

⁶⁸ Ibid art 13.6.4.

⁶⁹ Ibid art 13.6.6.

in art 13.6.1, and the more specific references to retail and wholesale rates in subsequent provisions.⁷⁰

Third, the roaming provisions have a dual objective of assisting both consumers and business. One goal is to enhance ‘consumer welfare’, a broad concept covering everything from improving consumer information to achieving a better price for roaming. Additionally, the parties recognise that IMR facilitates trade by removing friction costs. For example, IMR enables a business person who has travelled cross-border to place and receive calls on his or her home country phone number (the number with which he or she is ordinarily associated), allowing the receiver to recognise the caller.

These dual consumer and commercial objectives are related, in that a better deal for consumers is presumed to be a better deal for business users of IMR services. In practice, larger enterprises tend to negotiate advantageous terms for roaming as part of their whole-of-business mobile services agreements with MNOs, meaning that their IMR rates would not be the same as the retail rates paid by individual consumers. However, for individual entrepreneurs and smaller businesses that do not have the bargaining power to negotiate volume-based deals with MNOs, reductions in consumer IMR rates are likely to increase the use of IMR in cross border travel for business.⁷¹

Finally, art 13.6.1 implicitly reflects a perceived need for cooperation or joint action in addressing IMR rates and conditions, because of the nature of IMR services as explained above.⁷²

Before turning to the TPP provisions on unilateral, bilateral and plurilateral roaming measures, we note that the objective of assisting businesses in TPP countries through the roaming provisions is reflected in the general procedural mechanism for resolving telecommunications disputes in TPP art 13.21. Under that provision, TPP parties must ensure that ‘enterprises have recourse to a telecommunications regulatory body or other relevant body of the Party to resolve disputes regarding the Party’s measures relating to matters set out in ... Article 13.6 (International Mobile Roaming)’,⁷³ among others. Subject to a blanket exception for Australia and a limited exception for Peru,⁷⁴ TPP parties must also ensure that enterprises ‘whose legally protected interests are adversely affected by a determination or decision of the Party’s telecommunications regulatory body may appeal to or petition the body or other relevant body to reconsider that determination or decision’.⁷⁵ These dispute resolution and appeal mechanisms apply in addition to the possibility for state–state dispute settlement under the TPP for violation of the telecommunications chapter⁷⁶ and

⁷⁰ For example, art 13.6.2(a) refers to ‘*retail rates*’, whereas art 13.6.3 addresses regulation of ‘rates for *wholesale* international roaming services’ (emphasis added).

⁷¹ However, the extent of increased adoption is difficult to predict. These highly cost conscious users will likely have adopted OTT applications such as Skype in combination with use of WiFi and destination SIM cards when travelling offshore. Having obtained zero or low cost alternatives relative to IMR rates in the past, including messaging applications with which their network of contacts has become familiar, these users may be reluctant now to adopt IMR in the absence of justification based on superior quality and utility.

⁷² Part II(B) above.

⁷³ TPP art 13.21.1(a).

⁷⁴ Ibid ch 13 n 22.

⁷⁵ Ibid art 13.21.1(d).

⁷⁶ Ibid ch 28 (Dispute Settlement).

investor–state dispute settlement under the TPP for violation of the investment chapter.⁷⁷

IV RECOGNITION OF UNILATERAL DOMESTIC MEASURES: ARTICLES 13.6.2–13.6.3

Perhaps unusually, the TPP telecommunications chapter contains specific provisions regarding the ability of TPP parties to take unilateral domestic measures in conjunction with IMR rates and alternatives to IMR. These provisions are contained in art 13.6.2 (in relation to transparency and competition, especially at the retail level) and art 13.6.3 (in relation to wholesale IMR rates). We discuss these two provisions in turn.

A *Domestic Regulation to Enhance Transparency and Competition: Article 13.6.2*

Article 13.6.2 of the TPP provides that a TPP party ‘*may choose to take steps to enhance transparency and competition with respect to [IMR] rates and technological alternatives to roaming services, such as*’⁷⁸ imposing consumer information requirements (art 13.6.2(a)) and ‘*minimising impediments to the use of technological alternatives*’ (art 13.6.2(b)). We address these two paragraphs in turn below. As with most of art 13.6, the TPP does not require parties to take such steps: rather, parties may choose to take them as a matter of domestic regulation without reference to the TPP. The words ‘*such as*’ in art 13.6.2 also make clear that paragraphs (a) and (b) are merely examples of the kinds of steps a TPP party could take to achieve the broad objective of ‘*enhanc[ing] transparency and competition*’. However, as our analysis below explains, the practical utility of art 13.6.2 in the context of the TPP is unclear, since TPP parties would be likely to have the right to take such steps even in the absence of that provision. Article 13.6.2 seems, instead, to be largely an exhortation to TPP parties to consider taking such steps for the benefit of their own consumers, with some possible flow-on benefits for other TPP parties’ suppliers and consumers.

1 *Disclosure of Retail Rates: Article 13.6.2(a)*

Under art 13.6.2(a), parties may take steps to ‘*ensur[e] that information regarding retail rates is readily accessible to consumers*’. Focusing on retail rates within its territory, this provision is directed at a party’s own consumers; it does not appear to dictate new benefits for suppliers or consumers of other TPP parties. Requiring the provision of information to consumers regarding retail IMR rates is an entirely domestically focused regulatory measure that could be

⁷⁷ Ibid ch 9 (Investment) Section B (Investor–State Dispute Settlement).

⁷⁸ Ibid art 13.6.2 (emphasis added).

(and in many jurisdictions has been)⁷⁹ adopted, irrespective of ‘permission’ to do so in a trade/investment treaty such as the TPP. Such a measure would typically apply equally to all MNOs operating in the party’s territory, removing any basis for a foreign-owned MNO in the party’s jurisdiction to complain to its home state (another TPP party) of discrimination contrary to the TPP. It is also difficult to conceive of such a measure amounting to the imposition of an undue burden that a foreign-owned MNO might complain about through the TPP, were no remedy available under the party’s domestic law. In any case, art 13.6.2(a) appears to create a presumption that a requirement of retail IMR rate disclosure would be valid under the TPP. However, art 13.6.2(a) is not explicitly framed as an exception to other TPP obligations. A discriminatory or otherwise unduly burdensome measure regarding consumer access to information on IMR retail rates that somehow violated another TPP provision might, but would not necessarily, be saved by art 13.6.2(a). That would depend on the relevant facts, TPP obligation and treaty language.

2 Facilitating Technological Alternatives to Roaming: Article 13.6.2(b)

The reference to ‘technological alternatives’ to IMR in art 13.6.2(b) acknowledges that international travellers have several telecommunications options other than using mobile roaming, as described above.⁸⁰ Article 13.6.2(b) makes clear that a TPP party could take unilateral steps to minimise impediments to such technological alternatives. For example, the regulatory agency of a TPP party could (as already occurs):

- (i) prohibit MNOs from blocking OTT application traffic on their network;⁸¹ or
- (ii) require that MNOs enable subscribers who have purchased network locked handsets, on subsidised monthly plans, to unlock the handsets.⁸²

⁷⁹ See, eg, *Telecommunications Consumer Protections Code* (Communications Alliance, Australia, C628:2015), especially at s 3.2 and ch 4. See also the summary provided by the Australian Communications and Media Authority (‘ACMA’): ACMA, *The TCP Code* <<https://perma.cc/KV9W-QUXT>>. These information transparency rules are applicable to all telecommunications services generally, including roaming offers. More specific real-time information must be provided to consumers when they are roaming under the *Telecommunications (International Mobile Roaming) Industry Standard 2013* made by the ACMA, as amended by the *Telecommunications (International Mobile Roaming) Industry Standard Variation 2016 (No 1)* (Cth).

⁸⁰ Part II(C) above.

⁸¹ See, eg, the legislation enacted in the Netherlands in 2012 to respond to retail charges imposed by that country’s mobile operators for use by customers of OTT applications: Iljitsch van Beijnum, ‘Netherlands Becomes World’s Second ‘Net Neutrality’ Country’, *Ars Technica* (online), 11 May 2012 <<https://perma.cc/X5YV-GZHZ>>.

⁸² See, eg, the Wireless Code of the Canadian Radio-Television and Telecommunications Commission (‘CRTC’), which requires that a Wireless Service Provider (‘WSP’) which ‘provides a locked device to a customer as part of a wireless service contract must, (i) if the device is subsidised, unlock the device, or give the customer the means to unlock the device, upon request, at the rate specified by the WSP, no later than 90 calendar days after the contract start date; and (ii) if the device is unsubsidised, unlock the device, or give the customer the means to unlock the device, upon request, at the rate specified by the WSP at any time during the contract. The rate for the WSP’s unlocking service must be clearly stated in the written contract and the Critical Information Summary’. See Canada Radio-Television and Telecommunications Commission, ‘Telecom Regulatory Policy CRTC 2013 271 — The Wireless Code’ (Regulatory Policy No 8665-C12-201212448, 3 June 2013) para 168 <<https://perma.cc/Q8VE-MG6S>>.

