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INTELLECTUAL PROPERTY AND DIGITAL TRADE – MAPPING INTERNATIONAL REGULATORY RESPONSES TO EMERGING ISSUES

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* Contribution to the forthcoming volume Antony Taubman and Jayashree Watal (eds.), *Trade in Knowledge*, Cambridge University Press, 2020.

Intellectual Property and Digital Trade – Mapping International Regulatory Responses to Emerging Issues

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Abstract

This paper explores how regulatory responses to emerging IP issues in digital trade may develop at the international level and in particular how existing mechanisms might influence the chances of developing internationally agreed rules in this regard. The primacy of state sovereignty in intellectual property up to the late 19th century gave way to the important WIPO treaties, which still retained some independence of member states and based international regulatory responses directly on national experience. While more regulatory sovereignty was ceded in TRIPS, the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty, the adoption of non-binding instruments (such as the WIPO Joint Recommendations in the area of trademarks) show the limits of decision making by consensus. International non-state solutions such as the Uniform Domain-Name Dispute-Resolution Policy (UDRP) established by the Internet Corporation for Assigned Names and Numbers (ICANN) have introduced separate, technically determined solutions to specific IP issues. Proliferating free-trade agreements (FTAs) have emerged as a new platform to agree to IP-related regulatory responses that can be used to project the national solutions of a few dominant FTA-partners. However, these FTAs have also served to give legally binding status to internationally agreed non-binding recommendations. These diverse approaches are apparent in recent IP-regulatory responses to emerging digital issues that are particularly relevant for digital business models, including inter alia Internet service provider (ISP) liability, "safe harbour" provisions and the issue of orphan works, where there appears to be less agreement. Still further behind to reaching any kind of agreement are the emerging issues of online exhaustion, data mining and IP-related questions of artificial intelligence.

Keywords: intellectual property, trade in knowledge, digital trade, TRIPS Agreement, Berne Convention, Paris Convention, WIPO Internet Treaties, Regional Trade Agreements, online exhaustion, safe harbour, ISP liability.

JEL classifications: F13, K10, K33, O30, O31, O33, O34,

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1. INTRODUCTION

The genesis of international regulation in any subject area is complex and multifaceted. Whether a particular rule or practice succeeds in garnering international agreement is influenced by varying constellations of interests, stakeholders and institutions, and the fragile interaction between national jurisdictions and regional or international agreements. Internationally-agreed regulation is particularly advanced in the area of intellectual property (IP), where detailed treaties set binding international standards on subject matter, scope of protection and enforcement of most types of IP rights. International registration systems exercise a harmonizing influence on procedures and formalities. The intangible nature of IP meant that it was one of the first regulatory areas to react to the challenges posed by digital networks and their consequences for territoriality and the reproduction of digital works. While many of the principles underlying existing IP regulation proved sufficiently adaptable to the digital world, many IP-related issues that have emerged since the advent of the internet and digitization are triggering new or adapted regulatory responses at various levels. Some matters have already resulted in international agreements or uniform multilateral practices. Other – more recent – issues are still receiving different treatment in different jurisdictions and international consensus on how to regulate them is not (yet) in sight.

To understand how international regulatory responses to IP-related challenges in the area of digital trade might develop at the international level, and what factors influence the locus and nature of such responses, this paper first describes the rule-making processes that have shaped the international IP regime since its origins in the late 19th century, including recent examples of tools and legal instruments that address digital challenges. The paper then reviews the status of selected current digital issues, including ISP liability and online exhaustion, from the perspective of mechanisms that might lead to internationally agreed responses.

2. THE CHANGING PATTERN OF INTERNATIONAL RULE-MAKING IN INTELLECTUAL PROPERTY

The proverbial lag of regulatory and policy responses to technological developments is a frequently evoked stereotype that has become particularly popular – and true – in the area of digital technologies, where the rate and profundity of change has reached breakneck speed. This "tech lag" phenomenon merely describes the time delay that national institutions face in identifying, formulating, issuing and implementing relevant policy or regulatory reactions to technological developments. However, even further complexity is usually associated with *international* regulatory responses, which – while having the advantage of disproportionate regulatory synergy across different markets – encounter myriad additional challenges as to legitimate fora, compatibility of legal systems, enforcement, and adjudication of disputes.

2.1 The early ideal of universal codification and the primacy of sovereign treatymaking

The WIPO Paris and Berne Conventions, together with the TRIPS Agreement, form the foundations of today's international IP system. Their substantive and institutional development largely shaped the advancement of internationally agreed IP rules during the 20th century.

2.1.1 The Berne and Paris Conventions as the foundation of international IP regime

The Berne and Paris Conventions resulted from the intangible nature – and hence easy international mobility – of inventions and literary works. The popularity of "Universal Exhibitions" in the second half of the 19th century, and the corresponding surge of international exchange of industrial inventions and literature, soon united the relevant actors – industrialists and authors/publishers[1] – to call for 'universal' unified regulation of authors' and inventors' rights. The resulting

[1] For the role of the *Association Artistique et Littéraire* (ALAI) in the initiation of the Berne Union, see Ricketson and Ginsburg (2006), pp.49-58

intergovernmental organizations (the Berne and Paris Unions) and conventions remained the prime locus for formulating international IP rules for the next century.

While the early ideal of truly universal codification[2] soon gave way to more realistic – and moderate – objectives, the early spirit of finding common rules through exchange of technical expert directly at the international level remained reflected in the institutions' structure and operations.[3] Exemplifying a form of international regulatory activity, these conventions – and the institutions administering them – provided a unique intergovernmental forum for technical experts in the relatively well-defined areas of IP to discuss and strive to formulate common regulatory solutions directly at the international level, which – if successful – became international treaty law.

Participants in these deliberations were mostly like-minded national IP experts that subscribed to the common goal of international harmonization around appropriate subject matter principles and solutions. The iterative process of successive treaty revisions of the Paris and the Berne Conventions, which remained the focus of efforts up until the second half of the 20th century, further reflects the lingering spirit that a 'universal regulation' of the entire area of industrial property or copyright could be contained in a single body of rules agreed among sovereign states.

