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Towards coherent rules for digital trade: Building on efforts in multilateral versus preferential trade negotiations

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The rapid development of the Internet as well as of other information and communication technologies (ICT) has led to increased electronic cross-border delivery of services and digital products such as sound recordings, audiovisual works, video games, computer software and literary works. While regional trade agreements increasingly innovate as regards the incorporation of chapters on e-commerce, the cross-border delivery of services, and the inclusion of new Internet-related provisions on intellectual property rights in the online context, on the multilateral level, no substantial progress has been achieved since the end of the Uruguay Round. This paper reviews the progress made in bilateral and multilateral trade agreements in securing liberal digital trade, understood as the electronic cross-border trade of services and digital products. Provisions that concern new IPR rules specific to digital trade are also looked into. Building on these enquiries and taking into account the complexity of the regulatory environment, the paper discusses what digital trade rules are needed today and in the future.

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Towards coherent rules for digital trade: Building on efforts in multilateral versus preferential trade negotiations

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The rapid development of the Internet as well as of other information and communication technologies (ICT) has led to increased electronic cross-border delivery of services and digital products such as sound recordings, audiovisual works, video games, computer software and literary works.¹ While regional trade agreements increasingly innovate as regards the incorporation of chapters on e-commerce, the cross-border delivery of services, and the inclusion of new Internet-related provisions on intellectual property rights (IPRs) in the online context, on the multilateral level, no substantial progress has been achieved since the end of the Uruguay Round.

In the first two sections, this chapter reviews the progress made in bilateral and multilateral trade agreements in securing liberal digital trade, understood as the electronic cross-border trade of services and digital products.² Provisions that concern new IPR rules specific to digital trade are also looked into. Building on these enquiries and taking into account the complexity of the regulatory environment, the third section raises the question of what digital trade rules are needed today and in the future.

A. Digital trade and the WTO: Maintaining relevance in the information age

Ten years ago delegations at the World Trade Organization (WTO) recognised that the Internet offers unseen possibilities for digital trade and that offline trade barriers should not be replicated online. In 1998, WTO Members issued a declaration on global e-commerce.³ After *Mexico – Telecom*,⁴ *US – Gambling*⁵ and *China – Audiovisuals*⁶ it is now established that digital trade and the Internet are (the) leading cases of service-related WTO disputes. The

* Sacha Wunsch-Vincent (written in his capacity as Faculty Member of the World Trade Institute) and Arno Hold (written in his capacity as Doctoral Fellow at the World Trade Institute). The views expressed here shall neither be attributed to the institutions to which the authors are affiliated nor to their Member States. This chapter continues work on digital trade rules initiated in 2003 for the UN ICT Task Force. In particular it revises a previous publication (S. Wunsch-Vincent, 'Trade Rules for the Digital Age', in: M. Panizzon, N. Pohl and P. Sauvé (eds.), *GATS and the Regulation of International Trade in Services* (Cambridge: Cambridge University Press, 2008), 497–529, in the light of new developments. Pierre Sauvé deserves thanks for encouraging the initial work on this topic.

¹ The term digital content is used here to refer to products which are digitally encoded and transmitted electronically over networks (e.g. films, music, software and computer games).

² The scope of this paper is thus narrower than the broad notion of e-commerce as understood within the WTO context (see General Council, Work Programme on Electronic Commerce, WT/L/274, 30 September 1998).

³ WTO, Ministerial Declaration on Global E-Commerce, WT/MIN(98)/DEC/2, 20 May 1998.

⁴ Panel Report, *Mexico – Measures Affecting Telecommunications Services (Mexico – Telecom)*, WT/DS204/R, adopted 2 April 2004.

⁵ Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services (US – Gambling)*, WT/DS285/AB/R, adopted 7 April 2005.

⁶ Appellate Body Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (China – Audiovisuals)*, WT/DS363/AB/R, adopted 19 January 2010.

Internet increasingly also raises questions as to the protection of copyrighted products online.

The next section provides an overview of the achievements within the WTO Work Programme on E-commerce. The following one goes on to assess the progress related to digital trade in the Doha Development Agenda (DDA).

I. Rewind on the WTO Work Programme on E-Commerce: ‘much ado about nothing’ versus ‘much without doing anything’?

In May 1998, WTO Members established a Work Programme on E-commerce that included a political statement calling upon Members to ‘continue their current practice of not imposing customs duties on electronic transmissions’ (the WTO Duty-free Moratorium on Electronic Transmissions).⁷ As part of the work programme, the Council for Trade in Services (CTS) and other WTO Councils raised core questions which have to be settled.

Providing details of the WTO Work Programme is beyond the scope of this paper. Suffice it to say that negotiators and the WTO Secretariat have done an excellent job in ‘mapping the WTO e-commerce issues’. In fact, the discussions which started in 1998 – a time when WTO experts did not take digital trade too seriously – were more creative and forward-looking than discussions in many other WTO areas. Moreover, and maybe surprisingly given the actual progress on the matters so far, WTO negotiators have managed to maintain the e-commerce issues on the agenda by consistently referencing them in WTO Ministerial Declarations.

Nevertheless, the progress made in terms of converting thinking into action has been slow. Even on simple issues such as establishing a permanent and clear duty-free moratorium on e-commerce, or confirming the applicability of WTO rules and commitments to electronically-traded services, no results have been achieved.

Practically speaking, the Dedicated Discussions on E-commerce made no headway on any of the selected (admittedly complex) focus areas, notably the classification of the content of certain electronic transmissions; development-related issues; fiscal implications of e-commerce; relationship (and possible substitution effects) between e-commerce and traditional forms of commerce; imposition of customs duties on electronic transmissions; competition; jurisdiction and applicable law and other legal issues.⁸

With the Hong Kong Ministerial Declaration of 2005, WTO Members adopted the following minimalist stance:

We take note that the examination of issues under the [Work Programme on E-Commerce] is not yet complete. We agree to reinvigorate that work [...]. We declare that Members will maintain their current practice of not imposing customs duties on electronic transmissions until our next Session.⁹

Whereas preparations for the Geneva Ministerial Conference in 2009 also foresaw language on the intensive reinvigoration of the Work Programme and some specific areas of work,¹⁰ in the absence of a Ministerial Declaration none of this was included.

⁷ WTO, *supra* note 3.

⁸ See General Council, Summary by the Secretariat of the Issues Raised, Dedicated Discussion on Electronic Commerce under the Auspices of the General Council on 15 June 2001, WT/GC/W/436, 6 July 2001.

⁹ Hong Kong Ministerial Declaration, WT/MIN(05)/DEC, 22 December 2005, para. 46.

¹⁰ ‘We decide to intensively reinvigorate that work’. It was also noted that ‘[t]he Work Programme shall include development-related issues, basic WTO principles including among others non-discrimination, predictability and transparency, and discussions on the trade treatment, inter alia, of electronically delivered software. We agree to maintain the current institutional arrangements for the Work Programme.’ Report to the 17 November

1. Key unresolved questions related to digital trade

The Work Programme on E-Commerce left a number of pressing issues related to digital trade unresolved. Some of them were addressed in *US – Gambling*, the second General Agreement on Trade in Services (GATS) case, which also succeeded in closing some, but not all, gaps.¹¹ Below, we provide a list of the most critical unresolved questions, while Table 1 summarises the progress achieved on these questions in the WTO Work Programme and contrasts the multilateral progress to that made in bilateral trade deals.

Agreement on a clear, permanent, duty-free moratorium on electronic transmissions and their content: At the Geneva Ministerial in 2009, WTO Members only extended the temporary duty-free moratorium on electronic transmissions until 2011. Some delegations argued that the permanence of the moratorium is conditional on the completion of the Work Programme.¹² Delegations also failed to clarify the exact meaning of the moratorium. Currently it is unclear whether it applies to the content of the transmissions themselves, i.e. whether it prevents the imposition of tariffs on digital products, such as songs or films sold for download on the Internet.¹³

Applicability of general GATS rules and specific commitments to the electronic delivery of services: To date, no clear affirmation concerning the applicability of WTO rules to cross-border electronic services has been forthcoming from WTO Members. The most significant progress made in *US – Gambling* is the confirmation that WTO rules are indeed applicable to e-commerce and to electronically-supplied services.¹⁴ This stance was confirmed by *China – Audiovisuals*.¹⁵

Classification of electronically-traded services as either mode 1 or mode 2: So far, WTO Members have found it difficult to determine whether the electronic cross-border delivery of a service is a service supplied through GATS mode 1 (cross-border supply) or mode 2 (consumption abroad).¹⁶ It is noteworthy that in *US – Gambling*, the statements of the parties as well as the rulings of the Panel and the Appellate Body, imply that GATS mode 1 commitments are the ones applicable to the delivery of electronic services.¹⁷

Classification and scheduling of new services arising in the context of e-commerce: Since the conclusion of the GATS negotiations in 1994, many new services that can be delivered across borders have appeared, which cannot be clearly captured by existing specific GATS commitments. The Central Product Classification (CPC) has been updated three times (most recently with the CPC 2007) to reflect the rapidly changing economic activities since the end of the Uruguay Round. However, the ongoing WTO services negotiations are still based on the provisional CPC of 1991. New services might thus not be covered, or may be covered by multiple categories.

2009 meeting of the General Council, WT/GC/W/613, 9 November 2009, para. 9.

¹¹ R. H. Weber, 'Digital Trade in WTO-Law – Taking Stock and Looking Ahead', *Asian Journal of WTO and International Health Law and Policy* 5 (2010), 16.

¹² Whereas the United States proposed to make the moratorium permanent, other delegations such as India and Cuba proposed to maintain it only until the next ministerial conference.

¹³ S. Wunsch-Vincent, *The WTO, the Internet and Digital Products: EC and US Perspectives* (Oxford: Hart, 2006).

¹⁴ S. Wunsch-Vincent, 'The Internet, Cross-border Trade in Services, and the GATS: Lessons from *US – Gambling*', *World Trade Review* 3 (2006), 1–37.

¹⁵ Appellate Body Report, *China – Audiovisuals*, supra note 6, paras. 363–365.

¹⁶ Council for Trade in Services (CTS), The Work Programme on Electronic Commerce, S/C/W/68 (16 November 1998), paras. 6 ff.

¹⁷ Panel Report, *United States – Measures Affecting the Cross Border Supply of Gambling and Betting Services (US – Gambling)*, WT/DS285/R, adopted 19 November 2004, para. 3.29 and Appellate Body Report, *US – Gambling*, supra note 5, para. 215.

Classification of digital products: The lack of a decision on the correct classification of digital products has been the biggest problem in the ongoing Work Programme, stalling progress on other matters.¹⁸ WTO Members cannot agree on whether digital products traded electronically are goods governed by the General Agreement on Tariffs and Trade (GATT), services governed by GATS or some unique category deserving its own set of trade rules. If GATS commitments are pertinent to digitally downloaded multimedia products, it also needs to be decided which GATS commitments apply (those on audiovisual, telecommunication, computer or other new services¹⁹).