If a TPP party took unilateral steps as envisaged by art 13.6.2(b), benefits would likely accrue not only to consumers and suppliers of that party, but also to those of other parties (for example, because a traveller from another TPP party would be able to use an OTT application on his or her phone in the regulating party's territory). However, such benefits would arise even in the absence of art 13.6.2(b), which is not necessary for a TPP party to assert the right to take such measures or for another TPP party to prevent discriminatory aspects of such measures. If the prohibition in example (i) above was restricted to *domestic* customers of mobile networks, so that the OTT traffic of inbound roamers could be blocked, in the absence of a separate applicable exception or listed exemption, the prohibition could violate the general national treatment obligation in the 'cross-border trade in services' chapter of the TPP (ch 10).⁸³ In the case of example (ii), the relevant international industry standard does not permit removal of the network lock on a device for some purposes (such as switching to a domestic competitor's SIM) but not for others (inserting the SIM of a foreign MNO when travelling to that provider's country, which could benefit suppliers of another TPP party).⁸⁴ It is difficult to conceive of any other kinds of measures benefiting other TPP parties' consumers or suppliers that would fall within art 13.6.2(b), and that a party would be likely to adopt in practice. Thus, the recognition in art 13.6.2(b) that a TPP party may take steps to minimise impediments to technological alternatives to IMR does not seem to mandate any additional benefits for suppliers of other TPP parties.

3 *Other Possibilities: Disclosure of Wholesale Rates?*

As noted above, the examples in arts 13.6.2(a) and (b) do not, as a matter of interpretation, exhaust the universe of steps that a TPP party may take to enhance transparency and competition in relation to IMR rates and technological alternatives. A party might introduce other measures under the broad rubric of transparency and competition within the meaning of art 13.6.2. For example, a party could require MNOs in its jurisdiction to disclose to the public all the *wholesale* IOTs that its domestic MNOs have contracted to pay to, and are receiving from, foreign MNOs for the purpose of IMR. Despite any good intentions, such a requirement would likely be counterproductive in a competitive market for roaming. Even without public disclosure of IOTs, if an MNO priced its IOTs above that of its domestic competitors, foreign MNOs would attempt to negotiate lower rates and could 'steer' their outbound roamers' traffic towards the lower priced competitors as a bargaining tool. Roaming to that country could also be priced differentially at retail by the foreign MNO depending on which domestic MNO is providing the IMR service, such that the foreign MNO could signal its customers to choose to limit their exposure to the more expensive provider.

The negative consequence of requiring that all IOTs be made public is likely subsequent tacit collusion between MNOs on wholesale rates. Rates that were previously commercially negotiated would coalesce, as MNOs learned of the

⁸³ TPP art 10.3.

⁸⁴ See 3GPP, '3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Personalisation of Mobile Equipment (ME); Mobile Functionality Specification (Release 13)' (January 2016) <<https://perma.cc/KZV5-JZ4Z>>.

IOTs being provided to their competitors and renegotiated their roaming agreements. Rates would more likely coalesce towards the mean or upwards. Unlike retail mobile broadband services, IMR services are not easily differentiated between MNOs because they are composed largely of traditional voice and text services rather than data,⁸⁵ and hence differences in IOTs between domestic carriers are difficult to sustain. A domestic MNO would have little incentive to discount its services unilaterally in the face of mandatory IOT disclosure, as other MNOs seeking to retain their ‘share’ of inbound traffic would be forced to match the price reduction immediately.

This analysis of the competitive impact of a requirement to disclose wholesale IMR rates raises difficult questions. Is such a requirement a measure ‘to enhance transparency *and competition* with respect to [IMR] rates’ within the meaning of TPP art 13.6.2⁸⁶ if it is designed to enhance competition but in fact damages competition? Perhaps the negotiators recognised the negative effects on competition that would likely arise from wholesale roaming rate disclosure, leading them to refer to the disclosure of ‘retail’ but not ‘wholesale’ rates as an example of such a measure under art 13.6.2(a). On the other hand, if mandatory wholesale rate disclosure was accepted as a measure allowed under art 13.6.2, would this provision provide an exception for such a measure even if it led to other inconsistencies with the text or spirit of the TPP chapters on telecommunications and cross-border trade in services? Perhaps these questions need not be answered, and the drafters considered it unnecessary to be more explicit about whether art 13.6.2 provides an exception from other TPP obligations, because these kinds of measures are unlikely in any case to impose any discriminatory or excessive burden on service suppliers from other TPP countries.

In summary, the recognition of domestic regulatory measures in art 13.6.2 may reduce the likelihood of claims by a supplier of another TPP party that such measures have caused the supplier loss. As the domestic regulatory measures are intended to achieve competition and transparency objectives primarily for the benefit of that party’s consumers, protection from claims deriving from other parties’ suppliers appears logical and justifiable. However, within both the examples in art 13.6.2(a) and (b), and other hypothetical measures that might fit within art 13.6.2, few domestic measures that might cause loss to a supplier of another TPP party come to mind. This conclusion suggests that art 13.6.2 constitutes largely rhetorical encouragement for the adoption of appropriate domestic measures, particularly the two examples given in paras (a) and (b).

B *Domestic Regulation of Wholesale Rates in Case of Market Failure?* *Article 13.6.3*

In addition to recognising TPP parties’ right to take steps to enhance transparency and competition in relation to IMR under art 13.6.2, art 13.6.3 recognises that TPP parties may have domestic authority (typically through a

⁸⁵ Differentiation between MNOs on the basis of coverage is relevant to voice and text services. However, typically, inbound roamers will automatically roam onto any available network so they do not need to ‘select’ their provider in the same way as consumers in the domestic market.

⁸⁶ TPP art 13.6.2 (emphasis added).

telecommunications regulator) ‘to adopt or maintain measures affecting rates for wholesale [IMR] services with a view to ensuring that those rates are *reasonable*’.⁸⁷ Mandating disclosure of wholesale rates might be one such measure, although such measures might be better understood as falling within the ‘transparency’ provisions in art 13.6.2. In any case, as explained above,⁸⁸ such disclosure could in fact reduce competition and thus not help ensure ‘reasonable’ wholesale rates. Other more direct forms of regulation could include imposing floors, ceilings, or other price setting mechanisms on domestic wholesale IMR rates. The appropriateness of such regulation will depend on the conditions of the relevant market and the nature of the regulation.

As a matter of best practice in the telecommunications sector, the existence of a market failure should be established before introducing regulation to address that market failure.⁸⁹ Yet art 13.6.3 does not specify the conditions or criteria to be fulfilled in order to justify regulation of wholesale IMR rates (that is, IOTs). No market failure or competition problem is identified as a prerequisite for TPP parties’ domestic regulation of IOTs. Instead, the TPP seems to leave the identification and application of such prerequisites to the domestic laws and regulations of TPP parties. That approach is consistent with the parties’ recognition of ‘their inherent right to regulate’ and ‘the flexibility of the Parties to set legislative and regulatory priorities’,⁹⁰ as well as the parties’ recognition in relation to telecommunications ‘that regulatory needs and approaches differ market by market, and that each Party may determine how to implement its obligations under this Chapter’.⁹¹

As elaborated in detail below,⁹² art 13.6.3 also allows for any two TPP parties to adopt a bilateral arrangement of the kind envisaged by Australia and New Zealand, providing for reciprocal domestic regulation of IOTs.⁹³ Again, the parties to such an arrangement need not agree on the existence of market failure on the relevant roaming route before engaging in such regulation.

The absence of an express requirement that the relevant parties first identify the existence of a problem in the market for wholesale roaming on their bilateral route is worrisome. Governments might expend extensive resources negotiating bilateral arrangements and imposing domestic wholesale regulation for predominantly political reasons (for example, to be seen to be ‘doing something’ about roaming charges), when in fact the wholesale roaming market might already be highly competitive, with a downward trend in retail roaming rates on the route as a result of competition and other factors such as technological developments as noted above.

The absence of a prerequisite of market failure also means that a TPP party could seek to rely on the roaming provisions to justify domestic regulation

⁸⁷ Ibid art 13.6.3 (emphasis added).

⁸⁸ See Part IV(A)(3) above.

⁸⁹ See, eg, European Regulators’ Group, ‘ERG Report on Guidance on the Application of the Three Criteria Test’ (4 June 2008) <<https://perma.cc/ZT2S-V24S>>. The report sets out the experience of assessing whether competition conditions in particular markets justify the imposition of ex ante regulation.

⁹⁰ TPP Preamble.

⁹¹ Ibid art 13.3.1.

⁹² Part V(A) below.

⁹³ TPP arts 13.6.3, 13.6.4(a).

designed to *increase* IOTs, as occurred in Vietnam in late 2014. Pursuant to certain directives, the Vietnam Telecommunications Authority within the Ministry of Information and Communications introduced *minimum* IOTs, imposed from 1 January 2015 by Vietnamese carriers on foreign carriers for providing roaming services to those carriers' subscribers who use their mobile phones in Vietnam on a Vietnamese carrier's network. The directives prohibit Vietnamese carriers from imposing IOTs that are 10 per cent or more below the identified average IOT and preclude Vietnamese carriers from providing 'discount models of fixed payment or unlimited volume or any undefined tariff models'.⁹⁴ Oddly, the authority characterised below-floor pricing as 'dumping',⁹⁵ by which it presumably meant that the three major state-owned MNOs were losing out on a source of income.

The TPP could assist in addressing this kind of regulation in several ways. First, the transparency obligations imposed on TPP parties in connection with retail roaming rates may reveal and place pressure on such forms of regulation, as explained further below.⁹⁶ Second, these measures could violate other TPP telecommunications provisions⁹⁷ regarding matters such as 'access to and use of any public telecommunications service',⁹⁸ anti-competitive practices⁹⁹ and interconnection.¹⁰⁰ Third, as we now explain, notwithstanding the omission of a 'market failure' test for unilateral or bilateral regulation under art 13.6.3, the allowance for unilateral measures to ensure that wholesale IMR rates are 'reasonable' (and cooperative arrangements to facilitate implementation of such measures) could be interpreted to preclude measures intended to increase rather than decrease wholesale rates.