Political and policy considerations did influence divergent national positions. Yet in expert deliberations, and certainly in the dynamics of revision conferences, it is clear that the limitation of the treaty scope to the relatively confined area of IP, and the traditional influence of practical technical questions (rooted in the early influence of authors, publishers and inventors) meant that the influence of strategizing and external political considerations could remain limited.

The historical context of these treaties is complex and cannot be viewed in a simple linear pattern. Yet these arguably dominant traits of the early stages of international IP treatymaking help explain the surprisingly early and dynamic genesis of these conventions, which represent – then, as today – a degree and depth of international codification unparalleled in any other area of private law. The early and successful establishment of the Berne and Paris Unions with their expert-driven and unified regulatory approach made this model of sovereign treatymaking the natural focus for international IP regulation for most of the 20th century, next to which alternative institutions – or even alternative approaches to treatymaking in this area – remained limited in scope.[4]

By the time digitization and the internet emerged in the 1990s, however, this traditional model of consensus-based treaty revisions based on expert opinion had reached certain limits. Concerns of developing countries had dominated the revision conferences in the 1960s and 1970s, and the iterative revisions of entire conventions had become difficult – and, while still hoped for in the 1990s, effectively came to a halt after the 1971 revision of the Berne Convention.[5] The emerging and accelerating technological changes, and the corresponding new means of exploitation now led to more divergent national solutions and approaches that could no longer be easily bridged by national expert discussions at the international level, as had been the case in the early years.

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[2] See the programme of the Vienna Patent Congress 1873, Appendix A, *Webster's Report*, page 400 (cited in Ricketson (2015), p.34): "All the views, however, even those of the partisans of patent protection, unite invariably and unexceptionably in this, that the protection of the rights of inventors needs new forms corresponding to the altered international commercial relations; and the solution of this question of reform should not be aimed separately as hitherto, by each state of the great commercial area, but rather, that a complete solution common to all states should be accomplished by international agreement."; regarding the Berne Convention see the debate of the German motion in favour of a universal codification at *Actes 1884*, p. 28-9, cited in Ricketson and Ginsburg (2006), p.138.

[3] The unions were organized in "groups of experts" that formed the precursors to today's WIPO Standing Committees.

[4] This is not to diminish alternative efforts such as the Universal Copyright Convention (UCC), that pursued equally 'universal' ambitions.

[5] See the account of "uneasy truce" that no-one wanted to reopen by beginning new debates in Ricketson and Ginsberg (2006), p.140.

Hence the provisions of the 1971 Berne Convention remained far from the original ideal of 'uniformity of protection' with implications for coverage of emerging digital issues. Gaps persisted, in particular in regard to a right of distribution of copyright protected works. The formulation of a number of protected rights still permitted considerable variations in national interpretation.[6] Given the wide discretion left to countries with regard to copyright exceptions, and the lack of clarity as to whether software fell within the scope of the convention, much of the effective protection of authors was effectively left to the application of national treatment.

While member countries maintained the characteristically expert-driven approach in the context of WIPO by establishing committees of government experts on a number of salient issues – such as computer software as early as the 1970s and 1980s – these efforts did not bear fruit until after the conclusion of the TRIPS negotiations, when some of the work from the 'guided development'[7] period served as a basis of the 1996 WIPO Internet Treaties.

2.1.2 TRIPS: a continuation of unified expert-driven treatymaking

Although the inclusion of IP subject matter in the multilateral negotiations of the GATT Uruguay Round represented a significant shift from the historical pattern of treatymaking, the methodology and the outcome of the negotiations of the TRIPS Agreement still resemble the model of unified expert-driven treatymaking. The factors that facilitated the shift of focus from WIPO to the GATT/WTO have been amply commented upon.[8] From the perspective of international IP regulatory activity, these factors fall into two categories: those related to the limits of the traditional locus and methodology of international IP regulation in WIPO; and those relating to the systemic dynamics of multilateral trade negotiations. For WIPO, the lack of progress since the last revisions of the Paris and Berne Conventions in 1967 and 1971 respectively meant that there was little prospect that remaining gaps in protection, notably on enforcement and dispute settlement, could be closed in the traditional fashion in the foreseeable future. The protracted experience of the last revision conferences, and the failure of attempts to conclude 'special agreements' in the 1980s - notably on software[9] – opened some member countries' minds to alternative approaches of treatymaking, although much convincing remained to be done before agreement on negotiating a comprehensive IP instrument in GATT was reached in the course of the Uruguay Round.[10]

In the trade negotiations area, the characteristic trade-off dynamic of the Uruguay Round negotiations meant that, in contrast to the WIPO context, non-IP considerations were able to exercise more considerable – and more direct – leverage on countries' willingness to discuss IP. At the time, this concerned first and foremost the question whether a fully-fledged TRIPS outcome should be part of the Uruguay Round *at all*. The mandate to negotiate comprehensive "standards and principles concerning the availability, scope and use of trade-related IPRs" was agreed in April 1989[11] – after considerable hesitation on the part of a number of both developed and developing countries – only when the prospective benefits of the Uruguay Round in areas such as textiles, agriculture and tariffs became clearer, and a refusal to negotiate on IP would have endangered the benefits of the overall outcome.[12] It is less evident that this trade-off leverage had any effect on individual substantive IP questions in the same way as is argued in the context of recent bilateral treaties.[13] Rather, it seems that negotiating countries on the whole saw IP negotiations *as a whole* as a trade-off for lucrative agricultural market access offers, hence requiring progress on the latter

[6] This was the case in the areas of reproduction, broadcasting and cable distribution. See Ricketson and Ginsberg (2006), 138.
[7] Ricketson and Ginsberg (2006), 143.
[8] Ibid. 155, fn 44.
[9] Ibid. 144.
[10] See Otten (2015).
[11] GATT Document MTN/TNC/11, Uruguay Round – Trade Negotiations Committee – Mid-Term Meeting, 21 April 1989.
[12] Otten (2015), 62 and 74.
[13] See below section 2.3

before continuing the former during the successive negotiation sessions.[14] Negotiations on individual IP issues remained largely guided by the – offensive or defensive - substantive interests, patiently explained by IP experts, of the negotiating countries who lined up in groups – often defying the traditional North-south narrative – of common positions around copyright, enforcement or geographical indications, to name just a few.[15]