While strictly-speaking no progress has been made on the broader classification issue, since 2005 the United States has proposed shifting the attention to securing free trade for electronically delivered software.²⁰ In parallel, a plurilateral GATS request for computer and related services is ongoing. Some delegations however do not want this discussion to prejudice any Member's positions on the broader matter.²¹ Interestingly, however, the liberalisation of trade in digital products is a cornerstone of a cluster of preferential trade agreements.

Determining 'likeness' for application of most-favoured nation (MFN) and national treatment obligations: The CTS expressed the need for more work on the concepts of technological neutrality and the likeness of electronic versus non-electronically supplied services.²² Two variations and two interpretations of the concept of technological neutrality exist:

- **Intra-modal technological neutrality:** In the context of GATS market access and national treatment obligations, the question was raised whether specific commitments for GATS mode 1 encompass the delivery of services through electronic means.²³ In *US – Gambling* the Panel confirmed this view when it determined that 'a market access commitment [...] implies the right [...] to supply a service through all means of delivery [...] unless otherwise specified in a Member's Schedule'²⁴ and that '[a] prohibition on one, several or all of the means of delivery included in mode 1 thus constitutes a limitation on the total number of service operations [...] within the meaning of Article XVI:2(c)'.²⁵ This view was confirmed in *China – Audiovisuals*.
- **Likeness between electronic and non-electronic services:** In the context of GATS MFN and national treatment obligations, the question is whether electronically-delivered services and those delivered by more traditional methods should be considered 'like services'. Some delegations argued that, on the basis of technological neutrality, services provided electronically and services provided non-electronically were like services. In an explanatory note without binding character, the WTO Secretariat also emphasised that 'likeness in the national treatment context [...] depends in principle on attributes of the product or supplier *per se* rather than on the means by which the product is delivered'.²⁶ However, no consensus could be reached on this matter, so uncertainty persists.

¹⁸ See Wunsch-Vincent, *supra* note 13.

¹⁹ A prominent example is the case of an online multiplayer game which combines audiovisual, music, software and computer services.

²⁰ Sixth Dedicated Discussion on Electronic Commerce under the auspices of the General Council, November 2005, WT/GC/W/556, 2.

²¹ *Ibid.*, 3.

²² CTS, Work Programme on E-Commerce, S/C/8, 31 March 1999.

²³ General Council (GC), Submission by the United States, WT/GC/16, 12 February 1999.

²⁴ Panel Report, *US – Gambling*, *supra* note 17, para. 6.285. See also paras. 6.355 and 7.2(b).

²⁵ Panel Report, *US – Gambling*, *supra* note 17, paras. 6.355 and 7.2(b). Compare to S/C/8, *supra* note 22, 1.

²⁶ See S/C/W/68, *supra* note 16, para. 33 (concerning GATS Article XVII).

- Furthermore, the question of when electronically-delivered services can be considered ‘unlike’ their non-electronic counterparts remained unanswered in *US – Gambling* and *China – Audiovisuals*.²⁷ The rulings also did not directly address the thorniest question, i.e. how the likeness of domestic versus foreign service providers should be assessed.

Application of GATS Article VI regarding domestic regulation: In the light of increasing cross-border trade in services, the ensuing juxtaposition of domestic regulation and standards online and the rise of domestic rules applicable to digital transactions will become an ever more important trade issue. This is especially true because the ‘pristine state of e-commerce and associated regulations’²⁸ is increasingly a thing of the past as we witness the ‘balkanisation’ of the Internet via technologies and national regulatory patchworks.

During debates in the WTO Work Programme there was agreement that the GATS discipline on domestic regulation – i.e. the one to be elaborated under GATS Article VI – applies to e-commerce. But Members disagreed on how to treat e-commerce under GATS Article VI.

Application of GATS Article XIV regarding general exceptions for e-commerce: Online content regulation as well as measures applied for the protection of privacy and public morals and the prevention of fraud were identified as regulations likely to be permissible under GATS Article XIV.²⁹ But it was also stressed that measures should be subject to a necessity test and should not constitute a means of arbitrary or unjustifiable discrimination nor a disguised restriction on trade in services.³⁰ *US – Gambling* tackled this thorny issue as the Appellate Body found that in principle the US gambling laws in question fall under the public morals exception of GATS Article XIV and that – if implemented correctly and without discrimination – they are compatible with the Chapeau of Article XIV. In other words, the case showed that WTO Members can – despite full specific GATS commitments – rely on this provision when trying to achieve certain public policy objectives.

In *China – Audiovisuals*, China argued that certain measures are justified by Article XX(a) GATT on the grounds of public morals.³¹ The Panel found that because ‘none of the relevant measures cited by China has been demonstrated to be “necessary” within the meaning of Article XX(a) GATT to protect public morals’, the measures are not justified under Article XX(a). The Appellate Body later modified and reversed some of the Panel’s reasoning, but upheld the conclusion that the measures are not justified under Article XX(a) GATT.³²

²⁷ Panel Report, *US – Gambling*, supra note 17, paras. 6.25–6.28 and 6.425–6.426.

²⁸ C. L. Mann and S. C. Knight, ‘Electronic Commerce in the WTO’, in: J. Schott (ed.), *The WTO after Seattle* (Washington, DC: Institute for International Economics, 2000), 255.

²⁹ W. Drake and K. Nicolaidis, ‘Global Electronic Commerce and the GATS: The “Millennium Round” and Beyond’, in P. Sauvé and R.M. Stern (eds.), *GATS 2000: New Directions in Services Trade Liberalisation* (Washington, DC: Brookings Institution Press, 2000), 399–437. See CTS, Communication from the European Communities and their Member States, S/C/W/98, 23 February 1999, para. 26 and CTS, Work Programme on Electronic Commerce – Progress Report to the General Council, S/L/74, 27 July 1999.

³⁰ S/C/8, supra note 22, 9–10 and CTS, Communication from Australia, S/C/W/108, 18 May 1999.

³¹ Panel Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (China – Audiovisuals)*, WT/DS363/R, final report circulated 12 August 2009, paras. 7.331 and 7.913.

³² Appellate Body Report *China – Audiovisuals*, supra note 6, para. 415(e). See chapter by Delimatsis in this volume.

Table 1: Performance of the WTO versus preferential trade deals on digital trade issues as raised in the WTO Work Programme on E-commerce

Issues suggested by WTO Work Programme on E-commerce	Dealt with by WTO Work Programme on E-commerce/negotiations	Dealt with by dispute settlement	Overall WTO results	Preferential trade agreements' results
Instauration and applicability of a clear, permanent duty-free moratorium on electronic transmissions and their content	No binding decision	Not subject to dispute	Pending	Clearly in force
Applicability of general GATS obligations (e.g. MFN and transparency) to the electronic delivery of services	No binding decision	Not subject to dispute	Pending	Clearly in force
Applicability of specific commitments to the electronic delivery of services	No binding decision	Yes	Dealt with	Clearly in force
Classification of electronically traded services as mode 1 or mode 2	No binding decision	Potentially: classify as mode 1	Pending? Dealt with?	Not an issue under negative list approach
Classification and scheduling of new services arising in the context of e-commerce	No binding decision	Not subject to dispute	Pending	Not an issue if no relevant limitations listed to market access
Classification of digital products	No binding decision	Not subject to dispute	Pending	US-style e-commerce chapters provide for non-discriminatory trade treatment for digital products which are however subject to limitations as listed in the services chapter
Determining 'likeness' for application of MFN obligations and national treatment commitments	No binding decision	NO, despite significant opportunity to rule on matter	Pending	Pending but less necessary in the negative list context
Application of GATS Article VI regarding domestic regulations relevant to digital trade	YES, but only in principle	Confirmed that it applies to electronic transaction	Dealt with in theory. To be determined in practice	Pending, especially in the light of more specific provisions on domestic regulation.
Application of GATS Article XIV regarding general exceptions for e-commerce	YES, but only in principle	Confirmed that it applies to electronic transaction	Dealt with in theory and practice	Same as in WTO but sometimes supplemented by additional provisions
TRIPS Council: Furthering the protection of content online	Only discussions	Not subject to dispute	Importing WIPO and new provisions under the trade agreement	TRIPS-plus provisions targeting protection of online content in place

2. The protection of online content and the TRIPS Council

As part of the Work Programme, the TRIPS Council was instructed to examine the IP issues arising in connection with e-commerce. The issues to be examined included – among many others³³ – the protection and enforcement of copyright, of trademarks and of domain names.³⁴

The Background Notes of the WTO Secretariat and submissions of Member States made the point that ‘the basic principles of intellectual property had survived rapid technological change and that the language used in the [Agreement on Trade-Related Aspects of Intellectual Property Rights] TRIPS Agreement was generally neutral in relation to technology’ and ‘would appear to remain valid even in cyberspace’.³⁵ Some Members, however, questioned the principle of technological neutrality because ‘the TRIPS Agreement had been negotiated before the implications of global digital networks’.³⁶ In a related note, the WTO Secretariat suggested that clear rules on how to apply IPRs in cyberspace will be needed in order to put protected materials on the net.³⁷

Note was taken of the work already done and under way in the World Intellectual Property Organization (WIPO), in particular the adoption in December 1996 of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), which aim to respond to the profound impact of the development and convergence of ICTs on the creation, production and use of literary and artistic works, performances and phonograms.³⁸ According to the WTO Secretariat, ‘the implementation of these new treaties will facilitate the creation of a secure and predictable legal environment that will foster the development of e-commerce involving on-line distribution of materials protected by copyright and related rights’.³⁹

Australia, supported by the US and the EU, has proposed considering a continued mutually supportive linkage between TRIPS and the provisions of the WCT and WPPT.⁴⁰ However, other Members considered the adoption of the WCT and WPPT in TRIPS as premature.⁴¹

In this context, the Background Notes also addressed the following issues relating to digital trade: the liability of service providers with respect to the transmission and storage of material initiated by others, the question of Internet domain names, technological measures, and electronic rights management information.⁴² The Dedicated Discussions on E-commerce do not however deal with IPRs explicitly. In fact, the discussions featured only one sub-point on linkages between competition and IPR – under the broader heading of competition.⁴³ Also it

³³ M. Bacchetta, P. Low, A. Mattoo, L. Schuknecht, H. Wager and M. Wehrens, *Electronic Commerce and the Role of the WTO* (Geneva: World Trade Organization, 1998), 59–64, or S. Wunsch-Vincent, *WTO, E-commerce and Information Technologies: From the Uruguay Round through the Doha Development Agenda – A Report to the, UN ICT Task Force* (New York, NY: United Nations Information and Communication Technology Task Force, 2005).

³⁴ General Council, Work Programme on Electronic Commerce, WT/L/274 (30 September 1998), para. 4.1 and TRIPS Background Note, IP/C/W/128, 19 February 1999, para. 14.

³⁵ TRIPS Background Note, IP/C/W/128, 19 February 1999, para. 12 and relevant TRIPS Council submissions.

³⁶ First *TRIPS Progress Report*, IP/C/18, 30 July 1999, para. 4.