The interpretation of the term 'reasonable' in this manner would be consistent with the relevant 'context' of this term within the TPP and the 'object and purpose' of the TPP as a whole, within the meaning of art 31(1) of the *Vienna Convention on the Law of Treaties* ('VCLT').¹⁰¹ The purpose of the TPP may be understood as being reflected in its Preamble, which refers to 'economic integration to liberalise trade and investment ... create new opportunities for ... business' and 'benefit consumers'.¹⁰² This purpose would not generally be promoted by measures designed to *increase* costs for foreign

⁹⁴ Vietnam Telecommunications Authority, 'On the Subject of Enhancing the Management of the Inbound International Roaming Services into Vietnam' (Directive No 1468/CVT-GCKM, 17 October 2014) paras 4, 6.

⁹⁵ Vietnam Telecommunications Authority, 'For Promulgating the Average Tariff and the Regulated Rate for Inbound International Roaming Services' (Directive No 1469/CVT-GCKM, 17 October 2014) [2].

⁹⁶ Part V(II)(B) below.

⁹⁷ The possibility of violation of other provisions of the general cross-border trade in services chapter (ch 10) also arises. Vietnam has listed no relevant non-conforming measures in its TPP annexes I and II. However, in its TPP annex IV (see TPP art 17.9.1), Vietnam lists an exemption from art 17.4.1(a) in ch 17 (State-Owned Enterprises and Designated Monopolies), stating that any state owned entity 'in the telecommunications sector may sell ... services at a regulated price ... pursuant to a government measure'.

⁹⁸ TPP art 13.4.1.

⁹⁹ Ibid art 13.8.1.

¹⁰⁰ Ibid art 13.11.1(d).

¹⁰¹ *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980) ('VCLT').

¹⁰² TPP Preamble.

TPP businesses and, in turn, consumers. Similarly, the immediate context for interpreting ‘reasonable’ in art 13.6.3 includes art 13.6.1, which refers to the intention to ‘help promote the growth of trade among the Parties and enhance consumer welfare’.

The reference in ch 13 n 11 (discussed further below)¹⁰³ to ‘rates ... reflect[ing] the reasonable cost of supplying [IMR] services’ may also suggest that wholesale roaming rates should bear some relationship to cost, rather than being set far above the cost of supplying the service. References to ‘reasonable’ rates and conditions abound in other provisions of the TPP telecommunications chapter. Some of these provisions might be used to advocate a more flexible position to the interpretation of ‘reasonable’ in art 13.6.3, justifying measures such as Vietnam’s. In particular, n 13 to art 13.9.2(a) provides, in relation to resale of public telecommunications services, that ‘each Party may determine reasonable rates through any methodology it considers appropriate’. However, n 13 commences with the limiting words ‘[f]or the purposes of this Article’, which may be understood as referring to art 13.9 (Resale). In addition, several other TPP telecommunications provisions explicitly refer to rates that are both ‘reasonable’ and ‘cost-oriented’¹⁰⁴ (meaning ‘based on cost, and may include a *reasonable* profit’),¹⁰⁵ confirming the potential for overlap between these concepts.

The following TPP telecommunications provisions may also provide relevant context to suggest that regulation to *increase* wholesale rates in the absence of a justification based on absence of competition or other market failure would not fall within the category of measures recognised in art 13.6.3:

- art 13.6.2, which refers to a party taking steps ‘to enhance ... competition with respect to [IMR] rates’;
- art 13.3.1, which recognises the ‘value of competitive markets’ and that ‘economic regulation may not be needed if there is effective competition’;
- art 13.3.2(a), which presupposes the existence of ‘an issue ... in the market’ as a basis for *ex post* direct regulation or anticipatory *ex ante* regulation; and
- art 13.3.2(b), which recognises that a party may ‘rely on the role of market forces, particularly with respect to market segments that are, or are likely to be, competitive’.¹⁰⁶

In conclusion, notwithstanding the absence of a specific requirement that a TPP party establish the existence of market failure before engaging in unilateral or bilateral regulation of wholesale IMR rates, questions of competition and cost

¹⁰³ See Part V(B) below.

¹⁰⁴ TPP arts 13.10, 13.11.1(d), 13.12.2, 13.13.1–2. Only one provision refers to ‘cost-oriented prices’ without also mentioning that these prices should be reasonable: at art 13.12.2.

¹⁰⁵ *Ibid* art 13.1 (emphasis added).

¹⁰⁶ See also *ibid* art 25.5.2(a), referring to ‘the nature and significance of the problem’ in connection with regulatory impact proposals; at art 16.1, citing the *APEC Principles to Enhance Competition and Regulatory Reform* which premise regulatory action on the identification of a competition problem: APEC, *The Auckland Challenge: APEC Leaders’ Declaration* (13 September 1999) attachment <<https://perma.cc/6JJK-MC94>>.

are arguably relevant to determining the scope of what measures might be ‘reasonable’ for parties to adopt under art 13.6.3.

V THE MECHANISM FOR BILATERAL WHOLESALE RATE REGULATION:
ARTICLES 13.6.3–13.6.4

The significant novel development in the TPP telecommunications chapter, compared to similar chapters in previous bilateral trade agreements,¹⁰⁷ is the mechanism in arts 13.6.3 and 13.6.4 enabling any two TPP parties to negotiate a bilateral deal to regulate the IOTs payable by each other’s service suppliers. Thus, under art 13.6.3, if a party chooses to adopt domestic measures to ensure reasonable wholesale IMR rates, it may also decide to ‘cooperate on and implement mechanisms with other Parties to facilitate the implementation of those measures, including by entering into arrangements with those Parties’. In turn, under art 13.6.4, the party that has chosen to engage in unilateral regulation must ‘ensure that a supplier of public telecommunications services of another Party (the second Party) has access to the regulated rates or conditions for wholesale [IMR] services for its customers roaming in the territory of the first Party’ in two sets of circumstances: first, where the two parties have entered a bilateral arrangement for reciprocal roaming regulation (art 13.6.4(a), as contemplated in art 13.6.3); and, second, in the absence of a bilateral arrangement, where the supplier offers comparable rates or conditions (art 13.6.4(b)). We discuss both these possibilities below. In either case, the availability of reciprocal rates or conditions triggers the benefits of access to the regulated rates or conditions.

The logic adopted by the language of art 13.6.4 is awkward. The opening paragraph of this provision presupposes that a party would choose to regulate rates or conditions for wholesale IMR on a unilateral basis. However, as noted above, TPP parties have little incentive to take this step, as this would benefit only consumers of *other* parties, who would presumably enjoy the benefit of a consequent pass through to lower retail rates.

A *The Reciprocity Mechanism between TPP Parties: Article 13.6.4(a)*

The key to bilateral regulation of IOTs on a particular roaming route is, as noted, that each party regulates the wholesale rates its domestic MNOs charge

¹⁰⁷ *Singapore–Australia Free Trade Agreement*, signed 17 February 2003, 2257 UNTS 103 (entered into force 28 July 2003) ch 10; *Australia–United States Free Trade Agreement*, signed 18 May 2004, [2005] ATS 1 (entered into force 1 January 2005) ch 12; *Australia–Thailand Free Trade Agreement*, signed 5 July 2004, [2005] ATS 2 (entered into force 1 January 2005) art 807; *Australia–Chile Free Trade Agreement*, signed 30 July 2008, [2009] ATS 6 (entered into force 6 March 2009) ch 11; *Agreement Establishing the ASEAN–Australia–New Zealand Free Trade Area*, signed 27 February 2009, [2010] ATS 1 (entered into force 1 January 2010) ch 8 annex (Telecommunications); *Malaysia–Australia Free Trade Agreement*, signed 22 May 2012, [2013] ATS 4 (entered into force 1 January 2013) ch 9; *Free Trade Agreement between the Government of Australia and the Government of the Republic of Korea*, signed 8 April 2014, [2014] ATS 43 (entered into force 12 December 2014) ch 9; *Agreement between Australia and Japan for an Economic Partnership*, signed 8 July 2014, [2015] ATS 2 (entered into force 15 January 2015) ch 10; *Free Trade Agreement between the Government of Australia and the Government of the People’s Republic of China*, signed 17 June 2015, [2015] ATS 15 (entered into force 20 December 2015) ch 8.

suppliers of the other party, on a reciprocal basis. Thus, art 13.6.4(a) provides for suppliers of the second party to access regulated rates or conditions offered by the first party where ‘the second Party has entered into an arrangement with the first Party to reciprocally regulate rates or conditions for wholesale [IMR] services for suppliers of the two Parties’. While the primary subject matter for a bilateral arrangement of this kind would likely be the wholesale roaming rate (that is, the IOTs), this provision also allows for agreement on ‘conditions for wholesale [IMR] services’, presumably including non-price terms such as a reciprocal obligation to pass real time usage data between MNOs and thereby facilitate usage alerts by the MNOs to their retail customers.