From the perspective of international IP regulation, therefore, and despite this new context of international IP regulation in the Uruguay Round, the substantive outcome on IP within the TRIPS Agreement followed in many ways the characteristics of the treatymaking process under the WIPO Conventions. Although the negotiations moved much faster and in a less formal manner, and took place outside the WIPO ecosystem of government expert committees and working groups, national IP experts played a central role in the framing and the conduct of TRIPS negotiations. Furthermore the historic ideal underlying the conventions, namely of 'universal codification' seems to have been even more successful in the unifying edifice of the TRIPS Agreement. Incorporating *tel quel* not only most of the provisions of the Berne and Paris Conventions, but also parts of the Rome Convention and the Washington Treaty, and supplying significant substantive additions and clarifications, the TRIPS Agreement remains the single most comprehensive international treaty on IP today – covering substantive protection and enforcement of most conventional categories of IP in a single treaty.

Although negotiated just as early digitization issues were arising,[16] the TRIPS Agreement contains few specific regulatory responses in this area. Notable is the first international confirmation that software is covered by copyright, resolving an issue discussed in WIPO in the 1980s. The specific formulation "whether in source or object code" clarified that protection extended also to the machine-readable binary code in which software was usually distributed – which some national jurisprudence had excluded,[17] hence rendering protection ineffective. By stipulating protection "as literary works", Article 10.1 TRIPS ensured that computer programs – with their arguably functional character – would not be categorized as works of applied art, which would have permitted a reduced minimum term of protection[18], or even exclusion from protection altogether – albeit while risking material reciprocity – under the Berne Convention (1971).[19] TRIPS Article 10.2 on "compilations of data and other material" – while deciding against requiring *sui generis* database protection at the international level[20] – specifically acknowledges that compilations of data or other material "whether in machine-readable or other form" are to be protected if they constitute intellectual creations by reason of selection or arrangement, even if the data or material itself is not copyright protected.

Against this – admittedly simplistic and selective – account charted above it would seem that, despite the institutional shift from a body exclusively dedicated to IP into the multilateral trade regime, the TRIPS negotiations represent nevertheless the culmination of the traditional model of international IP regulation in which (i) largely expert-driven negotiations directly at the international level develop rules in pursuit of – ideally - (ii) a unified and universal body of rules in the shape of conventions or comprehensive texts, that are then agreed to as (iii) international treaties by sovereign states. The limits of this model arguably showed already in the earlier slowdown after the conventions' last revisions and it could be argued that it was only the context of the trade-offs available in the Uruguay Round that achieved the renewed momentum. The TRIPS outcome nevertheless shows the continued salience and attractiveness of the 'universal sovereign treaty model' in the early 1990s, although

[14] See the account of the Brussels breakdown of negotiations in Otten (2015), p. 67.
[15] See the country experiences reported in Watal and Taubman (2015) *The Making of the TRIPS Agreement* (WTO 2015).
[16] Although signed only in 1994, the bulk of the TRIPS text was negotiated already in the 1980s. See Gervais (2012).
[17] See Blomqvist (2014), 88.
[18] Article 7(4) Berne Convention (1971)
[19] Art. 2(7) of the Berne Convention (1971); see also Blomqvist (2014). For an overview of the negotiating dynamics on copyright protection of software at the time of the Uruguay Round see Wager (2015).
[20] See the background in Gervais (2012).

other - more limited – selective subject matter agreements would also have been possible, and were in fact contemplated.[21]

2.2 The emergence of new modes of regulatory responses

The culmination of the model described above coincided with the early development of the World Wide Web, and therefore did not address the new issues raised by widespread use of the Internet, particularly the online distribution of protected works. In responding to these challenges, the traditional model began to give way to more varied regulatory responses.

2.2.1 The WIPO Internet Treaties: an issue-driven international solution

Although work on the challenges presented by new technological developments had begun in WIPO already in the 1970s, progress had been slow, and momentum was lacking particularly once the Uruguay Round mandate to negotiate a comprehensive IP agreement had taken shape in the late 1989. As TRIPS did not address many of the new technology issues in detail, momentum returned to WIPO where an astonishing spurt of concerted effort produced the WIPO "Internet Treaties", namely the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), less than two years after the Uruguay Round concluded.[22] The Internet Treaties took significant steps towards adapting international rules for the protection of copyright and the rights of performers and producers of sound recordings to the digital revolution, and in particular to the distribution of copyright material over the internet.[23]

These treaties establish an international agreement[24] that storage of works in a digital form in an electronic medium constitutes a reproduction. Despite alternative approaches discussed in the run-up to the Diplomatic Conference, signatories ultimately agreed that the respective reproduction rights, of authors, performers, and of phonogram producers – as well as the permitted exceptions – fully apply to the digital environment.[25] While this ensured that digital exploitation and storage was covered by the traditional reproduction concept, the specific mention of the applicability of permitted exceptions, and a certain leeway in interpreting the term "storage", was understood to permit justified exceptions regarding transient or incidental reproductions[26] as may occur in the operation of digital networks.[27] An agreed statement to the TRIPS-style three-step test that was now introduced to cover exceptions of the Internet Treaties and the Berne Convention[28] explicitly highlighted the objective to permit the development of new exceptions and limitations appropriate for the digital network environment.[29]

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[21] See the GATT 1982 and 1986 Ministerial Declarations with a mandate for a code on counterfeit goods only.

[22] The WCT and the WPPT were adopted on 20 December 1996 and entered into force on 6 March 2002 and 20 May 2002, respectively.

[23] Wager (2015).

[24] In March 2020, the Internet treaties had been signed by 104 countries.

[25] For copyright, see Article 1(4) WCT and agreed statement. For performers' and phonogram producers' rights, see Articles 7 and 11 of the WPPT that confirm and expand the reproduction rights provided for in Article 7.1 (for performers) and Article 10 (for phonogram producers) of the Rome Convention, and the accompanying agreed statement.

[26] See WIPO Handbook (2004), 5.220 and 5.563.

[27] This permitted, in principle, the same treatment as for "ephemeral fixations" by broadcasting organizations under Article 15.1 (c) of the Rome Convention (1961).