³⁷ See also General Council, Secretariat Note, WTO Agreements and Electronic Commerce, WT/GC/W/90, 14 July 1998, para. 24.

³⁸ See Latif’s contribution in this volume.

³⁹ TRIPS Background Note, IP/C/W/128, 19 February 1999, paras. 81–82.

⁴⁰ Australia’s Submission, IP/C/W/144, 6 July 1999, para. 21.

⁴¹ TRIPS Council, Minutes of Meeting, IP/C/M/33, 2 November 2001, para. 142.

⁴² TRIPS Background Note, IP/C/W/128, 10 February 1999, paras. 60 and 73–76.

⁴³ Dedicated Discussion on Electronic Commerce Under the Auspices of the General Council on 15 June 2001, Summary by the Secretariat of the Issues Raised, WT/GC/W/436, 6 July 2001.

has not received any particular attention since, except for a few mentions of the importance of the protection of IP under the TRIPS Agreement.

In sum, the WTO Work Programme on E-Commerce raised many important issues relating to digital IPR without leading to any consensus.⁴⁴ More recent WTO dispute settlement as in *China - IPR* has not furthered these matters either.⁴⁵ This exacerbates the situation of fuzzy rules and an uncertain legal environment.

II. *Getting the digital trade job done as part of the GATS and TRIPS negotiations of the Doha Development Agenda (DDA)*

1. DDA: Cross-border trade in services and the Internet

Far-reaching specific GATS commitments could possibly address the questions raised in the framework of the E-commerce Work Programme. This is the case, for example, when members broadly schedule entire services sectors covering potentially newly arising services. In the run-up to the DDA, many GATS 2000 negotiation proposals had addressed the potential for the Internet to expand services trade.⁴⁶ A significant number of WTO Members called for new or improved services commitments (GATS mode 1). A few submissions in the area of financial services ventured outside the scope of specific GATS commitments broaching the topic of delineating responsibilities between home and host countries in supervising and regulating cross-border electronic banking services,⁴⁷ shedding light on regulatory trade barriers to cross-border electronic financial transactions and even touched upon e-commerce issues, such as mobile commerce, data privacy, cyber threats and electronic payments.⁴⁸

Certain submissions in the areas of aviation, tourism and logistics have raised interesting new types of barriers to digital trade, namely the lack of access to technology distribution channels and information networks. Access on a commercial basis to information networks, subject to transparent, reasonable and objective criteria and the elimination of anti-competitive practices and unfair competition had been tabled as a prerogative.⁴⁹

Since the beginning of the DDA, Members have started to exchange (bilateral and plurilateral) liberalisation requests and (revised) offers. The majority of the requests have addressed the issue of facilitating cross-border trade in services (summarised in Table 2).

⁴⁴ Since year-end 2001, no WTO Member has submitted a communication to the Council for TRIPS on the matter of e-commerce and IPRs.

⁴⁵ Panel Report, *China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights (China – IPR)*, WT/DS362/R, adopted 20 March 2009.

⁴⁶ See Wunsch-Vincent, *supra* note 33, 65 ff.

⁴⁷ Committee on Trade in Financial Services, Communication from Switzerland, S/FIN/W/26, 30 April 2003.

⁴⁸ Committee on Trade in Financial Services, S/FIN/M/40, 30 June 2003.

⁴⁹ See e.g. CTS, Communication by Hong Kong, S/CSS/W/68, 28 March 2001.

Table 2: Plurilateral requests and cross-border trade in electronic services

Theme	Requested actions
Specific GATS commitments	<ul style="list-style-type: none"> • full commitments in modes 1 and 2 and removal of unbound entries in mode 1 in specified sectors (model schedule: professional, business, other business services, computer and related, research and development, tourism, part of education services + singling out sectors such as telecoms, transport, postal and courier, distribution, and financial services) • similar levels of commitments in GATS modes 1 and 2 whenever possible – clarification of the distinction between modes 1 and 2 • lift commercial presence/citizenship/residency requirements (including such requirements for licensing or certification, requirements for local participation in the services production and discriminatory measures + quantitative limitations) • consideration of other restrictions such as horizontal limitations (especially subsidies) which would limit the cross-border delivery of services • use of plurilateral approaches, such as model schedules or checklists/understanding on scheduling at the 2-digit level • address MFN exemptions
Rules and qualification requirements	<ul style="list-style-type: none"> • improve the transparency of domestic regulations • how to avoid domestic regulations (including consumer protection, e.g. different national rules prohibiting certain forms of advertising) constituting an excessive barrier to trade • reciprocity conditions on professional qualifications • the lack of accreditation possibilities in areas such as online education services should be addressed
Advanced digital trade issues	<ul style="list-style-type: none"> • capture technological developments in the field of services, including through two-digit classification and specific model schedules of new activities • avoidance of trade barriers in the area of computer reservation systems access, elimination of anti-competitive practices and unfair competition in the area of technology distribution channels and information/reservation networks • Restrictions on the electronic transmission of certain materials (advertising, educational material and audiovisual content) and messages (advertising)

Sources: GATS negotiating proposals and requests and offers as part of the DDA

As part of about 20 plurilateral request–offer clusters, a group of countries led by India also suggested a model schedule for securing full market access commitments on a range of business process outsourcing services which addressed certain classification problems (e.g. ‘call centre services’).⁵⁰ Another plurilateral request is aimed at securing market access for computer and related services, while scheduling the sector broadly (at two-digit CPC 84 level) in all four modes of supply.⁵¹ Preserving the ‘de facto level of openness’ on cross-border delivery of services was the underlying philosophy of many related proposals. Furthermore, there have also been several calls to consider the elimination of discriminatory market access barriers across the board as a priority – rather than focusing on the traditional specific commitments under market access and national treatment.⁵²

The services section of the Hong Kong Ministerial declaration demands GATS mode 1 commitments at existing levels of market access on a non-discriminatory basis across sectors of interest to Members; and the removal of existing requirements of commercial presence.⁵³ Besides, the Declaration only suggests that commitments on GATS mode 2 should be made where commitments on mode 1 exist, which is usually already the case.⁵⁴

So far, few of the revised GATS offers available in March 2011 (about 70 initial and 30 revised offers⁵⁵) have achieved the required mode 1 market access level. In the view of the delegations, the remaining gaps – between offers (or signals) and requests, and between offers (or signals) and applied regimes – are substantial – including in the relevant plurilateral groups such as on cross-border services and computer services.⁵⁶

2. DDA: Intellectual Property Rights and the Internet

The TRIPS is the only WTO Agreement which has substantively evolved through normative rule-making at the negotiation table since its conclusion; notably with the Doha Declaration on the TRIPS Agreement and Public Health.⁵⁷ That said, the advances have not touched on issues relating to copyright in the online context. Although almost two-thirds of the WTO Membership have signed and ratified the WIPO Internet Treaties, for instance, the discussions on referencing these updated WIPO Treaties in the TRIPS Agreement have not re-surfaced in earnest.

Thus, despite more than ten years of existence of the WTO Work Programme on E-commerce and nine years of the DDA, few of the above-mentioned horizontal questions regarding digital trade have been conclusively addressed.

⁵⁰ Joint statement on the ‘Liberalization of Mode 1 under GATS Negotiations’ from Chile, India and Mexico contained in Job(04)/87. C.f. A. Mattoo and S. Wunsch-Vincent, ‘Pre-Emptying Protectionism in Services: The GATS and Outsourcing’, *Journal of International Economic Law* 7 (2004), 765–800.

⁵¹ Chile, Review of Progress in Computer and Related Services (CRS), JOB(07)/196, 5 December 2007.

⁵² See the WTO Symposium on Cross-Border Supply of Services, http://www.wto.org/english/tratop_e/serv_e/sym_april05_e/mattoo_wunschvincentII_e.ppt; A. Mattoo, ‘Services in a Development Round: Three Goals and Three Proposals’, *Journal of World Trade* 6 (2005), 1223–1238.

⁵³ Hong Kong Ministerial Declaration, *supra* note 9, Annex C, para. 1(a).

⁵⁴ *Ibid.*, Annex C, para. 1(b)(ii).

⁵⁵ TN/S/O rev.1 document series.

⁵⁶ CTS, Chairman note, TN/S/M/39, 13 January 2011.

⁵⁷ Decision of the General Council of 30 August 2003, WT/L/540 and and Corr. 1, 1 September 2003.

B. Digital trade in preferential trade deals: what is hot and what is not?

The last decade has also seen a proliferation of preferential trade agreements (PTAs). These PTAs increasingly innovate as regards the cross-border delivery of services, cooperation on ICTs, Chapters on E-commerce and TRIPS-plus provisions related to digital trade. To help visualise the complex landscape, Tables 4 and 5 summarise the essence of a number of PTAs with respect to digital trade matters, while Figure 1 maps the number of PTAs and the connections between their signatories. When contemplating advances made by PTAs in digital trade issues, it is important to bear in mind that there are two main templates, those of the US and of the EU, whose characteristics are summarised in Table 3.

Table 3: The US and EU templates for liberalising digital trade

	US model	EU model
E-commerce	Fully-fledged e-commerce chapter sitting between goods and services: <ol style="list-style-type: none"> 1. formulation of relevant digital trade definitions 2. recognition of applicability of WTO rules to e-commerce 3. recognition of applicability of trade rules to electronic supply of services 4. establishment of clear/applicable duty-free moratorium 5. non-discriminatory treatment for digital products 6. MFN obligation for digital products, but limitations of the services chapter override the e-commerce chapters 	No e-commerce chapter. E-commerce increasingly dealt with in 'trade in services' chapter with following rules: <ol style="list-style-type: none"> 1. recognition of applicability of WTO rules to e-commerce 2. recognition of applicability of trade rules to electronic supply of services (not always) 3. establishment of clear/applicable duty-free moratorium
Services	Chapter on cross-border trade in services: negative list approach, but sometimes significant limitations making redundant the services provisions as well as the e-commerce provisions	Initially chapter on services operating by positive list approach Recently negative list approach for a cross-border supply of services sub-chapter with a priori sectoral exclusions such as audiovisual services
Deep digital trade rules	Deep regulatory digital trade rules Dispute settlement provisions do apply in some US PTAs (e.g. US – Australia, US – Korea)	Initially only general cooperation pledges on e-commerce and information technology More recently increasing specificity in areas where cooperation should be prioritised with respect to deep digital trade rules (e.g. electronic signatures, liability of Internet service providers) Dispute settlement provisions do not apply
TRIPS	TRIPS-plus provisions on digital trade-related matters	Initially no TRIPS-plus provisions Increasingly TRIPS-plus provisions on digital trade-related matters