Article 13.6.4(a) does not clarify the nature of the ‘arrangement’ by which the two parties agree on reciprocal terms and conditions. The term ‘arrangement’ suggests that something less than a formal bilateral treaty will suffice (for example, perhaps an exchange of letters between the two governments). As regulation of IOTs would ordinarily be the remit of the regulatory agency in a given jurisdiction, a bilateral ‘arrangement’ between governments does not translate automatically into regulatory action. In a few of the TPP jurisdictions, such as Japan and Vietnam, the regulator is part of the relevant government department and under direct control of the communications minister.¹⁰⁸ However, in most TPP jurisdictions the regulatory agency has some degree of independence from government.¹⁰⁹ Even so, in most TPP jurisdictions the executive is able to give policy directions to the regulatory agency,¹¹⁰ and the leadership of the regulatory agency is typically appointed by the executive¹¹¹ (or at least nominated by the executive subject to approval of the legislature).¹¹² The regulatory agency is, therefore, at the very least subject to significant influence by the government of the day, which could therefore expect the agency to implement reciprocal IOTs in accordance with the bilateral arrangement.¹¹³

The division between government and regulator creates a gap between the terms of a bilateral arrangement and its implementation in practice. One scenario in which a regulatory agency might balk at implementing a bilateral IMR arrangement is if it considered the measure unnecessary, for example if the

¹⁰⁸ In Japan, the Ministry of Internal Affairs and Communications; in Vietnam, the Vietnam Telecommunications Authority within the Ministry of Information and Communications.

¹⁰⁹ TPP art 13.16 contains obligations regarding independence and separation of the telecommunications regulatory body from telecommunications suppliers.

¹¹⁰ For example, under s 8 of the Canadian *Telecommunications Act*, SC 1993, c 38, the Governor in Council (on the advice of the Federal Cabinet) may issue to the CRTC ‘directions of general application on broad policy matters with respect to the Canadian telecommunications policy objectives’.

¹¹¹ For example, in the case of Australia, the members of the Australian Competition and Consumer Commission (‘ACCC’) — with which the regulatory authority to determine IOTs rests — are appointed by the Governor-General (on the advice of the Commonwealth government) under s 7 of the *Competition and Consumer Act 2010* (Cth) though with the caveat that the majority of the states and territories acting through their governments must support the appointment in each case.

¹¹² For example, in the case of the US, Commissioners of the Federal Communications Commission (‘FCC’) are nominated by the President but must be confirmed by the United States Senate. See *Communications Act of 1934*, 47 USC § 154(a) (2016).

¹¹³ If the regulatory agency nonetheless strayed from its implementation of reciprocal IOTs in the manner anticipated by the parties in their ‘arrangement’, the government could as a last resort legislate the required reciprocal arrangements — though this would be an unusual and highly specific intervention in matters ordinarily managed by the regulatory agency.

wholesale roaming market was already highly competitive, with a downward trend in retail roaming rates on the route. However, if governments tested for the existence of a competition problem prior to seeking a bilateral arrangement, this problem should not arise. A TPP party itself could also encourage inadequate implementation of a bilateral arrangement by the regulator, either as a deliberate attempt to game the process or due to pressure from domestic MNOs. Governments would be susceptible to such pressure if they could get away with ‘cheating’ of this kind, as they would achieve an asymmetric outcome where the cheating party’s consumers enjoy the benefit of flow on effects to the retail market of lower IOTs without its MNOs giving up any of their own wholesale revenue. In those circumstances, one party’s consumers become the sole or disproportionate beneficiaries of the bilateral arrangement. Such an outcome could be more likely on routes with a traffic imbalance due to income disparity and hence tourist numbers — for example, Australia and Vietnam — because MNOs in the jurisdiction with a significantly greater number of inbound roamers (and hence IOT receipts) would be less willing to absorb a loss in wholesale revenues.

Footnote 9 to art 13.6.4(a) specifies, ‘[f]or greater certainty’, that access to the regulated rates or conditions is available ‘only if such regulated rates or conditions are reasonably comparable to those reciprocally regulated under the arrangement referred to in this subparagraph’, with the ‘telecommunications regulatory body of the first Party’ to determine ‘in the case of disagreement ... whether the rates or conditions are reasonably comparable’. This footnote is difficult to decipher. In particular, the reference to rates or conditions that are ‘reasonably comparable to those reciprocally regulated under the’ bilateral arrangement is ambiguous.

Imagine that party A and party B have reached a bilateral arrangement for reciprocal regulation of wholesale IMR rates or conditions, and both parties have engaged in domestic regulation of such rates or conditions. An MNO of party B seeks access (for its customers travelling to party A) to wholesale roaming services from an MNO of party A, on the wholesale rates or conditions determined by party A’s regulation.¹¹⁴ Does the ‘reasonably comparable’ test require that *party A*’s regulated rates or conditions are ‘reasonably comparable’ to those agreed in the bilateral arrangement (that is, that what party A decided to do domestically was actually what it had agreed to do bilaterally and not a separate unilateral attempt at regulation, or intentionally weak implementation in order to game the process)? Or does the test require that *party B*’s regulated rates or conditions are ‘reasonably comparable’ to party A’s regulated rates or conditions (that is, that parties A and B have implemented their bilateral arrangement in a similar manner, allowing reciprocal benefits)?

The latter interpretation may accord better with the context and purpose of the provisions (with paras (a) and (b) of art 13.6.4 both focusing on reciprocity). Yet, even then, is the intended comparison under n 9 between the regulations of parties A and B, or between the rates or conditions offered by MNOs of parties A and B (which could conceivably differ from the rates or conditions dictated by the relevant regulations)? In other words, is n 9 intended to address the problem

¹¹⁴ Party B’s MNOs may have a prior obligation to seek supply by way of commercial negotiation with the relevant party A MNOs: see Part V(B) below.

of non-reciprocal rates or conditions as a result of party B's MNO's not complying with party B's regulations, or as a result of party B not issuing regulations in accordance with the bilateral arrangement? A number of possibilities arise, given the existence of four different sets of rates or conditions: as set out in party A's regulations; as implemented by party A's MNOs; as set out in party B's regulations; and as implemented by party B's MNOs.

In any case, art 13.6.4(a) seems to presume the following sequence of steps in implementing n 9:

- 1 Parties A and B enter a bilateral arrangement for reciprocal regulation of IMR rates or conditions.
- 2 Parties A and B impose domestic regulations on IMR rates or conditions purportedly in accordance with the bilateral arrangement, presumably narrowing the availability of the rates or conditions to each other's suppliers.
- 3 An MNO of party B seeks access to the regulated rates or conditions from an MNO of party A.
- 4 Party A's MNO refuses access to party B's MNO on the regulated rates or conditions, on the basis that party A's MNO does not receive reasonably comparable rates or conditions with respect to customers of party A's MNO travelling to party B.
- 5 Party B's MNO refers the dispute to the telecommunications regulatory body of party A.
- 6 If party A's regulator determines that party B's regulated rates or conditions meet the 'reasonably comparable' test, the body forces party A's MNO to provide access to party B's MNO on the regulated terms or conditions.

It may seem odd that an MNO would be able to refuse access on the basis of non-reciprocity, or that the regulator of party A could decide whether party B's regulations comply. However, these steps may be based on pragmatic considerations: for example, that only party A's regulator can force party A's MNOs to provide access, and that in a commercial setting only party A's MNOs would know how party B has implemented the bilateral arrangement in practice. In addition, in assessing party B's regulated rates or conditions, party A's regulator would presumably have the interests of party A's consumers in mind (that is, a failure to properly implement and enforce a bilateral arrangement is likely to have negative consequences for party A's suppliers when their customers travel to party B).

The mechanism in n 9, while perhaps dictated by practical considerations, also raises the troubling prospect of one TPP party's regulator casting aspersions on the efforts of another's. As noted earlier, regulatory agencies in the different TPP parties vary considerably. The Malaysian and Singaporean regulators, for example, have a primary mandate of industry development. A former head of the Malaysian Communications and Multimedia Commission, Tan Sri Nuraizah Abdul Hamid, said bluntly that 'the FCC and Ofcom are not relevant models for us'.¹¹⁵ Consideration of the wholesale IMR regulation adopted by another party's regulator might go beyond economic methodology to examine regulatory processes. A finding that a foreign regulator's process was administratively defective, for example because stakeholders were not adequately consulted, would be very sensitive politically. The regulator's decision may itself be

¹¹⁵ Quoted by Marina Bidoli, 'Follow the Leader', *Future Company* (online), 29 March 2002 .

influenced by political considerations including domestic industry lobbying, a criticism sometimes levelled at regulatory decisions in other sectors such as airline landing and cabotage rights. Experienced telecommunications regulatory agencies with institutional independence in markets with no remaining government ownership of mobile incumbents and a long history of competition, such as Australia, would likely prove less vulnerable to such pressures than newly established regulators in markets where state owned enterprises dominate the market. This difference creates a risk of inconsistent decisions on the ‘reasonably comparable’ test, especially since the comparators are uncertain and the criteria for making the comparison are unspecified.

B *Extending the Reciprocity Mechanism to Suppliers of TPP Parties:*
Article 13.6.4(b)

The reciprocity mechanism based on bilateral arrangements between TPP parties under art 13.6.4(a) would not assist in jurisdictions where the regulator either does not have authority to regulate wholesale IMR rates or conditions or has the authority but refrains from using it. In the US, in particular, the major mobile operators aggressively resist the introduction of any new regulation by the Federal Communications Commission (‘FCC’), on the basis that the FCC should forbear from regulating in view of the highly competitive commercial mobile market. Evidence of this sensitivity is reflected in n 2 to ch 13 of the TPP. Footnote 2 states that, ‘consistent with’ art 13.3.2(b) (mentioned above),¹¹⁶ the US, ‘based on its evaluation of the state of competition of the US commercial mobile market, has not applied major supplier related measures’ pursuant to several ch 13 provisions ‘to the commercial mobile market’.

US operators frequently challenge new telecommunications regulations in US courts,¹¹⁷ and the same response should be expected if the FCC proposed to regulate IOTs. As the FCC would have difficulty implementing any bilateral arrangement between the US and another TPP party involving reciprocal regulation of wholesale IMR rates or conditions, the US government is unlikely to seek any such arrangement. Lobbying by US operators may therefore explain the inclusion of both the country-specific n 2¹¹⁸ and art 13.6.4(b), which provides a different mechanism for reciprocal IMR rates or conditions, in the

¹¹⁶ See above n 106 and corresponding text.