[28] It is Art. 10(2) WCT that extends the test to govern exceptions and limitations to all Berne Convention rights.

[29] The agreed statement to Article 10 WCT – also covering Article 16(2) WPPT – reads: "It is understood that the provisions of Article 10 permit Contracting Parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention. Similarly, these provisions should be understood to permit Contracting Parties to devise new exceptions and limitations that are appropriate in the digital network environment. It is also understood that Article 10(2) neither reduces nor extends the scope of applicability of the limitations and exceptions permitted by the Berne Convention."

The treaties further enshrine the central principle that the transmission of works in digital networks is the object of an exclusive right of the author or other rights owner. In formulating this "right of making available" in a manner that captured the technological specificity of internet distribution, yet remained neutral as to which traditional rights were the basis of this new obligation, the treaties bridged considerable diversity that existed in national jurisdictions as regards the recognition and application of a distribution right or a right of communication to the public.[30] As the Berne Convention (1971) coverage of both these rights was limited,[31] the Internet treaties further endeavoured to fill these gaps by explicitly extending the right of communication to the public to cover the making available of works in digital networks (Article 8 WCT, Articles 10 and 14 WPPT), and by explicitly stipulating a distribution right (Article 6 WCT, Articles 8 and 12 WPPT), thus clarifying the hitherto heterogenous interpretation of the international standard.

This so-called "umbrella solution"[32] – to formulate a new making available right in a "neutral, legal characterization-free description"[33] – ensured that both possible bases for such an obligation – the right of communication to the public and the distribution right – were now equally enshrined in the international standard of copyright protection. This artful solution gave national legislatures considerable flexibility in characterizing the exclusive rights involved.[34] While Article 10 WCT associates the new right of making available with the right of communication to the public – and many countries have chosen to implement that way[35] – the negotiation history[36] and subsequent commentary[37] clarifies that the "umbrella solution" equally permits signatories to implement the making available right through applying the exclusive distribution right to electronic transmissions of works.[38]

Indeed, in that regard, the United States observed that:

> a "distribution" approach more closely approximates the real market impact of on-demand and other online transactions, in which the recipient of the transmission often ends up with a copy of a work that he or she did not have before.[39]

The United States therefore saw no need for legislative action to implement the new right, since "its broad reading of the distribution right, in conjunction with the reproduction right […] would cover the act of "making available" as that is defined in the WCT (and the WPPT)."[40]

Some of the challenges that would be raised by the implementation of these new rights, and which do indeed occupy courts and law-makers today – such as ISP liability and the question of online exhaustion – were anticipated in some of the agreed statements adopted with the Internet Treaties. The newly confirmed right of distribution was accompanied by a statement seeking to clarify that

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[30] See WIPO Handbook (2004).

[31] In the Berne Convention (1971) a distribution right is only explicitly granted with respect to cinematographic works (Art. 14(1)(i)), although some jurisdictions considered such a right a necessary – and thus implicit – corollary of the right of reproduction. The right of communication to the public only extends to certain forms of communication of works (Art. 11*bis*(1)).

[32] The term was reportedly coined by Mihály Ficsor, Secretary of the Diplomatic Conference. Schlesinger (2010), p.180.

[33] Mihály Ficsor (2002), § C.8.06.

[34] Schlesinger (2010).

[35] *Ibid*. See also an early Survey on Implementation Provisions of the WCT and the WPPT, document SCCR/9/6, 25 April 2003, which mentions that the right of making available had been implemented as a right of communication in 19 out of 39 laws reviewed, and "under or in conjunction with" the right of distribution in only five out of 39 laws reviewed.

[36] WIPO Handbook (2004), 5.226.

[37] Schlesinger (2010) and von Lewinski (2015), § 8.10.10.

[38] Schlesinger (2010) p. 181. For the WPPT, see von Lewinski (2015), § 8.10.10.

[39] Schlesinger (2010).

[40] *Ibid*. See also US Copyright Office (2016), p. 74-75 confirming the sufficiency of current statute: "In general, where a party offers members of the public access to a work in the form of a download, the offer implicates the right of distribution." "… Congress understood such conduct to be an infringement of the distribution right."

the "copies" subject to the distribution (and rental) right were *tangible* objects.[41] Together with the traditional understanding, expressed in the notes of the Basic Proposal, that "no rights are exhausted in connection with communication" and that "exhaustion of rights is only associated with the distribution of tangible copies"[42], this provides the dogmatic background for asserting that in countries that consider 'making available' a communication to the public, electronic copies made available in digital networks would not be subject to exhaustion. However, the basic tenet of the "umbrella solution" – namely that, despite the wording of Art. 8 WCT, countries are free to implement the new exclusive making available right by extending the distribution right to cover electronic transmissions – leaves the dogmatic context more ambiguous for those who, like the United States, consider online downloads an act of distribution.

This tension is recognized in some characterizations of the agreed statement, which seems to imply that countries' freedom of choice regarding the implementation of the new right includes the freedom to have exhaustion apply to electronic copies "distributed" through the making available right.

> The question may emerge whether this Agreed Statement [concerning Articles 6 and 7] conflicts with the "umbrella solution" for transmissions in interactive digital networks, and, particularly, whether or not it excludes application of the right of distribution to such transmissions. The answer to this question is obviously negative. The Agreed Statement determines only the minimum scope of application of the right of distribution; it does not create any obstacle for Contracting States to exceed that minimum.[43]

As regards the issue of ISP liability, the new making available right in Article 8 WCT was accompanied by an agreed statement clarifying that the provision of physical infrastructure did not in itself amount to an act of communication within the meaning of the treaty,[44] which is intended to clarify the issue of the liability of service and access providers in digital networks.[45] However, other than stating the rather obvious fact that providing infrastructure is not communicating to the public, this agreed statement is not determinative of who is liable for infringements of the exclusive right of making available stipulated in Article 8 WCT.