Table 4: Provisions of e-commerce chapters in bilateral trade agreements⁵⁸

	US PTAs											
	US – Jordan FTA	US – Chile FTA	US – Singapore FTA	US – Australia FTA	US – Morocco FTA	US – CAFTA	US – Bahrain FTA	US – Oman FTA	US – Peru TPA	US – Colombia TPA	US – Panama TPA	US – Korea FTA
Date of Signature/Entry into force	2000/2001	2003	2003/2004	2004	2004/2006	2004	2004/2006	2006/2009	2006/2009	2006/ pending	2007/ pending	2007/ pending
Applicability of WTO rules to e-commerce	✓*	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Applicability of trade rules to the digital service supply	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Duty-free moratorium on digital products	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chapter on cross-border trade in services	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Negative list approach	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-discrimination for digital products	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Exceptions	–	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Size of the e-commerce chapter (number of words)	287	869	660	993	663	1002	575	621	852	852	760	1303

	EU PTAs			PTAs in Asia										
	EU – Chile	EU – CARIFORUM	EU – Korea	New Zealand – Singapore	Japan – Singapore	Singapore – Australia	Thailand – Australia	Thailand – New Zealand	Korea° – Singapore	India – Singapore	Canada – Peru FTA	Chile – Australia FTA	Japan – Switzerland	ASEAN – Australia-New Zealand
Date of Signature/Entry into force	2002/2005	2007/2008	2010/2011	2000/2001	2002/2002	2003/2003	2004/2005	2005/2005	2005/2006	2005/2007	2008/2009	2008/2009	2009/2009	2009/2010
Applicability of WTO rules to e-commerce	–	–	✓	–	–	✓	✓	✓	✓	✓	✓	–	–	–
Applicability of trade rules to the digital service supply	–	–	–	–	–	–	–	–	✓	✓	✓	–	–	–
Duty-free moratorium on digital products	–	✓	✓	–	–	✓	✓	–	✓	✓	✓	✓	✓	–
Chapter on cross-border trade in services	–	✓	✓	–	–	–	–	–	✓	–	✓	✓	✓	–
Negative list approach	–	–	–	–	–	–	–	–	✓	–	✓	✓	✓	–
Non-discrimination for digital products	–	–	–	–	–	–	–	–	✓	–	✓	–	✓	–
Exceptions	–	–	–	–	–	–	–	–	YES	YES	YES	YES	YES	–
Size of the e-commerce chapter (in words)	78	253	240	Only paperless trading	Only paperless trading	687	569	462	487	671	922	1066	1609	955

⁵⁸ Updates and extends 2008 paper. See also L. Herman, 'Multilateralising Regionalism: The Case of E-Commerce', *OECD Trade Policy Working Paper* 99 (2010).

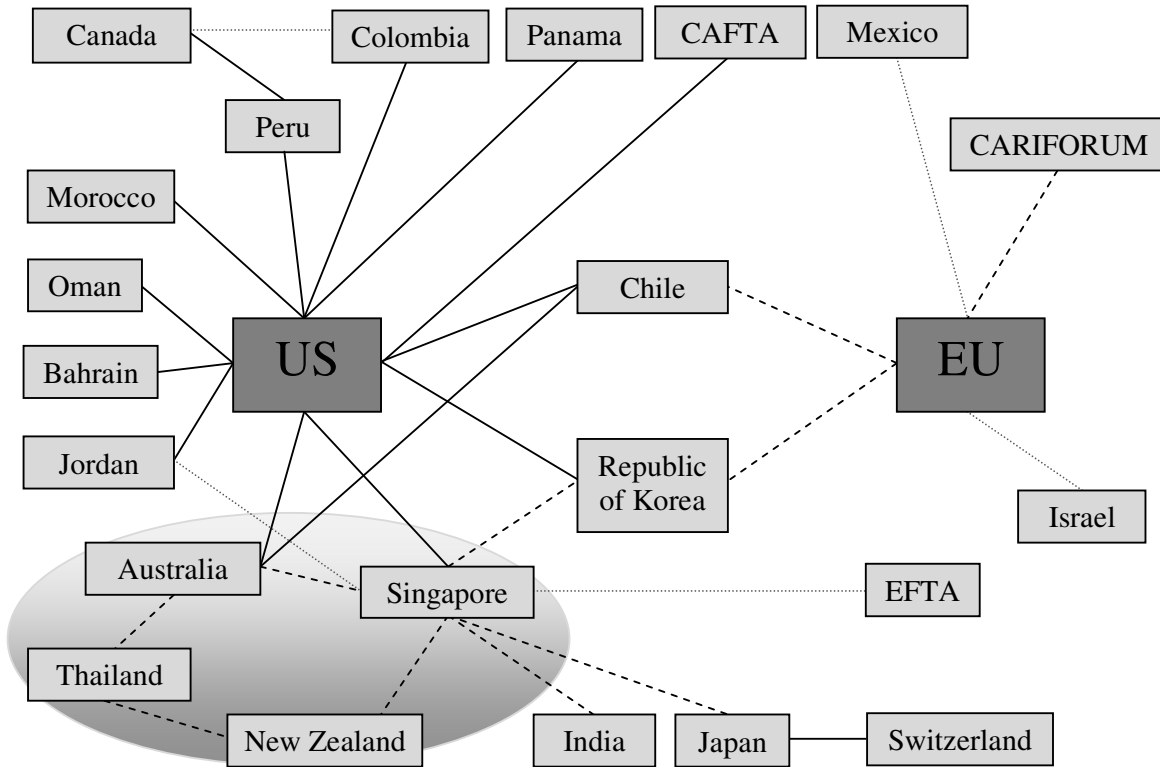
Table 5: Deep e-commerce regulatory issues in selected preferential trade agreements

	US PTAs											
	US – Jordan FTA	US – Chile FTA	US – Singapore FTA	US – Australia FTA	US – Morocco FTA	US – CAFTA	US – Bahrain FTA	US – Oman FTA	US – Peru TPA	US – Colombia TPA	US – Panama TPA	US – Korea FTA
Date of Signature/Entry into force	2000/2001	2003	2003/2004	2004	2004/2006	2004	2004/2006	2006/2009	2006/2009	2006/ pending	2007/ pending	2007/ pending
Pledge for cooperation in the e-commerce and ICT area	✓*	✓	–	–	–	✓	–	–	–	–	–	–
Pledge to avoid unnecessary regulatory barriers to e-commerce	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transparency	✓*	–	–	–	–	✓	–	–	✓	✓	✓	–
Consumer protection	✓*	–	–	✓	–	–	–	✓	✓	✓	✓	✓
Online personal data	✓*	–	–	–	–	–	–	–	–	–	–	✓
Authentication, certification, electronic signatures	✓*	–	–	✓	–	–	–	–	✓	✓	✓	✓
Free flow of information and data	–	–	–	–	–	–	–	–	–	–	–	✓
Paperless trade administration and customs facilitation	✓*	–	–	✓	–	–	–	–	✓	✓	✓	✓

	EU PTAs			PTAs in Asia										
	EU – Chile	EU – CARIFORUM	EU – Korea	New Zealand – Singapore	Japan – Singapore	Singapore – Australia	Thailand – Australia	Thailand – New Zealand	Korea – Singapore	India – Singapore	Canada – Peru FTA	Chile – Australia FTA	Japan – Switzerland	ASEAN – Australia-New Zealand
Date of Signature/Entry into force	2002/2005	2007/2008	2010/2011	2000/2001	2002/2002	2003/2003	2004/2005	2005/2005	2005/2006	2005/2007	2008/2009	2008/2009	2009/2009	2009/2010
Pledge for cooperation in the e-commerce and ICT area	✓	✓	✓	–	–	–	✓	✓	✓	✓	✓	–	✓	✓
Pledge to avoid unnecessary regulatory barriers to e-commerce	–	✓	✓	–	–	✓including pledge to follow UNCITRAL Model Law	✓including pledge to follow UNCITRAL Model Law	✓including pledge to follow UNCITRAL Model Law	✓	–	✓	✓	✓	✓including pledge to follow UNCITRAL Model Law
Transparency	–	✓	–	–	–	✓	–	–	–	✓	✓	–	–	✓
Consumer protection	–	–	–	–	–	✓	✓	✓	–	–	✓	✓	✓	✓
Online personal data	✓	✓	✓	–	–	✓	✓	✓	–	–	–	✓	✓	✓
Authentication, certification, electronic signatures	–	✓	–	–	–	✓	✓	–	✓	–	✓	✓	✓	✓
Free flow of information and data	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Paperless trade administration and customs facilitation	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Provisions taken from US–Jordan Joint Statement on Electronic Commerce

Figure 1: Overview of FTAs containing substantive e-commerce provisions



- Negative list approach for services commitments
- - - - Positive list approach for services commitments
- Not yet analysed in detail

* ASEAN–Australia–New Zealand Free Trade Area

Evidently PTAs serve as a laboratory for new trade rules and an area where two different liberalisation blueprints exist side by side and compete.

The US has consistently followed a clear (if not flawless) model throughout its different PTAs. Once other countries have signed such a trade agreement with the US, this template is usually carried over to agreements between bilateral trade partners of the US (Singapore – Australia, Chile – Australia, Korea – Singapore) or PTAs between one of the US partners and a third partner (Thailand – Australia, India – Singapore). So there is a proliferation of common language via PTAs (as mapped in Figure 1). Interestingly, particular features of the US template (such as text on the applicability of WTO rules to e-commerce and the duty-free moratorium on e-commerce) have also found their way into PTAs which have no obvious link to the US (Canada – Peru and Japan – Switzerland).

As discussed below, the same countries may however have PTAs with the EU, which adopts a different (and potentially contradictory) language, creating an ‘e-spaghetti bowl’⁵⁹ issue for digital trade.

The EU template has been less consistent than that of the US. Initially it focused less on negotiating digital trade issues in an explicit manner. EU – Chile (signed in 2002) was the first EU PTA that contained substantial e-commerce provisions. These provisions took the form of a cooperation pledge on e-commerce in the services chapter⁶⁰ and a cooperation pledge for information technology and society issues.⁶¹ The EU template originally did not include a cross-border trade in services chapter operating following the negative list approach.

The EU approach has evolved however: EU – Korea includes some specific e-commerce provisions similar to the US model (e.g. on applicability of WTO rules) in the associated services chapter.⁶² This is topped up by a list of areas in which cooperation should take place.⁶³

Some parties unaffiliated to the EU or to US FTAs continue to be largely agnostic to any explicit digital trade provisions – in particular PTAs in Asia (e.g. Japan – Vietnam, Japan – Malaysia, India – Korea). Other PTAs (e.g. Maghreb – Arab Union State, India – Thailand, Japan – Mexico, Japan – ASEAN, India – ASEAN and China – ASEAN) and statements from APEC and agreements increasingly contain pledges and rules on ICT cooperation and digital trade. The exception is the ASEAN – Australia – New Zealand FTA.⁶⁴

In the following section we look in more detail at the provisions of the US and EU templates.

⁵⁹ The term ‘spaghetti bowl’ was coined by Jagdish Bhagwati and refers to negative effects of FTAs resulting from the lack of transparency and the complexity of overlapping trade rules among commercial partners.

⁶⁰ EU – Chile FTA, Article 102. The agreement states that ‘[t]he inclusion of this provision in this Chapter is made without prejudice of the Chilean position on the question of whether or not electronic commerce should be considered as a supply of services.’