¹¹⁷ For example, in June 2016 the US Court of Appeals for the DC Circuit rejected a challenge to the FCC’s 2015 ‘Open Internet Order’ dealing with net neutrality, and that decision has in turn been appealed to the full court. This follows the pattern of a long history of litigation over prior FCC rules dealing with the same topic. See *United States Telecom Association v Federal Communications Commission*, 825 F 3d 674 (DC Cir, 2016).

¹¹⁸ The inclusion of this footnote, at the insistence of the US, is questionable. The footnote is likely explained by the privileged access of US industry to TPP text when no similar access was provided to most other private sector actors in other TPP jurisdictions. The footnote merely asserts the competitiveness of the US mobile market. This assertion presumably stems from concern by the US MNOs that the TPP telecommunications chapter might be used as a basis to introduce regulation where none currently exists in the US. Several TPP parties could make this claim about their own domestic mobile markets, supported by data on affordability and penetration suggesting that their mobile markets are *more* competitive than the US mobile market. Such parties evidently saw no purpose in making such a statement in the text or, because their domestic MNOs had limited or no visibility of the text and hence this particular US footnote, they were not lobbied to do so by their domestic industry.

absence of domestic regulation by party B. Similar considerations may also underlie

art 13.6.7 (which, as noted above, makes clear that the TPP does not require any TPP party to regulate rates or conditions for either retail or wholesale IMR services) and the exclusion of the roaming provisions from the requirement in art 13.20 that each party provide its competent authorities with authority to enforce the party's measures relating to particular ch 13 obligations.

Under art 13.6.4(b), if party A has chosen to regulate rates or conditions for wholesale IMR services, but party C has not, party A must provide access to the regulated rates or conditions to a public telecommunications service supplier of party C for that supplier's customers roaming in party A, if the party C supplier, 'of its own accord':

- (i) makes available to suppliers of public telecommunications services of [party A] wholesale [IMR] services at rates or conditions that are reasonably comparable to the regulated rates or conditions; and
- (ii) meets any additional requirements that [party A] imposes with respect to the availability of the regulated rates or conditions.¹¹⁹

As with art 13.6.4(a), the starting point of art 13.6.4(b) based on the opening paragraph of art 13.6.4 is that a party would choose to regulate rates or conditions for wholesale IMR on a unilateral basis in the hope that other parties or their MNOs would reciprocate: a most unlikely scenario. In art 13.6.4(a), the sequencing of this unilateral step can be treated as a fiction because parties A and B would already have negotiated a bilateral arrangement. Article 13.6.4(b) instead assumes that party A has engaged in unilateral regulation purely for the benefit of other TPP parties' consumers.

A more plausible scenario for the application of art 13.6.4(b) is that party A is engaging in publicly notified wholesale regulation pursuant to a bilateral arrangement with party B. Party C has no appetite for such regulation, but one of its MNOs realises that its IOTs are similar to those under the bilateral arrangement between parties A and B. Pursuant to art 13.6.4(b)(i), party C's MNO can seek access to the regulated rates or conditions in party A by providing wholesale IMR services to party A's MNOs for their customers travelling to party C at rates or conditions that are 'reasonably comparable' to party A's regulated rates or conditions.

Footnote 10 to art 13.6.4(b)(i) explains how to determine whether rates or conditions offered by party C's MNO are 'reasonably comparable' to those of party A: 'reasonably comparable means rates or conditions agreed to be such by the relevant suppliers or, in the case of disagreement, determined to be such by the telecommunications regulatory body of' party A. Utilising the first option (agreement between the suppliers), party C's MNO might require a contractual acknowledgment of reasonable comparability from party A's MNO as a condition for supplying at particular IOT rates or conditions, in order to ensure access to the regulated rates or conditions in party A. Having reached a commercial agreement to this effect, party A's MNO would offer the regulated rates or conditions to party C's MNO rather than being forced to do so by party A's regulator. This first option therefore seems to provide MNOs

¹¹⁹ Citations omitted.

from non-regulated jurisdictions (party C) with the ability to pressure MNOs from regulated jurisdictions (party A) to extend the regulated rates or conditions to them.

In the absence of agreement between party C's MNO and party A's MNO as to whether the rates or conditions they are offering are reasonably comparable, n 10 provides a second option, whereby party A's regulator determines the matter. This power is similar to that granted to regulators in determining reasonable comparability between the rates or conditions of parties A and B under n 9 to art 13.6.4(a), as explained above.¹²⁰ The same reasons apply for this approach under n 10 to art 13.6.4(b)(i): in practice, party A's regulator has the ability to enforce compliance by party A's MNOs for the benefit of party C's MNO, and the regulator will have the interests of party A's consumers in mind in assessing reasonable comparability. Nevertheless, party A's regulator passing judgment on the commercial offer of party C's MNO is as unusual as party A's regulator assessing party C's regulations and may raise corresponding concerns.

A further condition for party C's MNO to access party A's regulated rates or conditions, under art 13.6.4(b)(ii), is that party C's MNO meets any additional requirements that party C imposes with respect to the availability of the regulated rates or conditions. Footnote 11 to art 13.6.4(b)(ii) explains, '[f]or greater certainty', that these additional requirements could include 'that the rates provided to the supplier of [party C] reflect the reasonable cost of supplying [IMR] services by a supplier of [party A] to a supplier of [party C], as determined through the methodology of [party A]'. Strangely, this example seems to be a requirement imposed on party A's MNOs rather than party C's MNO. How could party C's MNO, 'of its own accord', 'meet' the requirement that the rates it receives from party A's MNO reflect the reasonable cost of supply? Perhaps party C's MNO must correspondingly offer rates reflecting costs and prove this relationship to party A's regulator? However, party A's regulator would have no ability to force party C's MNO to disclose data or to conduct further investigations concerning party C's costs. Moreover, party A's regulator would face difficulty applying party A's cost-modelling methodology to the costs data of party C's MNO, given the large discrepancies between market conditions in different TPP parties.¹²¹ In any case, if the TPP negotiators intended this kind of reciprocal obligation, n 11 as drafted does not reflect that intention. Instead, the negotiators may simply have intended to indicate, through this clumsy drafting, that party A could deny access to the regulated rates or conditions to party C's MNOs where those regulated rates would not reflect the reasonable costs of supply.

¹²⁰ See Part V(A) above.

¹²¹ Regulators might cooperate to exchange cost data in order to facilitate this analysis but, even assuming that this could be done without compromising commercial confidentiality, the required data may not be in a regulator's hands. In some jurisdictions such as Australia, where domestic mobile terminating access is regulated, the regulator has already done detailed cost studies on mobile network cost inputs; but in other jurisdictions regulators may not have any experience or prior data relating to mobile network cost assessment. Significant differences are likely to exist between network costs in large landmasses such as Australia and Canada and those in a city state such as Singapore or a far more densely populated country like Japan. Even in countries with similar geographic characteristics, significant variation may exist in labour and construction input costs. Adjustments for exchange rates would also be challenging.

While superficially similar to a bilateral ‘arrangement’ between TPP parties, the involvement of a non-government actor on one side of this bilateral process (that is, party C’s MNO) creates awkward asymmetries, particularly in regard to enforcement. If parties A and B were to reach a bilateral arrangement, should party B’s regulated rates or conditions cease to be ‘reasonably comparable’ to those of party A, party A could seek to enforce the arrangement either by denying access to the regulated rates or conditions to party B’s MNOs under art 13.6.4(a) or through direct engagement with party B to comply with the bilateral arrangement. In contrast, under art 13.6.4(b), if party C’s MNO subsequently changed its rates or conditions so that they were no longer ‘reasonably comparable’, party A could not directly force party C’s MNO back to the ‘reasonably comparable’ standard; party A’s only option would be to suspend access to the regulated rates or conditions to party C’s MNO.

Asymmetry also arises in the context of recourse to telecommunications regulators to resolve disputes under art 13.21.¹²² A non-regulated MNO could rely on art 13.21.1 to seek recourse to the telecommunications regulator of a regulating party in respect of that party’s IMR regulations. For example, party C’s MNO could seek recourse from party A’s regulator if it objected to the ‘additional requirements’ imposed by party A under art 13.6.4(b)(ii). A foreign MNO (for example, party A’s MNO) has no corresponding opportunity to seek recourse from the telecommunications regulator of a non-regulating party (for example, party C) with respect to IMR rates or conditions because party C has no IMR regulation against which party A’s MNO can object. The TPP also grants a regulated MNO (for example, party A’s MNO) no right to recourse against a decision of its own regulator, for example a decision by party A’s regulator under n 9 or n 10 that party B’s regulated rates or conditions or those of party C’s MNO are ‘reasonably comparable’. Party A’s MNO would have to rely instead on domestic laws and regulations for opportunities to review such a decision.

C *Commercial Negotiations as a Precondition: Final Sentence of Article 13.6.4*

The final sentence of art 13.6.4, applicable to all cases of access to regulated wholesale terms and conditions for IMR (that is, bilateral arrangements under para (a) or reciprocal rates or conditions under para (b)), allows the regulating party (party A) to require ‘suppliers of the second Party [that is, party B or C] to fully utilise commercial negotiations to reach agreement on the terms for accessing such rates or conditions’.