This brief – and selective[46] – overview of some of the Internet Treaties' achievements in crafting creative regulatory responses to the challenges the digital environment posed for copyright and related rights highlights a certain departure from the traditional treatymaking pattern identified earlier. The negotiators did not pursue international regulation of copyright or related rights in a 'unified and universal body of rules', i.e. by pursuing another revision of the traditional conventions, but deliberately chose separate instruments (making use of the Berne Article 20 provision for special agreements), with their own treaty administration,[47] that could be acceded to individually.[48]

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[41] "Concerning Articles 6 and 7: As used in these Articles, the expressions "copies" and "original and copies", being subject to the right of distribution and the right of rental under the said Articles, refer exclusively to fixed copies that can be put into circulation as tangible objects."

[42] See the Basic Proposal […] to be Considered by the Diplomatic Conference (CRNR/DC/4 of 30 August 1996), para. 10.20 "It should be pointed out that no rights are exhausted in connection with communication to the public. Should communication of a work result in the reproduction of a copy at the recipient end, the work may not be communicated further to the public or distributed to the public without authorization. Exhaustion of rights is only associated with the distribution of tangible copies."

[43] Mihály Ficsor (2005), p.11.

[44] See agreed statement concerning Article 8 "It is understood that the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention. It is further understood that nothing in Article 8 precludes a Contracting Party from applying Article 11*bis*(2)."

[45] WIPO Handbook (2004), 5.567.

[46] For a full overview of the regulatory breadth of the Internet Treaties see the respective sections of the WIPO Handbook (2004).

[47] See Article 15 WCT and Article 24 WPPT for arrangements of the respective assemblies.

[48] Note that membership of the Berne or Rome Conventions was not a condition for eligibility to join the Internet Treaties (see Art. 17 WCT and Art. 26 WPPT). In March 2020, the WCT and WPPT were in force in 97 out of a total of 104 contracting parties, while the 1971 Paris Act of the Berne Convention was in force in 188 contracting parties.

Although this is certainly not to suggest an abandonment of consistency with the existing body of rules,[49] this formal separation of instruments permitted a more focused – and arguably more ambitious – regulatory response to the specific challenges posed by new communication technology, and thus avoided the concerns associated with reopening the Berne Convention.

The Internet Treaties, like the Uruguay Round conclusion a few years earlier, also coincided with a geopolitical situation more favourable to market opening, multilateral cooperation and to embracing technological change, which influenced countries' willingness to agree on complex legal issues in an international forum. Many former communist or socialist economies were actively studying and seeking to establish societies based on market economy principles, which sometimes served as an inspiration for traditional developing countries to pursue similar ambitions.[50] The conclusion of the TRIPS Agreement, which reconfirmed, unified and further built on the Berne and Paris Conventions, may thus have helped overcome regulatory stagnation in the field of IP, and represented a new platform from which new solutions for the challenges posed by the accelerating technological developments could be developed in the Internet Treaties. In some areas, countries were prepared to agree solutions that had not yet been legislated or contemplated in the national jurisdictions, and thus again represent expert-driven substantive international law-making, rather than agreement on a lowest common denominator of existing national solutions.[51]

From a regulatory point of view, the issue-driven Internet Treaties thus represent a particularly successful instance of treatymaking that was able to benefit form a thorough expert preparation in substance and favourable geopolitical circumstances to achieve consensus on a rapid and relatively comprehensive response to the copyright challenges of new communication technologies. While countries were able to build on this success to some extent with the conclusion of the "the 3rd WIPO Internet Treaty"[52] – the Beijing Treaty on Audiovisual Performances in 2012 – achieving treaty-level consensus on regulatory responses to digital challenges soon became more difficult and gave rise the use of non-binding regulatory instruments.

2.2.2 The emergence of non-binding instruments – the Joint Recommendations

While work on the Internet Treaties was successfully concluded, alignment of interests in other areas was more elusive. Increased commercial internet use and the emergence of new trademark laws and registration authorities, among other factors caused by technological and commercial developments, had brought into sharp focus the need for clarity on the practical definition of "well-known" marks whose scope of protection in Article 6*bis* Paris Convention had just been extended by Article 16 of the TRIPS Agreement.[53] Based on a mandate to study "all questions of relevance to the correct application of Article 6*bis*" from the 1996-97 WIPO Program[54] a Committee of Experts on Well-Known Marks – later the Standing Committee on Trademarks, Industrial Designs and Geographical Indications (SCT) – developed draft provisions. Up until its third session in 1997 the

[49] Indeed, the elaborate provisions on relationships with other treaties emphasize the link with the Berne and Rome Conventions, respectively, and ensure that the Internet Treaties may not be interpreted in a manner that is inconsistent with their individual preceding conventions. See Art. 1 WCT and Art. 1 WPPT.

[50] Otten (2015), Wager (2015).

[51] The obligations on technical protection measures and digital rights management information (Arts. 11-12 WCT and Arts. 18-19 WPPT) have not been treated here. For an example on discussions in the context of subsequent implementation of these obligations see Geist (2010), and Ficsor (2009).

[52] See Ficsor (2012).

[53] See Kur (2013) remarking that "It was not uncommon during that phase that fortune-seekers succeeded in registering famous marks like "Dior" or "Cartier" and others, in order to extract money from the true proprietors when they tried to get a foothold on the same market. This of course created concern among the trademark community in the Western world, leading to warnings directed at the political instances in those countries that they were in violation of their obligations under Article 6bis Paris Convention and of Article 16 TRIPS, threatening to compromise their access to WTO membership. Trying to achieve what was expected of them most governments were keenly interested in obtaining specific and secure guidelines for checking which marks were to be considered as "well-known" in the meaning of the international agreements and hence must be excluded from trademark protection."

[54] WIPO Document AB/XXVI/2, Item 03(5).