⁶¹ EU – Chile FTA, Article 37.

⁶² See EU – Korea FTA, Article 7.48(1).

⁶³ See EU – Korea FTA, Article 7.49.

⁶⁴ The Agreement Establishing the ASEAN – Australia – New Zealand Free Trade Area (AANZFTA) entered into force on 1 January 2010 between the following countries: Australia, Brunei, Malaysia, Myanmar, New Zealand, Singapore, the Philippines, and Viet Nam (Thailand on 12 March 2010; Cambodia, Indonesia and the Lao People’s Democratic Republic shall follow). The agreement features a substantive and comprehensive e-commerce chapter that contains deep e-commerce regulatory issues (pledge to avoid unnecessary regulatory barriers to e-commerce, transparency, consumer protection, online personal data protection, authentication, certification, electronic signatures, and paperless trade administration). However, it does not include any provision referring to the applicability of WTO rules, the applicability of trade rules to digital service supply, to non-discriminatory treatment or to a duty-free moratorium on digital products. Furthermore, the agreement contains no IP chapter. It remains to be seen whether this agreement will serve as a model for bilateral PTAs of ASEAN.

I. *E-commerce chapters: securing the applicability of trade rules and deepening digital trade commitments*

What started with the incorporation of a non-binding e-commerce chapter in the US – Jordan PTA in 2000, has led to a flurry of bilateral US PTAs that incorporate e-commerce chapters. Interestingly, the trend has spread to other PTAs such as Singapore – Australia, Thailand – Australia, Thailand – New Zealand, New Zealand – Singapore, India – Singapore, Japan – Singapore and Korea – Singapore. The EU-related PTAs and most others do not have a specific chapter on e-commerce but increasingly include a sub-chapter on e-commerce as part of the services chapter.

1. Conclusion of e-commerce chapters with a focus on digital products

The US-style e-commerce chapters offer direct or indirect answers to many of the questions raised earlier as they formalise a definition of digital products, confirm the applicability of WTO trade rules to e-commerce, assure a clear zero-duty rate on the content of digital trade and provide for non-discrimination and MFN treatment for digital products (see right-hand column of Table 1). Without actually taking the politically contentious decision on classification, the e-commerce chapters create a special trade discipline tailored to digital products. Key to this emerging discipline are:

Formulation of relevant definitions of digital trade: The bilateral e-commerce chapters introduce the concepts of ‘digital products’ and of ‘electronic delivery or transmission (and electronic means)’. Remarkably, it is often explicitly stated that these definitions are without prejudice to the ongoing WTO discussions on classification. Because the definition of a ‘digital product’ refers to digital products delivered both offline and online, the treaties aim at the technologically-neutral treatment of both delivery forms.

Four steps have been taken that make reference to the multilateral level and that significantly advance the principles of free digital trade.

Recognition of the applicability of WTO rules to e-commerce: Most e-commerce chapters explicitly recognise the applicability of WTO rules to e-commerce.⁶⁵

Recognition of the applicability of trade rules to the electronic supply of services: The e-commerce chapters also affirm that the supply of a service using electronic means falls within the scope of the obligations of the relevant provisions in the cross-border trade in services chapter,⁶⁶ signifying that trade rules, obligations and non-conforming measures listed in the annexes and exceptions specified in the services chapters are fully applicable to digitally-delivered services, a problematic legal construct discussed in detail later.

Establishment of a clear and applicable duty-free moratorium: Almost all e-commerce chapters specify that the parties ‘shall not impose customs duties or other duties, fees, or charges on or in connection with the importation or exportation of *digital products* by electronic transmission’.⁶⁷ It is clear that the zero duty obligation applies to the content of the digital transmission, namely digital products. Due to the national treatment obligations included in the e-commerce chapters, the duty-free status has to be accorded to digital products that ‘transit’ via a third party to parties of the PTA as well.⁶⁸ However, the

⁶⁵ E.g. US – Singapore FTA, Article 14.1 and US – Australia FTA, Article 16.1.

⁶⁶ E.g. US – Chile FTA, Article 15.2 and US – Singapore FTA, Article 14.2.

⁶⁷ E.g. US – Singapore FTA, Article 14.3, para. 1. The US – Chile FTA, Article 15.3 notes that neither party may apply customs duties on digital products of the other party.

⁶⁸ An exception applies in the US – CAFTA FTA, Article 14.3, footnote 1. Later FTAs (Australia –Singapore,

moratorium does not instate a duty-free moratorium for digitally-delivered services.

Non-discriminatory treatment obligation for digital products: The e-commerce chapters specify a national treatment obligation for digital products. Specifically, a party shall not accord less favourable treatment to certain digital products than it accords to other like products, on the basis that these are: ‘created, produced, published, stored, transmitted, contracted for, commissioned, or first made available on commercial terms’ outside its territory; or ‘whose author, performer, producer, developer, or distributor is a person of another party or a non-party’.⁶⁹

MFN treatment obligation for digital products: The e-commerce chapters use very similar wording to specify an MFN obligation for digital products.⁷⁰ In particular, a party shall not accord less favourable treatment to a digital product ‘created, produced, published, stored, transmitted, contracted for, commissioned, or first made available on commercial terms’ in the territory of the other party than it accords to a like digital product ‘created, produced, published...’ in the territory of a non-party. In the same vein, a party shall not accord less favourable treatment to digital products whose ‘author, performer, producer, developer, or distributor is a person of the other party’ than it accords to like digital products whose ‘author, performer, producer, developer, or distributor is a person of a non-party’. Interestingly, in many PTAs, digital products must not be fully produced and exported via one of the contracting parties of the bilateral PTAs to benefit from these obligations for assuring non-discrimination. The negotiating parties have partly abandoned complex rules of origin, potentially setting a useful precedent for services trade negotiations as a whole.

2. Limitations of the e-commerce chapters: carve-in, carve-out?

The e-commerce chapters appear next to the chapters on trade in goods and on trade in services without addressing the question of the classification of digital products.

As mentioned above, the e-commerce chapters contain exceptions which indicate that the ‘[c]hapter is subject to any other relevant provisions, exceptions, or nonconforming measures set forth in other Chapters or Annexes of this Agreement’. This means that in overlapping cases, it is the trade in service obligations and the related non-conforming measures that override the principles of national treatment and MFN specified by the e-commerce chapters, invalidating commitments made in other parts of the trade agreement (thus the ‘carve in, carve out’-terminology)⁷¹. Furthermore, some US-led and Asian PTAs with e-commerce chapters specify that the parties are ‘not prevented from adopting or maintaining measures in the audio-visual and broadcasting sectors’ and that the Article on non-discrimination does not apply to measures affecting the electronic transmission of so-called linear, point to multipoint traditional broadcasting services.⁷² The US – Australia FTA goes as far as stating that its e-commerce chapter shall not prevent a party from adopting new or maintaining existing measures in the audiovisual and broadcasting sectors.⁷³

Furthermore, in some cases, the benefit of having a special e-commerce chapter is not obvious. In cases where no reservations are taken in pertinent sectors, many provisions of the e-commerce chapter – e.g. its duty-free moratorium or its commitments for national treatment

Australia – Thailand and Thailand – New Zealand) also specify that the moratorium only applies to ‘electronic transmissions between the two parties’.

⁶⁹ E.g. US – Singapore FTA Article 14.3, para. 3 and US – Australia FTA Article 16.4, para. 1.

⁷⁰ E.g. US – Singapore FTA Article 14.3, para. 4 and US – Australia FTA Article 16.4, para. 2.

⁷¹ Thanks go to Pierre Sauvé for coining this term.

⁷² See, for instance, the e-commerce chapters of the US – Singapore and Korea – Singapore PTAs.

⁷³ US – Australia FTA Article 16.4, para. 4.

obligations for digital products – become superfluous. This holds true as the signatory parties are committed either to full market access, national treatment and MFN obligations through the cross-border trade in services chapter or to duty-free treatment of ICT goods and non-discrimination through the chapters on market access for goods.

Finally, the services chapters contain elements that the e-commerce chapters do not. For example, the former guarantee market access and they boast a solid framework of general obligations modelled on the GATS (e.g. on domestic regulation).

All in all, the e-commerce chapters that mainly deal with digital products seem to be a second-best solution which must be viewed in the context of the lack of a decision on the classification of digital products.

II. Chapters to secure free cross-border (electronic) trade in services

1. US style

Use of a negative list approach: The PTAs use the most liberal form, namely the negative list approach, to schedule commitments on trade in services.⁷⁴ In the absence of listed limitations, this top-down approach guarantees that narrow or outdated classification schemes and uncertainties relating to the mode of delivery do not unnecessarily limit the applicability of commitments to existing and future digitally-delivered services.

Dropping local presence requirements: The US-style PTAs specify that ‘[n]either Party may require a service supplier of the other Party to establish or maintain a representative office or any form of enterprise, or to be resident, in its territory as a condition for the cross-border supply of a service’.

Dropping MFN exemptions: The US-style PTAs specify that ‘[e]ach Party shall accord to service suppliers of the other Party treatment no less favourable than that it accords, in like circumstances, to service suppliers of a non-Party’.

On the surface, these provisions, which deepen the specific commitments, seem comprehensive. But again the devil is in the detail as attention must be paid to specified non-conforming measures.

Suffice it to say that in the case of many PTAs, the number of limitations seems rather small and, owing to the negative list approach, many current and future services are covered by free trade obligations. Hence the impression arises that a GATS-plus level of liberalisation is achieved. However, only a sector-specific examination can reveal how relevant the specified non-conforming measures really are. In reality the limitations listed under the US-style negative list approaches can be very far-reaching⁷⁵ – often casting doubt on the overall value-added of negative versus positive lists.

In the area of rule-making, the bilateral US-style PTAs also bring to the table a few new elements which are particularly relevant to cross-border delivery of electronic services.

Strengthened transparency requirements: Obligations to publish regulations are supplemented by obligations to afford other Members access to the process of drafting of the regulations (e.g. advance notice and an opportunity to comment before they come into effect).

⁷⁴ E.g. US – Singapore FTA Article 8.3 (national treatment), Article 8.4 (most-favoured nation treatment), Article 8.5 (market access) and Article 8.7 (non-conforming measures).

⁷⁵ To pick out an extreme example, the US – Australia, the US – Morocco and most other US-led PTAs contain a limitation which specifies that all existing non-conforming measures of all US States are exempted from its specific free trade obligations.

The service-specific rules are strengthened by a fully-fledged transparency chapter.

Domestic regulation: Whereas GATS Article VI:4 only instructs Members to develop a discipline on domestic regulations, the PTAs specify that ‘each Party shall endeavour to ensure [...] that such measures are: (a) based on objective and transparent criteria, such as competence and the ability to supply the service; (b) not more burdensome than necessary to ensure the quality of the service; and (c) in the case of licensing procedures, not in themselves a restriction on the supply of the service’.⁷⁶

To summarise, against the above background, the consensus is that PTAs have done little to further services trade rules beyond the GATS.⁷⁷

2. EU style

More recently the EU template has also comprised a sub-chapter on cross-border trade in services with a negative list approach. However, there are notable a priori sectoral exemptions, of which two are significant (audiovisual services and services relating to ‘computer reservation systems’ in air transport services⁷⁸).