Although the TPP does not require parties to adopt this approach, many telecommunications regulatory schemes do encourage commercial negotiation as a step prior to seeking regulatory intervention — known as a ‘negotiate–

¹²² See Part III above.

arbitrate' approach.¹²³ The practical consequence is to encourage private settlement of access disputes, with the threat of regulatory intervention if such agreement is not reached, providing a 'carrot and stick' incentive mechanism. This approach also enables private parties to reach more creative solutions to commercial deals, such as volume-based, scaled and 'all you can eat' arrangements, which encourage greater usage of services and are generally beneficial to consumers. Regulated terms or conditions cannot anticipate all of the types of commercial agreements that private parties might conclude on a willing seller/willing buyer basis, and therefore should be a backstop rather than a substitute for commercial negotiation.

On the other hand, an obligation to engage in commercial negotiation should not be used as a means to frustrate access to regulatory relief. TPP art 13.6.4 contains no definition of 'fully utilis[ing] commercial negotiations'. In some jurisdictions, the requirement for commercial negotiation has been used as a means of imposing technical conditions or financial requirements that are difficult to fulfil, for example in interconnect negotiations.¹²⁴ In contrast, in the context of IMR, a settled commercial framework of template agreements and long established financial clearing procedures exists, which may minimise this kind of gaming. However, the broad language of art 13.6.4 creates a risk of inconsistent application across different TPP parties.

¹²³ This was the approach adopted in Australia under pt XIC of the *Competition and Consumer Act 2010* (Cth) and its predecessor legislation dating back to 1997. The approach provided that if parties could not agree on the terms of access to a declared service, then either party could notify an access dispute to the ACCC. The ACCC would then arbitrate the dispute and determine the terms and conditions of access, which would apply to those two parties only. In 2010, due to concern that the 'negotiate-arbitrate' model was not producing effective outcomes for industry or consumers, this approach was reformed to allow the ACCC to set up front prices and non-price terms for declared services. This reform was intended to establish a benchmark that access-seekers can fall back on, while still allowing parties to negotiate different terms.

¹²⁴ The Philippines' regulatory regime provides an example of gaming of the 'negotiate-arbitrate' model to frustrate access by competitors. Under s 18 of the Filipino legislation governing the telecommunications sector, *Republic Act 7925 of 1995*, interconnection rates must be negotiated between parties, but in the event of a dispute, the regulator, the National Telecommunications Commission, can step in to arbitrate the dispute. Subsequent Implementing Rules and Regulations issued in Memorandum Circular 14-7-2000 prescribed a maximum 90 day period for negotiation (s 14(I)). However, in practice, interconnection arrangements and particularly rates have been subject to prolonged disputes. See Mary Grace Mirandilla-Santos, 'Unleashing the Power of Competition: The Philippine Telecommunications Reform Story' in Raul V Fabella et al (eds), *Built on Dreams, Grounded in Reality: Economic Policy Reform in the Philippines* (Asia Foundation, 2011) 99, 115; Lorraine Carlos Salazar, *Getting a Dial Tone: Telecommunications Liberalisation in Malaysia and the Philippines* (Institute for Southeast Asian Studies, 2007) 319; Marcelino G Veloso III, 'Telconopoly: Overthrowing the Shadow of Regulatory Capture and Opportunism in Philippine Telecommunications through Interconnection and an Effective Government Competition Policy' (2011) 85 *Philippine Law Journal* 602, 659.

VI LEGAL AND PRACTICAL EFFECTS OF BILATERAL ROAMING ARRANGEMENTS:
FOOTNOTE 8; ARTICLE 13.6.5

A *Exemption from MFN and General Telecommunications Provisions:
Article 13.6.5*

A key difficulty that the TPP parties had to address in crafting the mechanisms for bilateral roaming arrangements in art 13.6.4 was the potential for such arrangements to amount to violations of most-favoured nation ('MFN') obligations or other telecommunications specific provisions. For example, the MFN obligation in the TPP (in the general cross-border trade in services chapter (ch 10)) states that '[e]ach Party shall accord to services and service suppliers of another Party treatment no less favourable than that it accords, in like circumstances, to services and service suppliers of any other Party or a non-Party'.¹²⁵ If a TPP party provided preferential wholesale IMR rates and conditions to suppliers from one TPP party (with which it has reached a bilateral roaming arrangement under art 13.6.4(a)) and not to suppliers from another TPP party (with which it has not reached such an arrangement), this preferential treatment could violate the MFN obligation.¹²⁶ An MFN violation could also arise where preferential treatment was granted to a particular supplier in the absence of a bilateral arrangement, pursuant to art 13.6.4(b).

The parties resolved this difficulty by stating in art 13.6.5:

A Party that ensures access to regulated rates or conditions for wholesale [IMR] services in accordance with paragraph 4 shall be deemed to be in compliance with its obligations under Article 10.4 (Most-Favoured-Nation Treatment), Article 13.4.1 (Access to and Use of Public Telecommunications Services), and Article 13.7 (Treatment by Major Suppliers of Public Telecommunications Services) with respect to [IMR] services.

As a result of this provision, a TPP party could not claim that preferential IMR rates and conditions offered pursuant to the requirements in art 13.6.4 amounted to an MFN violation under ch 10 of the TPP or a violation of other relevant telecommunications specific provisions under ch 13 of the TPP.

However, art 13.6.5 does not appear to provide protection to a TPP party engaging in preferential treatment in connection with IMR from claims under non-TPP treaties. For example, *GATS* art II:1 imposes a general MFN obligation on all WTO members with respect to trade in services covered by that treaty, except to the extent that the member has negotiated and listed an exemption for a particular service or measure in its *GATS* schedule of MFN exemptions. The 12 countries that negotiated the TPP are also all members of the WTO. None of those countries has listed a relevant MFN exemption with respect to

¹²⁵ TPP art 10.4 (subject to TPP ch 10 n 2).

¹²⁶ See Voon, 'Discrimination in International Mobile Roaming Regulation', above n 4, 103–7.

telecommunications services.¹²⁷ The TPP parties may instead be presuming that the exception in *GATS* art V for economic integration agreements would shield preferential treatment under a bilateral roaming arrangement. However, the applicability of the *GATS* art V exception is uncertain in those circumstances,¹²⁸ particularly if the bilateral roaming arrangement does not form an integral part of a broader economic integration agreement between the two parties providing for substantial liberalisation of trade in services. Given the voluntary nature of such arrangements under the TPP, and the fact that they will be separate from the TPP, the TPP itself is unlikely to constitute an ‘economic integration agreement’ under *GATS* art V sufficient to shield a bilateral roaming arrangement between two TPP countries.

B A ‘Domino Effect’ of Bilateral Arrangements? Footnote 8

Footnote 8 to TPP art 13.6.4 makes clear that a TPP party cannot invoke an MFN or other non-discrimination obligation from another PTA to gain access to the benefits of a bilateral roaming arrangement to which it is not a party:

For greater certainty, no Party shall, solely on the basis of any obligations owed to it by the first Party under a most favoured nation provision, or under a telecommunications specific non-discrimination provision, in any existing international trade agreement, seek or obtain for its suppliers the access to regulated rates or conditions for wholesale [IMR] services that is provided under this Article.

Unlike art 13.6.5, n 8 recognises the existence of MFN and non-discrimination provisions in treaties other than the TPP (for example, *GATS* and services provisions in other PTAs). At the same time, unlike art 13.6.5, n 8 does not appear to purport to prevent a claim under another treaty that such preferential treatment amounts to an MFN violation (whether such an attempt would be effective would depend on the circumstances, but an inter se modification of the *GATS* to remove a WTO member’s right to bring a claim of a violation of *GATS* art II:1 seems unlikely based on the current approach of the

¹²⁷ *Australia — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/6 (15 April 1994); *Brunei Darussalam — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/95 (15 April 1994); *Canada — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/16 (15 April 1994), GATS/EL/16/Suppl.1/Rev.1 (4 October 1995), GATS/EL/16/Suppl.2 (26 February 1998); *Chile — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/18 (15 April 1994); *Malaysia — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/52 (15 April 1994); *Mexico — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/56 (15 April 1994); *New Zealand — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/62 (15 April 1994); *Peru — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/69 (15 April 1994), GATS/EL/69/Suppl.1 (26 February 1998); *Singapore — Final List of Article II MFN Exemptions*, WTO Doc GATS/EL/76 (15 April 1994); *United States — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/90 (15 April 1994), GATS/EL/90/Suppl.1 (28 July 1995), GATS/EL/90/Suppl.2 (11 April 1997), GATS/EL/90/Suppl.3 (26 February 1998); *Vietnam — Final List of Article II (MFN) Exemptions*, WTO Doc GATS/EL/142 (19 March 2007). Japan’s list does not appear on the WTO website but for an undated version, see <<https://perma.cc/WY22-DPMY>>.

¹²⁸ Voon, ‘Discrimination in International Mobile Roaming Regulation’, above n 4, 111–16.

WTO Appellate Body).¹²⁹ Rather, n 8 appears intended to preclude TPP parties from using existing treaties to ‘free ride’ on other TPP parties’ bilateral roaming arrangements.