Committee of Experts foresaw adoption of these draft provisions either through an international instrument or a recommendation by the WIPO General Assembly, "once sufficient agreement had been reached on such conclusions."[55]

However, around the same time WIPO Members officially embraced the need to adapt to the pace of change in the field of industrial property by considering new options – i.e. other than treaties – for agreeing international common principles:

> Given the practical imperative for accelerated development and implementation of certain international harmonized common principles and rules in industrial property law, the future strategy for this main program includes consideration of ways to complement the treaty-based approach [...]. If Member States judge it to be in their interests so to proceed, a more flexible approach may be taken towards the harmonization of industrial property principles and rules, and coordination of administration, so that results can be achieved and applied more rapidly, ensuring earlier practical benefits for administrators and users of the industrial property system.[56]

Under this approach, WIPO Member States agreed three non-binding recommendations[57] between 1999 and 2001. In 1999, the Paris Union Assembly and the WIPO General Assembly adopted the Joint Recommendation Concerning Provisions on the Protection of Well-Known Marks (JR 1999), which provided criteria for the determination of whether a mark qualifies as "well-known"[58] and established remedies for conflicts between well-known mark and other marks, business identifiers and domain names.[59] Its relevance for digital trade arises from its recommended prohibition on requirements for use or registration of the mark in the Member State as a condition for it to be considered well known[60] there, while recommending the recognition of use and promotion or advertising – including on the internet – as factors counting in favour of well-known status of a mark.[61] Thus the JR 1999 significantly shores up the right owners' position in the digital marketplace, since advertising and use of the mark on the Internet is privileged vis-à-vis actual local use in the relevant Member.[62]

The newly created SCT had also started more general work on "Trademarks and the Internet" at its second session in 1999 which developed into the Joint Recommendation Concerning Provisions on the Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet (JR 2001) adopted in 2001. These recommendations attempted to harmonize the interpretation and meaning of 'trademark use' that had remained undefined in the Paris Convention and the TRIPS Agreement, and had come into sharper focus with the contradiction between the principle of territoriality of rights and the global nature of the Internet.

> The present provisions are intended to be applied in the context of determining whether, under the applicable law of a Member State, use of a sign on the Internet has contributed to the acquisition, maintenance or

[55] Memorandum on Protection of Well-Known Marks at the Third Session of the Committee of Experts on Well-Known Marks, 20-23 October 1997, WIPO Document WKM/CE/III/2: "Therefore, […] it is left open whether those draft provisions would be adopted in the form of a recommendation of the said bodies or in the form of an international instrument such as a Protocol to the Trademark Law Treaty."

[56] WIPO Program and Budget for the biennium 1998-99, document A/32/2-WO/BC/18/2, p. 86.

[57] Joint Recommendation Concerning Provisions on the Protection of Well-Known Marks (1999), a Joint Recommendation on Trademark Licenses (2000) and a Joint Recommendation Concerning the Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet (2001).

[58] JR 1999, Art. 2.

[59] JR 1999, Arts. 4-6.

[60] JR 1999, Art. 2(3)(i).

[61] JR 1999, Art. 2(1)(b)(2) and (3). Note that "promotion" was separately mentioned as a factor counting towards well-known status, also to overcome any ambiguity of whether promotion and advertising were regarded as "use" of the mark. See the (explanatory – not 'agreed') Notes on Article 2, available at https://www.wipo.int/edocs/pubdocs/en/wipo_pub_833-accessible1.pdf.

[62] See Kur (2013).

> infringement of a mark or other industrial property right in the sign, or whether such use constitutes an act of unfair competition, and in the context of determining remedies.[63]

In substance, the JR 2001 recommends resolving the question whether Internet use of a sign can be considered as use in a certain territory on the basis of whether it constitutes a 'commercial effect' according to a list of factors.[64] It also recommends a "notice and avoidance of conflict" procedure for avoiding conflicts of right holders of identical or similar rights granted in different countries and their use over the internet, under which right owners and other legitimate users are exempt from liability until they are notified of a conflicting right.[65] It recommends that remedies for infringement be limited, as far as possible, to the territory in which the right is recognized, and only be available if the allegedly infringing use of the sign can be deemed to have taken place in that territory. In other words, the JR 2001 proposes that the 'commercial effect' of Internet use should serve as a yardstick for determining a "proportionate" remedy.[66]

As international regulatory responses, the Joint Recommendations depart further from the traditional treatymaking model. They pursue distinct solutions to specific details within a single IP discipline, not a unified body of rules. And they are non-binding "soft law", not binding international treaty instruments agreed to by sovereign states. The need for acceleration of rule-making to ensure "earlier practical benefits for administrators and users"[67] that is cited in support of this new approach also seems to suggest that the traditional expert-driven process that would have been necessary to ensure consensus for binding treaty provisions may have given way to more interest-driven results[68] that representatives could accept in the absence of binding commitments.

Their non-binding nature may have facilitated their adoption but has not impeded their influence on national IP policymaking. Indeed, the standing of these instruments as recommendations from two authoritative WIPO bodies has led to their direct incorporation into the legislative projects in some countries,[69] or to them being taken into account in national[70] jurisprudence. More recently, their inclusion in IP chapters of Free Trade Agreements have turned these non-binding recommendations into binding and enforceable commitments of an increasing number of countries.[71]

2.2.3 A technically determined solution to specific IP issues: the UDRP

The contemporaneous privatization of the hitherto government-run structure of the Domain Name System (DNS) and the creation of ICANN led to the creation of an entirely different IP-related regulatory response in the area of the Internet's infrastructure.

The use of domain names as 'user friendly' labels to connect to numerical Internet Protocol addresses on the global Internet inevitably led to conflicts with the existing territorial protection of trademarks under the national laws.[72] The National Science Foundation (NSF) was authorized to permit commercial activity on the NSFNET – the non-military part of the Internet it was administering – in

[63] JR 2001, Preamble.
[64] Art. 3 JR 2001.
[65] Art. 9 JR 2001.
[66] WIPO Handbook (2004) 5.751.
[67] WIPO Program 1998-99 (n 56).
[68] Kur (2013) observes: "Driven not least by international stakeholders' associations, the text is pointedly right-holder friendly, without offering much legal certainty in return."
[69] See for example the Trade Marks Act of the Republic of India, Chapter II, 11(6) to (10) referring to JR 1999.
[70] See the section *9.3.3 The Long Arm of Non-Binding Decisions at WIPO*, in Kwakwa and Talbott (2013).
[71] See below Section 3.
[72] See generally Dinwoodie (2000).