The latest EU services chapters also include a sub-section on computer services which mirrors the EU negotiating proposal on computer and related services in the WTO. Specifically, it foresees the liberalisation of all computer and related services agreed to at the two-digit CPC 84 level while excluding core content or core services delivered electronically (including financial and, for instance, audiovisual type services which are highly relevant in this context).⁷⁹

III. *E-commerce chapters introducing cooperation pledges and ‘deep’ digital trade rules*

The inclusion of ‘deep’ digital trade rules’, i.e. detailed ‘beyond the border’ regulations that are broader than eliminating regular trade barriers alone,⁸⁰ is in full motion in trade agreements, with references to standards invoked in other fora such as the Organisation for Economic Co-operation and Development (OECD). In the US template, these deep digital trade rules are integrated in the self-standing e-commerce chapters. In the EU and other cases, they tend to take the form of cooperation pledges.

1. Non-binding joint understandings on e-commerce

Since 1997, trading nations have concluded a significant number of bilateral ‘understandings’ or ‘joint statements on e-commerce’. These have also been agreed upon on the regional level⁸¹ and declarations have been issued in APEC, ASEAN and eAsia-Europe forums.

⁷⁶ E.g. US – Singapore FTA, Article 8.8 2.

⁷⁷ See e.g. A. Mattoo and P. Sauvé, ‘The Preferential Liberalization of Services Trade’, *NCCR Trade Regulation Working Paper* 13 (2010) or C. Fink and M. Molinuevo, ‘East Asian Free Trade Agreements in Services: Key Architectural Elements’, *Journal of International Economic Law* 11 (2008), 263–311.

⁷⁸ Services provided by computerised systems that contain information about air carriers’ schedules, availability, fares and fare rules, through which reservations can be made or tickets may be issued. See e.g. EU – Korea FTA, Article 7.2.

⁷⁹ See EU – Korea FTA, Article 7.25.

⁸⁰ For a discussion of deep versus shallow e-commerce regulatory issues see S.E. Eckert, S.C. Knight and C.L. Mann, *Global Electronic Commerce – A Policy Primer* (Washington, DC: Institute for International Economics, 2000).

⁸¹ APEC, ‘Statement to Implement APEC Policies on Trade and the Digital Economy’, Leader’s Declaration, 27 October 2002, Los Cabos (Mexico).

2. ICT cooperation pledges and ‘deep’ digital trade rules in preferential trade agreements

The PTAs also contain cooperation pledges and deep digital trade rules which are described below (see Table 5).

EU-style cooperation pledges

Pledges for cooperation in the area of ICTs and e-commerce which relate to the above-mentioned understandings have recently become very visible in most new PTAs; not only in US-engendered agreements but also in EU bilateral trade agreements (e.g. EU – Chile), and in a wide range of Asian ones (e.g. India – Thailand and China – ASEAN). These cooperation pledges range from short statements on the promotion of ICT and e-commerce to broader agreements.

The EU trade in services chapter contains a full article on cooperation on regulatory e-commerce issues which details the areas of cooperation without making a normative pronouncement on explicit goals or forms of associated regulations⁸² – except in the area of data protection where it notes that, ‘[t]he Parties agree that the development of electronic commerce must be fully compatible with the international standards of data protection’.⁸³

Deep digital trade rules – US style?

Beyond the incorporation of language on cooperation on ICT, the integration of deep e-commerce regulatory issues into most US-led trade agreements is a novelty. Trading nations feel a need to address deep digital trade issues in trade agreements; either because there is a lack of alternative, international agreements or bodies for these e-commerce-specific rules or because PTAs are thought to spur developments in other fora.

Table 6 gives an overview of ‘deep’ digital trade provisions integrated in new US-style trade agreements. It is noteworthy that many of the subjects of these digital trade provisions (such as the protection of privacy, the protection of consumers and security issues) are usually conceived under the GATS Article XIV exception provisions which ‘tolerate’ derogations from GATS rules and obligations in special circumstances. Here, however, these digital trade provisions are not merely seen through the lens of an ‘exception approach’. Instead, the objectives are presented as necessary conditions for spurring digital trade.

⁸² Article 7.49: Co-operation and regulatory issues

1. The Parties shall maintain a dialogue on regulatory issues raised by electronic commerce, which will, inter alia, address the following issues:
 - (a) the recognition of certificates of electronic signatures issued to the public and the facilitation of cross border certification services;
 - (b) the liability of intermediary service providers with respect to the transmission or storage of information;
 - (c) the treatment of unsolicited electronic commercial communications;
 - (d) the protection of consumers in the ambit of electronic commerce;
 - (e) the development of paperless trading; and
 - (f) any other issues relevant for the development of electronic commerce.
2. The dialogue can include exchange of information on the Parties’ respective legislation on these issues as well as on the implementation of such legislation.

⁸³ See EU – Korea FTA, Article 7.48(2).

Table 6: Deep e-commerce integration rules in preferential trade agreements

Theme	Rules
Domestic regulation	<ol style="list-style-type: none"> 1. Each Party shall maintain domestic legal frameworks governing electronic transactions based on the UNCITRAL Model Law on Electronic Commerce. 2. Each Party shall: (a) minimise the regulatory burden on e-commerce; and (b) ensure that regulatory frameworks support industry-led development of e-commerce.
Transparency	Each Party shall publish or otherwise make publicly available its laws, regulations, and other measures of general application that pertain to e-commerce.
Consumer protection	<p><i>Variation 1</i> The Parties recognise the importance of maintaining and adopting transparent and effective measures to protect consumers from fraudulent and deceptive commercial practices when they engage in e-commerce. The Parties recognise the importance of cooperation between their respective national consumer protection agencies on activities related to cross-border e-commerce.</p> <p><i>Variation 2</i> Each Party shall, to the extent possible and in a manner considered appropriate by each Party, provide protection for consumers using e-commerce that is at least equivalent to that provided for consumers of other forms of commerce under their respective laws, regulations and policies.</p> <p>EU: dialogue on regulatory issues raised by electronic commerce, which will, <i>inter alia</i>, address</p> <p>(d) the protection of consumers in the ambit of electronic commerce;</p>
Data protection	<p>Variation 1</p> <ol style="list-style-type: none"> 1. Notwithstanding the differences in existing systems for personal data protection in the territories of the Parties, each Party shall take such measures as it considers appropriate and necessary to protect the personal data of users of e-commerce. 2. In the development of data protection standards, each Party shall, to the extent possible, take into account international standards and the criteria of relevant international organisations. <p>Variation 2</p> <ol style="list-style-type: none"> 1. The Parties agree to cooperate on the protection of personal data in order to improve the level of protection and avoid obstacles to trade that requires transfers of personal data. 2. Cooperation on personal data protection may include technical assistance in the form of exchange of information and experts and the establishment of joint programmes. <p>EU: The Parties agree that the development of electronic commerce must be fully compatible with the international standards of data protection, in order to ensure the confidence of users of electronic commerce.</p>
Spam	EU: the treatment of unsolicited electronic commercial communications
Authentication and digital signatures	<p>Variation 1</p> <ol style="list-style-type: none"> 1. Neither Party may adopt or maintain legislation for electronic authentication that would (a) prohibit parties to an electronic transaction from mutually determining the appropriate authentication methods for that transaction; or (b) prevent parties from having the opportunity to prove in

	<p>court that their electronic transaction complies with any legal requirements with respect to authentication.</p> <p>2. Each Party shall work towards the recognition at the central level of government of digital certificates issued by the other Party or under authorisation of that Party.</p> <p>Variation 2</p> <p>1. Each Party shall maintain domestic legislation for electronic authentication that: (a) permits parties to an electronic transaction to determine the appropriate authentication technologies and implementation models for their electronic transaction, without limiting the recognition of technologies and implementation models; and (b) permits parties to an electronic transaction to have the opportunity to prove in court that their electronic transaction complies with any legal requirements.</p> <p>2. The Parties shall work towards mutual recognition of electronic signatures through a cross-recognition framework at government level based on internationally accepted standards.</p> <p>3. The Parties shall encourage the interoperability of digital certificates in the business sector, including in financial services.</p> <p>EU: The Parties shall maintain a dialogue on regulatory issues raised by electronic commerce, which will, <i>inter alia</i>, address the following issues: (a) the recognition of certificates of electronic signatures issued to the public and the facilitation of cross-border certification services;</p>
<p>Paperless trading</p>	<p>1. Each Party shall endeavour to make all trade administration documents available to the public in electronic form.</p> <p>2. Each Party shall endeavour to accept trade administration documents submitted electronically as the legal equivalent of the paper version of such documents.</p>

While certain policy principles are encouraged, the e-commerce rules included in the PTAs do not mandate very detailed regulatory approaches which are to be adhered to by signatory parties. Often the digital trade provisions either suggest broadly formulated policy directions which can be filled with meaning at the national level (e.g. the mandate to minimise the regulatory burden on e-commerce) or they cross-refer to existing standards outside the trade agreement (e.g. the reference to the UNCITRAL Model Law on Electronic Commerce). Often the standards leave a lot of room for national regulatory preferences while making the policy objective unambiguously clear and demanding (e.g. rules on consumer protection which require that ‘to the extent possible and in a manner considered appropriate by each Party, provide protection for consumers using e-commerce that is at least equivalent to that provided for consumers of other forms of commerce’). Some elements such as the requirement to ‘minimise the regulatory burden on e-commerce’ can – despite looking very innocent – have important implications in dispute settlement or bilateral negotiations, especially in the absence of fully-fledged regulatory disciplines on domestic service regulation. Often the requirements also mandate further work: ‘The Parties recognize the importance of cooperation between their respective [...] consumer protection agencies on [...] cross-border e-commerce’.

The absence of meticulous regulation seems reasonable as the WTO has never been considered the appropriate body for such regulation. Rather, ‘policed decentralization’⁸⁴ via regulatory disciplines which lie midway between harmonisation and regulatory heterogeneity is the cornerstone of the WTO’s influence on domestic regulation. However, external digital policy principles to which the WTO or its Dispute Settlement Body could refer in the case of trade litigation do not always exist. In particular the provisions on authentication, which mandate certain technological and legal requirements, interoperability and non-discrimination, work on mutual recognition and international standards, are surprisingly powerful.

Furthermore, certain broad provisions can sometimes be seen in the context of provisions in other parts of the agreement (for example in the case of the transparency and domestic regulatory disciplines which are evoked in detail in other parts of the bilateral treaties). In one case – the US – Australia PTA – the digital trade rules even refer to obligations on cross-border consumer protection (including to the 2003 *OECD Guidelines for Protecting Consumers from Fraudulent and Deceptive Commercial Practices Across Borders*).⁸⁵ EU – Korea, for instance, specifies that ‘each Party, reaffirming its commitment to protect fundamental rights and freedom of individuals, shall adopt adequate safeguards to the protection of privacy, in particular with regard to the transfer of personal data’ while referring to the *OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data* or the *Guidelines for the Regulation of Computerized Personal Data Files*.⁸⁶ This shows how special rules on digital trade, horizontal trade obligations and external, non-trade instruments can function in conjunction with the external activities of other bodies.