Nevertheless, as a practical matter, could the conclusion of one bilateral arrangement between two TPP parties trigger a ‘domino effect’ whereby a third TPP party joins the bilateral arrangement to make it trilateral, and so forth? For example, a bilateral arrangement between Australia and New Zealand is all but concluded and could be implemented quickly after the TPP comes into force (assuming it does so).¹³⁰ Could Singapore then, having regard to the IOTs and any conditions of supply set out in the regulations in Australia and New Zealand, decide it wants to clamber aboard? The text of TPP art 13.6.4 does not directly allow for this, contemplating only bilateral arrangements. Also, any domestic implementing regulations, for example in Australia, would likely expressly limit access to the regulated IOTs, and related conditions, to MNOs from New Zealand. However, Singapore might enter into its own separate bilateral arrangements with each of Australia and New Zealand. That process could be hastened, first, by Australia and New Zealand demonstrating a willingness to enter into such arrangements and, second, by the publication of the implementing regulations in Australia and New Zealand, which would be expected to disclose the relevant regulated IOTs and any other applicable conditions. Such disclosure would create a known baseline for the Singaporean government (presumably after consultation with its MNOs) for the terms of potential bilateral arrangements with Australia and New Zealand. Therefore, while art 13.6.4 creates no automatic domino effect, the first bilateral arrangement could ease the conclusion of subsequent bilateral party to party arrangements.

The possibility of a domino effect is stronger in theory where an MNO from a non-regulating jurisdiction seeks to rely upon the mechanism in art 13.6.4(b): where another TPP party has chosen to regulate wholesale IMR rates or conditions, and the MNO is prepared to offer reciprocal rates or conditions. In practice, the MNO would face some hurdles. First, as noted above, domestic regulations implementing a concluded bilateral arrangement would limit access to regulated rates or conditions to MNOs of the other party to the bilateral arrangement. In order for a non-regulated MNO from a third party to access the same rates or conditions, the regulating party would need to amend its domestic regulation. Second, unlike bilateral party-to-party arrangements covering all MNOs in the two TPP parties, in the case of non-regulated MNOs, only one or two MNOs in the third party might be seeking access. Third, the process of determining whether the non-regulated MNO’s offer is ‘reasonably comparable’ would be complex, and the MNO would also have to meet any additional requirements such as cost reflective pricing.

In conclusion, although the conclusion of bilateral party to party arrangements pursuant to TPP art 13.6.4 may provide some encouragement to other TPP parties to seek similar arrangements and to non-regulated MNOs to seek access

¹²⁹ See, eg, Appellate Body Report, *Peru — Additional Duty on Imports of Certain Agricultural Products*, WTO Doc WT/DS457/AB/R, AB-2015-3 (20 July 2015, adopted 31 July 2015) [5.106], [5.112].

¹³⁰ See above n 4 and corresponding text.

to the same regulated IOTs and conditions, a cascade of falling dominos is unlikely.

VII PLURILATERAL TRANSPARENCY: ARTICLE 13.6.6

A *The Obligation on TPP Parties to Gather and Report Information*

The only IMR provision mandated for all parties, whether or not they choose to regulate IMR rates or conditions, is contained in art 13.6.6, which imposes an information gathering and reporting obligation. By the end of the first year after the TPP's entry into force for a given party, that party must provide to all other TPP parties information on retail IMR rates for voice, data and text messages that the MNOs in that party's jurisdiction offer to their customers when travelling to the territories of other TPP parties. The information must be updated annually or as otherwise agreed (presumably in the Committee on Telecommunications established under art 13.26). In addition, '[i]nterested Parties shall endeavour to cooperate on compiling this information into a report to be mutually agreed by the Parties and to be made publicly available'.¹³¹ This activity would also, presumably, be coordinated within the Committee on Telecommunications.

B *Purpose and Potential Benefits*

The purpose of this mandatory information-gathering and reporting obligation appears to be to establish some form of comparison or benchmarking that will expose outliers in terms of particularly high retail IMR rates. For example, the information could expose discrepancies between retail IMR rates offered in respect of visitors travelling to a particular TPP country from different TPP countries. A comparison of retail IMR rates disclosed by parties A and B could show, for instance, that party A's MNOs apply retail rates to party A's consumers travelling to party C that are twice those applied by party B's MNOs to party B's consumers travelling to party C. Although valid commercial reasons may explain some discrepancies in respect of individual MNOs, for example due to related party corporate relationships or volume purchase deals, large discrepancies reflected in the averages charged across all MNOs from a particular party would tend to be indicative of coordinated effects and a market failure problem on the particular route.

The mandatory information-gathering could also expose cases where retail IMR rates for travelling to a particular TPP country are particularly high compared to those applicable when travelling to other TPP countries. For example, a government-established floor price for wholesale IOTs, such as in Vietnam as explained above, would have flow on effects for retail pricing. Higher wholesale IOTs will generally be passed on to consumers, placing upward pressure on retail rates paid by consumers from other TPP countries when travelling to Vietnam. In those circumstances, information from TPP countries on retail IMR rates imposed by their MNOs could reveal a pattern of

¹³¹ TPP art 13.6.6.

higher rates imposed on consumers when travelling to Vietnam than when travelling to other TPP countries.

Article 13.6.6 does not indicate the outcome of such internal revelations. Information revealing that a country's own MNOs are imposing unusually high retail IMR rates on their consumers when travelling to all or particular TPP countries might be used voluntarily by that country to investigate the cause for such rates. TPP countries may therefore welcome art 13.6.6 as a means of placing pressure on their domestic MNOs to lower retail IMR rates. Information suggesting that a TPP country's intervention at the wholesale IMR rate level is having a regressive impact on IMR retail rates imposed by other TPP countries' MNOs on their consumers travelling to that country could be used to impose diplomatic pressure on the first country to cease or mitigate such intervention. If the information is made public under the voluntary process envisaged in the last sentence of art 13.6.6, this could amount to 'naming and shaming' of relevant TPP parties and their MNOs. A party concerned about such naming and shaming might, however, seek to participate in any group of parties cooperating to compile the data and then attempt to veto its publication.

As all MNOs in the TPP countries already publish their retail IMR rates, these kinds of comparisons are already possible. However, making accurate assessments with comparable measurement metrics would require considerable research. Mandatory information collection provides a shortcut for the TPP parties to gather this information easily in a meaningful form, particularly if the parties take up the option of cooperating on a publicly available compilation.

C Difficulties and Potential Regulatory Costs

While seemingly innocuous and beneficial from the perspective of transparency, art 13.6.6 generates two main difficulties. First, determining the metrics for measuring IMR rates, to ensure an 'apples for apples' comparison, is a non-trivial exercise. MNOs price their IMR offers differently, with 'package' pricing at a fixed rate to multiple destinations having become the norm in some TPP jurisdictions, including Australia. For example, all three Australian MNOs offer flat-rate pricing for roaming to specific destinations on a per day basis with unlimited voice and text messaging usage.¹³² This method of pricing is not easily comparable to traditional per minute, per text message, per megabyte and offshore-jurisdiction-specific pricing (which remains the basis for charging for roaming to countries such as Vietnam, in that specific case due to its government-directed IOT floor and hence the high retail roaming rates charged by Australian MNOs at present).¹³³ This concern could potentially be addressed by the parties agreeing, perhaps in the Committee on Telecommunications, on the metrics to be used for data collection. This agreement would need to be reached rapidly after the TPP comes into force as the deadline for initial reporting is only 12 months thereafter for the founding TPP parties.

¹³² See above n 21.

¹³³ Telstra's current rates for roaming in Vietnam are AUD2.00 per minute to make and receive a call, AUD0.75 to send an SMS (receiving an SMS is free) and AUD3.00 per MB for data (charged per KB). Optus' and Vodafone's rates for Vietnam are also priced on a per minute, per SMS and per MB basis — that is, Vietnam does not form part of their flat rate offers, which cover many other Asian countries. (Charges correct as at 6 May 2016.)

Second, in most TPP parties, the information is likely to be collected by way of a mandatory information request issued by government to the MNOs in its jurisdiction, imposing a new and ongoing regulatory burden on government and compliance burden on MNOs. For example, parties may require MNOs to prepare data and compile reports reflecting both advertised rates and any special volume based deals offered to corporate customers. Where fixed price packages are offered, parties may be expected to demand data from MNOs on the precise number of voice minutes and texts and the amount of data used by consumers in order to calculate effective pricing per minute/text/megabyte. The benefits of such an exercise will not necessarily justify the cost of compliance, which may need to be tested, for example in Australia under the approach of the Office of Best Practice Regulation.¹³⁴

Related to this second concern, some TPP parties may choose to overcome the new regulatory burden by not enforcing mandatory reporting requirements on their MNOs. Absent a binding agreement on the measurement metrics, a party might purport to satisfy the obligation in art 13.6.6 by having a junior official spend a few hours surfing the websites of the MNOs in its jurisdiction, printing off the results, and sending the resultant scrapbook to the other TPP parties. The utility of such an exercise would be limited. Ongoing disparity in how parties fulfil the obligation in art 13.6.6 would also undermine its beneficial impact.

VIII CONCLUSION

The TPP's roaming provisions are largely contained in six sub-paragraphs of art 13.6, comprising fewer than 850 words. Yet the above analysis reveals the enormous complexity and ambiguity of the roaming 'solution' achieved by the TPP parties. Trade texts are frequently criticised for being opaque, convoluted, and incomprehensible to the general public.¹³⁵ The TPP's roaming provisions do nothing to assuage such concerns. The awkward drafting is exhibited, for example, in: the use of a sequencing fiction in art 13.6.4 whereby one TPP party is presumed to engage in wholesale IMR regulation on a unilateral basis for the benefit of other parties' consumers; and the burial of important clarificatory material in footnotes, which in some cases do not match the text they purportedly clarify (for example, n 11). The application of these torturous provisions to the practical commercial and policy structures in which they necessarily operate will be difficult.