1992,[73] and the ensuing interest of commercial actors led to a rapid expansion of the internet.[74] Network Solutions Inc. (NSI), a private company in charge of registering and administering the most valuable generic Top Level Domains (gTLDs)[75] – including .com – on behalf of the NSF on a first come, first serve basis, originally saw no substantive role for the registration authority in the resolution of such disputes.[76] However, as disputes over the internet's naming system soared[77] and criticism over the absence of competition in the registration process grew – and as NSI began charging user fees for domain name registration[78] - NSI introduced a first Domain Name Dispute Policy in 1995. Based on the contractual relationship between the domain name applicant and the registrar, to which it was annexed, this policy sought to avoid liability and prevent potential lawsuits of third parties against NSI.[79]

NSI's role as sole DNS registrar, and its Domain Name Dispute Policy, attracted sustained criticism over its monopoly position and, from the trademark community, its archaic dispute policy. The policies' approach to resolving conflicts between trademarks and domain names on the basis of registration priority[80] stood in stark tension with the long-standing US first-to-use tradition, by which rights in a mark are based on first use, not registration.[81] While the Clinton administration's ensuing decision to 'privatize' the Internet, and NSI's subsequent loss of registrar monopoly with the creation of ICANN and a new governance structure, was taken in the much larger policy context of internet governance,[82] the tension between the 'commercial' trademark owner community and the 'academic' engineering community that had created the network was a visible part of this defining period for the Internet's naming system.

The International Trademark Association's (INTA) 1997 White Paper,[83] in criticizing the state of affairs under the NSI policy, opined that

> At the threshold is the issue that the Internet was not created solely for commercial enterprise and that domain names should not be the exclusive province of trademark owners. Thus, those with legitimate non-trademark interests in second level domain names have to be accommodated along with the rights of trademark owners. Similarly, the interests of owners of trademarks which exist in commerce concurrently for non-related products or services must be considered as do those of famous marks. Finally, it is not necessary to have a second level domain name to do business effectively or successfully on the Internet, and thus while it may be

[73] See Scientific and Advanced-Technology Act of 1992; Pub. L. 102-476 § 4(9), 106 Stat. 2297, 2300 (codified at 42 U.S.C. § 1862 (a)).

[74] For an overview of the Domain Name System and the Evolution of its governance structure see Petillion and Janssen (2017), Chapter 2.

[75] NSI, a private American company, had received a directive from the InterNIC in 1993 to administrate the generic Top Level Domain Names (gTLDs): COM, EDU, GOV, INT, NET, ORG and MIL. See Haas (2009).

[76] Response to RFC (Request for Comments) 1561 from March 1994: "In case of a dispute between domain names registrants as to the rights to a particular name, the registration authority shall have no role or responsibility other than to provide the contact information to both parties. The registration of a domain name does not have any trademark status. It is up to the requester to be sure he is not violating anyone else's trademark" cited in Haas (2009).

[77] In a 1998 Wired.com article, Dave Graves, Network Solutions' director of business affairs, is quoted as "Our dispute policy has been invoked about 1,700 times in the two years that it has been in existence," he said. "Compared to a database of over 1.6 million domain names, that represents about one-tenth of 1 percent." See Stutz (1998).

[78] Petillion and Janssen (2017) Chapter 2, fn 57. NSI was permitted to charge USD50 per year per second level domain.

[79] Haas (2009). See also INTA White Paper (1997) Section E. NSI Dispute Policy: What Happens When Domain Names and Trademarks Conflict.

[80] Haas (2009): "NSI determined the "creation date" of the domain name registration. If it was prior to the trademark, no action was taken."

[81] For a thorough conceptual discussion of this tension see Dinwoodie (2000), 515.

[82] For the larger context see the introductions to the U.S. Green Paper (1998), and the U.S. White Paper (1998).

[83] INTA White Paper (1997).

> preferable to acquire the second level domain name of your choice, it is not an absolute right and may have to bend to accommodate competing interests.[84]

INTA's preferred solution was thus *not* to create a separate substantive domain name dispute resolution policy at all. Rather, a *sui generis* approach would permit a workable procedural approach to domain registration and disputes, while all substantive issues "will be left to the courts and trademark tribunals" and their already growing body of domain name dispute jurisprudence,[85] thus ensuring that traditional trademark law would apply to these conflicts.

The NSI's director of business affairs disagreed with trademark lawyers' criticism of their revised Dispute Policy.

> "[T]here's nothing at all in law that says having a trademark and the rights to that trademark also provide an automatic right to a domain name," said Graves. "There's nothing that says that."[86]

The alternative governance model known as gTLD-MoU – competing with the much-criticized[87] U.S. Department of Commerce's Green Paper proposal of 30 January 1998[88] – built on previous criticism of NSI's dispute policy. It focused on a self-regulatory and market-driven mechanism enforced by administrative challenge panels (ACP) that would reside within WIPO's Arbitration and Mediation Center.[89] While this MoU, as well as the envisaged governance association with the International Telecommunications Union (ITU), did not garner the required governmental support of the United States,[90] many of the characteristics of its dispute resolution approach[91] would be replicated in the UDRP that was developed under WIPO auspices and eventually adopted by ICANN under the arrangements of the U.S. Department of Commerce's White Paper of 5 June 1998,[92] in which the Clinton administration's privatization policy for the DNS was settled.

The U.S. White Paper's solution to the "Trademark Dilemma"[93] was to ask WIPO to initiate a "balanced and transparent" process to develop a uniform approach to resolving trademark/domain name disputes involving cyberpiracy (not conflicts between competing trademarks), albeit with precise recommendations that sought to address problems and criticism identified under previous experiences. These included the maintenance of an up-to date database of domain name owners' contact information that should be accessible to trademark owners in order to identify and contact potential infringers, and development of process to exclude famous trademarks from being used as domain names except by the trademark holder. It further recommended that, at the time of registration or renewal, domain name registrants submit "infringing domain names" to a court of law in a certain jurisdiction,[94] while for cases "involving cyberpiracy and cybersquatting" they would submit to and be bound by the alternative dispute resolution systems that the new corporation (i.e.