Some elements of the digital trade provisions, such as the transparency requirements, may be criticised for being redundant as other parts of the trade agreements sufficiently capture the need for transparency, consultation and publication. As shown above, the cross-border trade in services chapters of PTAs and a special chapter on transparency already mandate demanding transparency requirements which also apply to digital trade rules and the discussion in the WTO Work Programme on E-commerce that leaned towards the interpretation that the GATS Article III on transparency is fully applicable to and sufficient for digital trade.

⁸⁴ A term coined by A. O. Sykes, ‘The (Limited) Role of Regulatory Harmonisation in International Goods and Services Markets’, *Journal of International Economic Law* 2 (1999), 49–70.

⁸⁵ US – Australia FTA, Chapter 14 on Competition-related Matters, Article 2.

⁸⁶ Adopted by the United Nations General Assembly Resolution 45/95 of 14 December 1990.

This is the beauty of having horizontal GATS rules which automatically and uniformly apply to all GATS modes and new forms of delivery. Similar areas of duplication could arise in the areas of market access and national treatment commitments, rules on domestic regulations, technical standards and interoperability, and topics which fall under the GATS Article XIV exceptions.

Avoiding duplication which could arise through the creation of unnecessary rules which single out digital trade seems important, especially when it leads to disciplines which sit squarely between provisions on trade in goods and in services without specifying which general rules and specific obligations apply. However, in some cases, special digital trade provisions will be necessary and useful to add political emphasis on certain policy issues.

It should be noted that few of these digital trade provisions are subject to dispute settlement provisions. In fact, those bilateral trade agreements such as Singapore – Australia, Thailand – Australia and Thailand – New Zealand which go furthest in detailed digital trade regulations specify that these digital trade rules are not subject to the dispute settlement provisions.⁸⁷ Nevertheless, these digital trade rules are part of trade agreements and must thus be considered as binding international law on the parties that signed them.

IV. Provisions in IPR chapters of PTAs that are relevant to digital trade

PTAs are firmly moving towards implementation of IPR rules to protect content online. The US FTAs were the first to establish TRIPS-plus regulations which relate to digital trade. There is a considerable increase in the level of detail from the earlier FTAs (US – Jordan) to the most recent ones (US – Korea). Slowly but surely other trading nations have integrated similar IPR-related provisions into their PTAs. The EU, for instance, did not refer to TRIPS-plus provisions in its trade agreements until 2002. Since EU – Chile, and to a much greater extent with EU – CARIFORUM and EU – Korea though, TRIPS-plus provisions pertinent to digital trade have been included. However, there are no indications that other countries (namely in Asia) have adopted similar provisions.

Specifically, the IPR chapters refer to the following provisions relevant to digital trade:

Adherence to the WIPO Internet Treaties: With the exception of US – Chile, all recent PTAs involving either the US or the EU call on both trading partners to ratify, accede to or at least comply with the WCT and the WPPT.⁸⁸ As neither Australia, New Zealand nor Thailand are signatories of both WIPO Internet Treaties, their PTAs refer only to TRIPS and ‘any other multilateral agreement relating to intellectual property to which both are party.’⁸⁹

Technical protection measures (TPMs) and digital rights management (DRM): To prevent unauthorised digital copying, copyright holders have made use of so-called technological protection measures (TPMs) or digital rights management (DRM) systems aimed at regulating the copying and distribution, as well as the use of and access to digital works.

While TRIPS does not contain any related obligations, the legal protection against the circumvention of TPMs was introduced at the international level through the WIPO Internet Treaties.⁹⁰ Although they require their Members to provide ‘adequate’ legal protection and

⁸⁷ For a recent systematic analysis of the application of dispute settlement see L. Herman, ‘Multilateralising Regionalism: The Case of E-Commerce’, *OECD Trade Policy Working Paper* 99 (2010).

⁸⁸ E.g. US – Korea FTA, Article 18.1, EU – Cariforum Article 170.

⁸⁹ Thailand – Australia FTA, Article 1302.

⁹⁰ See Article 11 WCT and Article 18 WPPT.

‘effective’ legal remedies,⁹¹ the WIPO Internet Treaties do not contain precise definitions of what technological measures are and leave leeway to the contracting parties as to how they should implement the provisions.⁹² All recent US PTAs and also the latest EU agreement with Korea stipulate that parties have to provide appropriate legal protection and effective legal remedies against the circumvention of TPMs as well as against devices used for that purpose (independent of the intended use of the device).⁹³

Liability of Internet Service Providers (ISPs): Numerous parties are involved when protected content in digital networks is transmitted from one point to another, or made accessible to the public. Many bilateral agreements, in particular all US PTAs but also EU – CARIFORUM and EU – Korea contain provisions regulating the liability of Internet service providers (ISPs). For some of the above provisions, only a detailed analysis would show whether they are actually ‘WIPO Internet Treaties-plus’ provisions, i.e. whether despite their similar language they add substantial value – potentially also due to their link to the dispute settlement provisions attached to the bilateral trade agreement. Also the exact differences between the related US or EU provisions merit the attention of legal scholars.

Internet domain names: US PTAs contain provisions on Internet domain names that oblige the management of each party’s country-code top-level domain (ccTLD) to provide for an appropriate dispute settlement procedure based on the principles established in the Uniform Domain-Name Dispute-Resolution Policy.⁹⁴ Furthermore, the management of each party’s ccTLD should also provide for online public access to a reliable and accurate database of contact information for domain-name registrants. While the Australia – Singapore FTA contains a less detailed provision on Internet domain names,⁹⁵ the Australia – Chile FTA almost exactly mirrors the US provision.⁹⁶

Enforcement: Some PTAs, namely those from the US, contain enforcement provisions in additional confirmation/side letters targeted at copyrights in a digital environment.⁹⁷

Government use of non-infringing software: US FTAs contain a provision that obliges governmental agencies to use non-infringing software including measures to ensure this. Similar provisions exist in Australia – Chile FTA⁹⁸ and ASEAN – Australia – New Zealand FTA (AANZFTA)⁹⁹.

⁹¹ See Communication of the WIPO Standing Committee on Copyright and Related Rights, SCCR/10/1, 1 August 2003, 38.

⁹² U. Gasser, ‘Legal Frameworks and Technological Protection of Digital Content: Moving Forward Towards a Best Practice Model’, *Berkman Center Research Publication* 4 (2006), 7 f.

⁹³ E.g. US – Singapore FTA, Article 16.4(7).

⁹⁴ E.g. US – Singapore FTA, Article 16.3(2).

⁹⁵ See Australia – Singapore FTA, Chapter 13, Article 7.

⁹⁶ See Australia – Chile FTA, Article 17.24.

⁹⁷ E.g. US – Korea FTA contains two Confirmation Letters (the first on *Promoting Protection and Effective Enforcement of Copyrighted Works*, the second on *Online Piracy Prevention*), US – Singapore FTA contains two Side Letters (on *Enforcement* and on *Optical Discs*), US – Australia FTA contains one Side Letter on *ISP Liability*.

⁹⁸ See Australia – Chile FTA, Article 17.30.

⁹⁹ See AANZFTA, Chapter 13, Article 6.

Table 7: Provisions relevant to digital trade in IPR Chapters of PTAs

Theme	Rules
Technical protection measures and digital rights management	<ul style="list-style-type: none"> • Detailed anti-circumvention provisions, including a ban on both circumvention and trafficking in circumvention devices. Plus an exhaustive list of exceptions (similar to the one in the Digital Millennium Copyright Act (DMCA))¹⁰⁰ • Definition of technological protection measures¹⁰¹ • Ban on removing rights management information (RMI); distributing removed RMI, knowingly distributing copies of works with RMI removed¹⁰²
Liability of Internet service providers	<ul style="list-style-type: none"> • The provisions in the US FTAs are modelled closely on the DMCA and contain two sections: the first section requires that parties provide ‘legal incentives’ so that service providers will work with copyright owners to deter copyright infringement over their networks.¹⁰³ The second substantive section outlines specific limitations on copyright liability for ISPs who meet certain procedural requirements in four areas (the so-called ‘safe harbours’): (1) transmitting, routing, or providing connections for material, (2) automated caching, (3) storage at the user’s direction, and (4) referring or linking¹⁰⁴
Enforcement	<p>Some PTAs (namely recent US FTAs) contain confirmation/side letters on the following issues:</p> <ul style="list-style-type: none"> • promoting protection and effective enforcement of copyrighted works • online piracy prevention • enforcement (in general) • optical disks • ISP liability
Internet domain name: dispute resolution	<ul style="list-style-type: none"> • Obligation of the management of each party’s country-code top-level domain (ccTLD) to provide for an appropriate dispute settlement procedure based on the principles established in the Uniform Domain-Name Dispute-Resolution Policy • Obligation of the management of each party’s ccTLD to provide for online public access to a reliable and accurate database of contact information for domain-name registrants¹⁰⁵
Government use of non-infringing software	<ul style="list-style-type: none"> • Obligation of governmental agencies to use non-infringing software including measures to be taken to ensure this¹⁰⁶
Encrypted satellite signals	<ul style="list-style-type: none"> • Criminalisation of the act of providing devices to decode satellite signals and wilfully making use of illegally decoded satellite signals¹⁰⁷

Table 8: Provisions in PTA IPR chapters relating to digital trade

¹⁰⁰ E.g. US – Australia FTA, Article 17.4.7.

¹⁰¹ E.g. US – Australia FTA, Article 17.4.7(b).

¹⁰² E.g. US – Australia FTA, Article 17.4.8.

¹⁰³ E.g. US – Australia FTA, Article 17.11.29(a).

¹⁰⁴ E.g. US – Australia FTA, Article 17.11.29(b)(i).

¹⁰⁵ E.g. US – Australia FTA, Article 17.3.

¹⁰⁶ E.g. US – Australia FTA, Article 17.4.10.

¹⁰⁷ E.g. US – Australia FTA, Article 17.7.