The roaming provisions, and the telecommunications provisions set out in ch 13 more generally, in some respects seem to pander to idiosyncratic interests of US MNOs. This singling out of the interests of suppliers of one TPP party is reflected most obviously in n 2, with its superfluous reference to the US commercial mobile market. However, the influence of US MNOs is also seen more subtly in the inclusion of art 13.6.4(b) to allow a non-regulated MNO to

¹³⁴ See Australian Government, Department of the Prime Minister and Cabinet, Office of Best Practice Regulation, *Best Practice Regulation* <<https://www.dpmc.gov.au/regulation/best-practice-regulation>>.

¹³⁵ See, eg, Francis Keany, 'Trans-Pacific Partnership Critics Concerned about Environment, IP Clauses in Trade Pact's Fine Print', *ABC News* (online), 6 November 2015 <<https://perma.cc/6TW8-DSFN>>, quoting Professor Matthew Rimmer's description of the investment provisions as 'labyrinthine'.

gain access to preferred rates or conditions where its own government has chosen not to enter bilateral arrangements for reciprocal IMR rates or conditions. Although art 13.6.4(b) is on its face agnostic as to the jurisdiction of the non-regulating party, the most likely users of this reciprocity mechanism would be US MNOs. Perhaps as a result of this contrivance, the mechanism in art 13.6.4(b) appears less workable than the provision for bilateral arrangements in art 13.6.4(a). More concerning is the fact that asymmetries in arts 13.6.4(a) and 13.6.4(b) mean that parties choosing not to regulate IMR services — such as the US — and their MNOs may have greater opportunities to enforce the TPP's roaming provisions and to use obligations in those provisions to settle roaming related disputes than regulating parties have.

Even the seemingly innocuous and sensible collective transparency provisions in art 13.6.6 and allowance of unilateral domestic measures in arts 13.6.2–3 may raise unexpected problems, including regulatory burdens in terms of both government monitoring and suppliers' compliance. The information gathering and reporting obligations in art 13.6.6 are also likely to be subject to wide variation in terms of implementation across the 12 TPP parties, as is the 'negotiate–arbitrate' provision in the last sentence of art 13.6.4, potentially enabling gaming and frustration of access to regulatory relief.

Finally, the potential for inconsistency between bilateral roaming arrangements and general MFN obligations under the *GATS* and existing PTAs involving TPP parties is not alleviated by the exemption in art 13.6.5. Surprisingly, despite the elaborate nature of the TPP roaming provisions and the level of detail about the different options open to TPP parties in addressing IMR costs, the treaty is silent on the relationship between bilateral arrangements and non-TPP MFN obligations. The apparent decision to rely on a vague economic integration exception, in the case of the *GATS*, to justify preferential treatment pursuant to bilateral roaming arrangements, may be open to challenge in a WTO dispute.

In conclusion, we caution against excitement over the TPP's roaming provisions. They will require significant work in order to be implemented in a rational manner that enhances competition or offers benefits for tourists, tourist-related service industries, telecommunications suppliers, or international businesses reliant on cross-border telecommunications. Large grey areas surround the interpretation of a number of aspects of the roaming provisions, which are also at risk of asymmetric application and presume the involvement of domestic regulators making difficult and politically sensitive decisions. All of these problematic factors must be viewed against a backdrop of growing competition in wholesale IMR services and technological developments — including the most significant changes in SIM technology in 25 years — that may render roaming and the TPP roaming provisions increasingly irrelevant.

IX ANNEX: TPP ROAMING PROVISIONS

CHAPTER 13: TELECOMMUNICATIONS

Article 13.1: Definitions

For the purposes of this Chapter:

...

international mobile roaming service means a commercial mobile service provided pursuant to a commercial agreement between suppliers of public telecommunications services that enables end-users to use their home mobile handset or other device for voice, data or messaging services while outside the territory in which the end-user's home public telecommunications network is located;

...

Article 13.6: International Mobile Roaming

1. The Parties shall endeavour to cooperate on promoting transparent and reasonable rates for international mobile roaming services that can help promote the growth of trade among the Parties and enhance consumer welfare.
2. A Party may choose to take steps to enhance transparency and competition with respect to international mobile roaming rates and technological alternatives to roaming services, such as:
 - (a) ensuring that information regarding retail rates is easily accessible to consumers; and
 - (b) minimising impediments to the use of technological alternatives to roaming, whereby consumers when visiting the territory of a Party from the territory of another Party can access telecommunications services using the device of their choice.
3. The Parties recognise that a Party, when it has the authority to do so, may choose to adopt or maintain measures affecting rates for wholesale international roaming services with a view to ensuring that those rates are reasonable. If a Party considers it appropriate, it may cooperate on and implement mechanisms with other Parties to facilitate the implementation of those measures, including by entering into arrangements with those Parties.
4. If a Party (the first Party) chooses to regulate rates or conditions for wholesale international mobile roaming services, it shall ensure that a supplier of public telecommunications services of another Party (the second Party) has access to the regulated rates or conditions for wholesale international mobile roaming services for its customers roaming in the territory of the first Party in circumstances in which:⁸

⁸ For greater certainty, no Party shall, solely on the basis of any obligations owed to it by the first Party under a most-favoured-nation provision, or under a telecommunications-specific non-discrimination provision, in any existing international trade agreement, seek or obtain for its suppliers the access to regulated rates or conditions for wholesale international mobile roaming services that is provided under this Article.

- (a) the second Party has entered into an arrangement with the first Party to reciprocally regulate rates or conditions for wholesale international mobile roaming services for suppliers of the two Parties;⁹ or
- (b) in the absence of an arrangement of the type referred to in subparagraph (a), the supplier of public telecommunications services of the second Party, of its own accord:
 - (i) makes available to suppliers of public telecommunications services of the first Party wholesale international mobile roaming services at rates or conditions that are reasonably comparable to the regulated rates or conditions;¹⁰ and
 - (ii) meets any additional requirements¹¹ that the first Party imposes with respect to the availability of the regulated rates or conditions.

The first Party may require suppliers of the second Party to fully utilise commercial negotiations to reach agreement on the terms for accessing such rates or conditions.

5. A Party that ensures access to regulated rates or conditions for wholesale international mobile roaming services in accordance with paragraph 4 shall be deemed to be in compliance with its obligations under Article 10.4 (Most Favoured Nation Treatment), Article 13.4.1 (Access to and Use of Public Telecommunications Services), and Article 13.7 (Treatment by Major Suppliers of Public Telecommunications Services) with respect to international mobile roaming services.
6. Each Party shall provide to the other Parties information on rates for retail international mobile roaming services for voice, data and text messages offered to consumers of the Party when visiting the territories of the other Parties. A Party shall provide that information no later than one year after the date of entry into force of this Agreement for the Party. Each Party shall update that information and provide it to the other Parties on an annual basis or as otherwise agreed. Interested Parties shall endeavour to cooperate on compiling this information into a report to be mutually agreed by the Parties and to be made publicly available.
7. Nothing in this Article shall require a Party to regulate rates or conditions for international mobile roaming services.

...

⁹ For greater certainty, access under this subparagraph to the rates or conditions regulated by the first Party shall be available to a supplier of the second Party only if such regulated rates or conditions are reasonably comparable to those reciprocally regulated under the arrangement referred to in this subparagraph. The telecommunications regulatory body of the first Party shall, in the case of disagreement, determine whether the rates or conditions are reasonably comparable.

¹⁰ For the purposes of this subparagraph, rates or conditions that are reasonably comparable means rates or conditions agreed to be such by the relevant suppliers or, in the case of disagreement, determined to be such by the telecommunications regulatory body of the first Party.

¹¹ For greater certainty, such additional requirements may include, for example, that the rates provided to the supplier of the second Party reflect the reasonable cost of supplying international mobile roaming services by a supplier of the first Party to a supplier of the second Party, as determined through the methodology of the first Party.

9. For greater certainty, access under this subparagraph to the rates or conditions regulated by the first Party shall be available to a supplier of the second Party only if such regulated rates or conditions are reasonably comparable to those reciprocally regulated under the arrangement referred to in this subparagraph. The telecommunications regulatory body of the first Party shall, in the case of disagreement, determine whether the rates or conditions are reasonably comparable.
 10. For the purposes of this subparagraph, rates or conditions that are reasonably comparable means rates or conditions agreed to be such by the relevant suppliers or, in the case of disagreement, determined to be such by the telecommunications regulatory body of the first Party.
 11. For greater certainty, such additional requirements may include, for example, that the rates provided to the supplier of the second Party reflect the reasonable cost of supplying international mobile roaming services by a supplier of the first Party to a supplier of the second Party, as determined through the methodology of the first Party.
- ...

Article 13.21: Resolution of Telecommunications Disputes

1. Further to Article 26.3 (Administrative Proceedings) and Article 26.4 (Review and Appeal), each Party shall ensure that:

Recourse

- (a) enterprises have recourse to a telecommunications regulatory body or other relevant body of the Party to resolve disputes regarding the Party's measures relating to matters set out in ... Article 13.6 (International Mobile Roaming) ...
- (b) if a telecommunications regulatory body declines to initiate any action on a request to resolve a dispute, it shall, upon request, provide a written explanation for its decision within a reasonable period of time;²¹

...

*Reconsideration*²²

- (d) any enterprise whose legally protected interests are adversely affected by a determination or decision of the Party's telecommunications regulatory body may appeal to or petition the body or other relevant body to reconsider that determination or decision. ... A Party may limit the circumstances under which reconsideration is available, in accordance with its laws and regulations.

²¹ For the United States, this subparagraph applies only to the national regulatory body.

²² With respect to Peru, enterprises may not petition for reconsideration of rulings of general application, as defined in Article 26.1 (Definitions), unless provided for under its laws and regulations. For Australia, paragraph 1(d) does not apply.