	US PTAs											
	US – Jordan FTA	US – Chile FTA	US – Singapore FTA	US – Australia FTA	US – Morocco FTA	US – CAFTA	US – Bahrain FTA	US – Oman FTA	US – Peru TPA	US – Colombia TPA	US – Panama TPA	US – Korea FTA
Date of Signature/Entry into force	2000/2001	2003	2003/2004	2004	2004/2006	2004	2004/2006	2006/2009	2006/2009	2006/ pending	2007/ pending	2007/ pending
Adherence to WIPO Internet Treaties	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Technical protection measures and digital rights management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Liability of Internet service providers	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unauthorised receipt or distribution of encrypted satellite signals	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internet domain names	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Government use of non-infringing software	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

	EU PTAs			PTAs in Asia										
	EU – Chile	EU – CARIFORUM	EU – Korea	New Zealand – Singapore	Japan – Singapore	Singapore – Australia	Thailand – Australia	Thailand – New Zealand	Korea ^o – Singapore	India – Singapore	Canada – Peru FTA	Chile – Australia FTA	Japan – Switzerland	ASEAN – Australia-NZ
Date of Signature/Entry into force	2002/2005	2007/2008	20010/2011	2000/2001	2002/2002	2003/2003	2004/2005	2005/2005	2005/2006	2005/2007	2008/2009	2008/2009	2009/2009	2009/2010
Adherence to WIPO Internet Treaties	✓	✓	✓	-	-	✓	-	-	-	-	-	-	✓	-
Technical protection measures and digital rights management (-	-	✓	-	-	-	-	-	-	-	-	✓	-	-
Liability of Internet service providers	-	✓	✓	-	-	-	-	-	-	-	-	✓	✓	-
Unauthorised receipt or distribution of encrypted satellite signals	-	-	-	-	-	-	-	-	-	-	-	✓	-	-
Internet domain names	-	-	-	-	-	✓	-	-	-	-	-	✓	✓	-
Government use of non-infringing software	-	-	-	-	-	-	-	-	-	-	-	✓	-	✓

C. Digital trade rules for 2020?

This section raises the question of what digital trade rules are needed today and will be needed in 2015–2020. Its objective is to envisage the digital trade rules that will be required in the medium- to long-term.

I. *Short-term: building on what exists and putting the house in order*

The first priority should be to ensure that existing GATS rules and obligations unambiguously apply to digital trade transactions. Furthermore, the existing and new specific GATS commitments must ensure that digital trade flows are covered by far-reaching free service trade commitments. Finally, the conclusion of ongoing negotiations on GATS rules in the area of domestic regulations seems particularly important.

Sections 1 and 2 of this chapter have shown that – in spite of some progress being made – all three conditions are far from being achieved, especially when it comes to the multilateral level. The most glaring examples are digital products and new services which are not clearly captured by existing GATS commitments. Despite their shortcomings, the existing GATS rules and full specific GATS commitments are powerful instruments which have been shown to work in the Internet context (as demonstrated in *US – Gambling* and *China – Audiovisuals*). Once comprehensive specific GATS commitments are made, open questions such as the status of the WTO duty-free moratorium on electronic transmissions, the delineation between GATS modes 1 and 2, the rise of new services and the classification of digital products will be fully or partly resolved.

Moreover, it seems that not all open questions raised by the WTO Work Programme on E-commerce and in this chapter – such as the applicability and interactions of GATS Article VI or XIV or possibly even decisions on proper classifications for certain services or digital products – have to be solved at the negotiation table. It would be in the interest of legal certainty and of pre-empting digital trade barriers to seek clarity wherever possible without relying on disputes.

At the multilateral level, WTO Members should study the provisions of the already concluded PTAs closely to ensure that the basic applicability of GATS rules and obligations is improved through additional agreements or clarifications.

The PTAs themselves may also need to be revisited in the light of shortcomings such as those indicated above. Most notably, there is a risk of introducing additional complexity and heterogeneity when apparently progressive digital trade commitments are made redundant by other provisions (e.g. the carve-in, carve out dilemma, or the sometimes far-reaching, horizontal limitations to cross-border trade in services in some, at first sight, liberal negative list services portions of PTAs).

In the case of IPR provisions, it currently seems far-fetched to believe that models implemented in PTAs could soon make it into the TRIPS context. It remains to be seen whether there is any value-added in referring to existing adherence to third-party IPR treaties or by explicitly integrating IPR provisions into bilateral trade agreements which are very close to or identical to the existing WIPO Internet Treaties.

II. *Medium- to long-term: formulating ‘deep’ digital trade rules and anticipating new digital trade barriers*

The process of formulating new ‘deep’ digital trade rules and of anticipating new digital trade barriers will be a medium- to long-term exercise. Here two analytical steps are proposed:

Step 1: Assessing the usefulness and trade relevance of ‘deep’ digital trade provisions in the PTAs

As a first, medium-term step, WTO Members, potential signatories of future e-commerce chapters as part of upcoming PTAs, and ICT experts may want to assess the usefulness and trade relevance of ‘deep’ provisions in existing PTAs and identify lacunae. Signatory parties to existing e-commerce chapters can be expected to have already selected the ‘deep’ provisions which are most useful or which address the most pressing (and ideally most trade-relevant) matters. The legal language used in these bilateral exercises provides a useful starting point for future agreements.

This observation must be considered with the following in mind. There seem to be two types of ‘deep’ provisions with two discrete but often overlapping goals. First, rules bolstering certain policy objectives in the international context, which should facilitate e-commerce transactions and ensure the trust of consumers and users at large (including measures relating to consumer and data protection) and, second, rules which aim at the elimination of new barriers to digital trade, which pursue non-discrimination and market access in the traditional sense (e.g. non-discrimination for digital products).

Moreover, with respect to the former type, the question of trade-relevance of certain ICT policy objectives and related ‘deep’ digital trade rules seems crucial as there are mounting arguments that the role of the WTO is to focus narrowly on trade. Clearly, securing data protection in the cross-border Internet context is a policy objective worth pursuing, particularly if it can be achieved without the WTO itself having to formulate detailed regulations. Nevertheless, it is necessary to ask whether the WTO can and should be involved in formulating measures such as appropriate framework conditions or regulations with the sole intent of stimulating trade flows, i.e. also in the context of having no body other than the WTO equipped to guarantee the binding nature of agreements and a comprehensive geographical coverage.

Looking at the existing ‘deep’ provisions (Table 5) and our analysis above, answers to the following questions may prove useful:

- Are particular digital trade provisions redundant as potentially they are already covered by a horizontal discipline (as may be the case for the e-transparency provisions)?
- Does it make sense to create such digital trade rules in a stand-alone e-commerce chapter with specific application to digital trade? Or would its integration into the GATS as a stand-alone digital trade discipline or even as part of an existing or newly created horizontal GATS discipline make more sense?
- Are the existing trade rules sufficiently detailed to be meaningful and effective in a cross-cultural context with varying styles of regulatory approach?¹⁰⁸
- Do enough organisations outside the WTO and agreed international policy approaches exist to guarantee meaningfulness to these principles and to help trade partners and

¹⁰⁸ E.g. the provisions on the domestic regulatory framework which state that ‘[e]ach Party shall: (a) minimise the regulatory burden on e-commerce and (b) ensure that regulatory frameworks support industry-led development of e-commerce’.

WTO or other courts to settle disputes? If not, should recognised international anchors such as the ones at UNCITRAL, ITU or OECD be added?

- Should these digital trade rules be subject to the dispute settlement system of the WTO or of PTAs?

Step 2: Unlocking the true potential of digital trade: Anticipating existing and new digital trade barriers

As a second step, with a longer-term ambit, new barriers to digital trade have to be anticipated. This task will benefit from an approach inspired by a deep technical, economic and legal knowledge of ICT market structures and digital transactions that goes beyond the usual GATS parlance and the ‘offline’ world as we know it. The two hitherto totally separate policy groups, the ICT and the trade policy community, need to put their heads together. In this quest, unlocking the true potential of cross-border digital trade and preserving the contestability of electronic markets must be the guiding principle.

Here some potential venues for existing or future digital barriers are suggested to help define a forward-looking research and policy agenda.

- Increased importance of pro-competitive telecom and network regulation and related trade principles.
- Lack of access to technology distribution channels and information networks, sometimes as a result of anti-competitive practices and unfair competition.
- Technical (sometimes national and proprietary) standards and their interoperability.¹⁰⁹ The PTAs have started to address such issues through their provisions on authentication and digital signatures.
- Competition-related matters: Securing the contestability of digital markets and promoting innovation taking into account new online market structures, the influence of ‘infomediaries’ such as search engines, software providers and aggregators, and the possible market dominance of a small number of companies.¹¹⁰
- Data privacy and consumer protection issues and how these might constitute trade facilitators or non-tariff barriers to trade.
- Issues relating to online content regulation including Internet filtering and blocking (e.g. the Yahoo and Google cases in China), measures such as content or language quotas to preserve national identities, and online advertising restrictions. More recently the potential threat to halt BlackBerry electronic mail and messaging services in certain countries provided a dramatic example.¹¹¹
- Internet Governance and Information Society policies: the plethora of new issues raised by the Pandora’s box of ‘Internet governance’ and the pursuit of broadband policy or broader Information Society goals that increase the level and the complexity of regulation.¹¹²

¹⁰⁹ Council for Trade in Goods, Work Programme on E-commerce, WT/GC/24, 12 April 1999.

¹¹⁰ In this context, investigating the existing but largely unexplored GATS Article VIII on *Monopolies and Exclusive Service Suppliers*, GATS Article IX on *Business Practices* and the relevance of related provisions in the GATS telecom agreements may be useful.

¹¹¹ See e.g. B. Meier and R. F. Worth, ‘Emirates to Cut Data Services of BlackBerry’, *New York Times*, 2 August 2010.

¹¹² OECD, The Seoul Declaration for the Future of the Internet Economy, 18 June 2008.

D. Conclusion

As shown at the beginning of this chapter, little substantial progress has been achieved on the multilateral level in the past decade in accommodating the growing digital trade resulting from the rapid development of the Internet. In the past ten years, we have, however, seen a proliferation of bilateral and regional trade agreements that increasingly innovate as regards to the cross-border delivery of services, cooperation on ICT, chapters on e-commerce and TRIPS-plus provisions which relate to digital trade. In this chapter, we have analysed 26 PTAs that address digital trade. Although we have discovered a variety of digital trade regulations, two main templates have emerged with respect to digital trade: the US and the EU models that follow different paths in advancing rules that appropriately reflect the contemporary reality of digital trade.

Against the so-called ‘e-spaghetti bowl’, we have sought to establish an agenda on how to improve the current and future regulatory framework for digital trade. In the short-run, the main priority should be to ensure that existing GATS rules and obligations unambiguously apply to digital trade transactions. Moreover, existing and new specific GATS commitments have to ensure that digital trade flows are covered by far-reaching free service trade commitments before new trade barriers arise. In addition, a swift conclusion of the ongoing negotiations on GATS rules in the area of domestic regulations, preferably with a particular focus on the new possibilities of electronic cross-border services trade, would be essential.

The process of formulating new ‘deep’ digital trade rules and of anticipating new digital trade barriers will be a medium- to long-term exercise. Therefore, we propose that as a first step, the usefulness and trade relevance of ‘deep’ provisions in existing PTAs should be assessed and potential gaps should be eliminated. In the second step, new digital trade barriers will have to be appropriately anticipated and addressed in order to unlock the true potential of cross-border digital trade and to preserve the contestability of electronic markets.

In conclusion, we have highlighted a few core technical areas and some particular features of the Internet which will be sources of further trade barriers and disputes. Work on these matters is becoming more pressing by the hour.

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