[84] INTA White Paper (1997).
[85] INTA White Paper (1997).
[86] David Graves, NSI cited in Stutz (1998).
[87] Petllion and Janssen (2017), Chapter 2, A.2.b.(3)(a).
[88] U.S. Green Paper (1998).
[89] Petillion and Janssen (2017) Chapter 2, A.2.b.(3)(a). See also Komaitis (2010), p. 75.
[90] *Ibid.* See also U.S. White Paper (1998).
[91] See Komaitis (2010): "The proposal conceived of a mechanism that would be hybrid in nature, would not replace traditional means of adjudication and would see administrative panels adjudicating disputes under certain objective standards and criteria".
[92] U.S. White Paper (1998).
[93] U.S. White Paper (1998), section 8.
[94] "1) Domain registrants pay registration fees at the time of registration or renewal and agree to submit infringing domain names to the authority of a court of law in the jurisdiction in which the registry, registry database, registrar, or the "A" root servers are located." U.S. White Paper (1998) Recommendations.

ICANN) would adopt following the WIPO process.[95] Finally, the rights of both domain name registrants and trademark owners under national laws should remain unaffected.[96]

After a brisk process of nine months, and taking into account reactions to an interim report,[97] WIPO delivered its final report[98] to ICANN on 30 April 1999, which – after an equally brief commenting period and a number of amendments[99] – on 26 August 1999 adopted the Uniform Domain Name Dispute Resolution Policy ("UDRP").[100] On 1 January 2000, a one-member panel decided the first domain name dispute under the UDRP, which has since governed well over 40,000 cases.[101]

The UDRP is a mandatory policy between a registrar and its customer and is included in registration agreements for all ICANN-accredited registrars. It thus applies for second-level domain name registrations in all generic top level domains (gTLDs)(e.g..com,.net, and .org) and those country code top level domains (ccTLDs) that have elected to adopt the Policy.[102] Under its mandatory administrative proceedings, it "complainants" (trademark owners) request cancellation, transfer or other changes to infringing domain name registrations in cases where (i) the domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights; (ii) if the domain name owner does not have rights or legitimate interests in respect of the domain name; and (iii) if the domain name has been registered and is being used in bad faith.[103] Complaints are heard and decided by independent administrative panels (not the registrar)[104] upon whose recommendation the registrars will cancel or transfer the domain name – thus providing a single system for *adjudication* and *enforcement*.

This brief sketch of the UDRP's genesis provides a glimpse of the complex interaction of interests that led to the creation of this unique regulatory instrument.[105] As the United States' decision to privatize the DNS opened the registration process up to competition and multiple registrars, it became important to ensure the uniform "global" application of dispute resolution procedures across different gTLDs.[106] Early proposals to ensure this by requiring applicants to submit to personal jurisdiction at the place of the root 'A' server met with scepticism, as this was seen as "as an inappropriate attempt to establish U.S. trademark law as the law of the Internet."[107] Hence the realization in the U.S. White Paper that accepting jurisdiction of "an alternative dispute resolution body is likely to be at least somewhat less controversial."[108] Finally, it was the common view among

[95] "2) Domain name registrants would agree, at the time of registration or renewal, that in cases involving cyberpiracy or cybersquatting (as opposed to conflicts between legitimate competing rights holders), they would submit to and be bound by alternative dispute resolution systems identified by the new corporation for the purpose of resolving those conflicts. Registries and Registrars should be required to abide by decisions of the ADR system." U.S. White Paper (1998) Recommendations.

[96] "4) Nothing in the domain name registration agreement or in the operation of the new corporation should limit the rights that can be asserted by a domain name registrant or trademark owner under national laws." U.S. White Paper (1998) Recommendations.

[97] *The World Intellectual Property Organization (WIPO) publishes its Interim Report on the Internet Domain Name Process*, 22 December 1998, Press Releases PR/1998/149.

[98] WIPO, *Final Report of the WIPO Internet Domain Name Process*, 30 April 1999, available at https://www.wipo.int/amc/en/processes/process1/report/finalreport.html.

[99] Komaitis (2010), p. 82.

[100] ICANN, Uniform Domain Name Dispute Resolution Policy (UDRP), adopted 26 August 1999, available at https://www.icann.org/resources/pages/schedule-2012-02-25-en.

[101] http://www.wipo.int/wipo_magazine/en/2017/05/article_0008.html

[102] Isenberg (2017).

[103] https://www.icann.org/resources/pages/policy-2012-02-25-en

[104] See paragraphs 4(e) and (h), UDRP (n 100).

[105] See the critical accounts of the processes involved in the privatization of the Internet and the creation of ICANN and the UDRP in Komaitis (2010) Chapter 5; Petillion and Janssen (2017) Chapter 2; and Helfer and Dinwoodie (2001).

[106] The U.S. Green Paper (1998) had still envisaged allowing different registrars to develop their own dispute resolution mechanisms.

[107] U.S. White Paper (1998). The original root 'A' server, and the subsequent additional root servers were located in the United States. See 'History of the Root Server System Report from the ICANN Root Server System Advisory Committee (RSSAC)' 4 November 2016; available at https://www.icann.org/en/system/files/files/rssac-023-04nov16-en.pdf.

[108] U.S. White Paper (1998).

the engineering community that the registrars' involvement in resolving these disputes should be minimal.

The UDRP clearly represents an international regulatory response to a digital IP challenge that differs entirely different from the traditional treatymaking model. The unique constellation of a single global infrastructure – the DNS, that identifies servers and websites throughout the Internet – which is administered by a private corporation – ICANN, that is itself governed by a consensus-based multistakeholder model – created its own set of necessities and opportunities. The drive for a 'supra-national' uniform solution to domain name disputes was not motivated by aspirations of creating a 'unified and universal body of rules' for IP, but by the need - and the technical possibility – for uniform pragmatic solutions to a narrowly focused practical problem that occurred in the same fashion throughout the world, wherever a gTLD was registered. The UDRP is not an international treaty agreed by sovereign nations, nor even a national legislative act, but rather a set of standard terms that are included in the contractual relationship between applicant and registrar at the time of a gTLD registration. The single global infrastructure, and the individual contract with each domain name applicant during the registration process, permitted this unique contractual solution that enables conflict resolution and implementation in a single instance. This constellation is, however, also responsible for the narrow scope of application of the UDRP that focuses on providing a "quick and cheap" solution to the most obvious cases.[109]

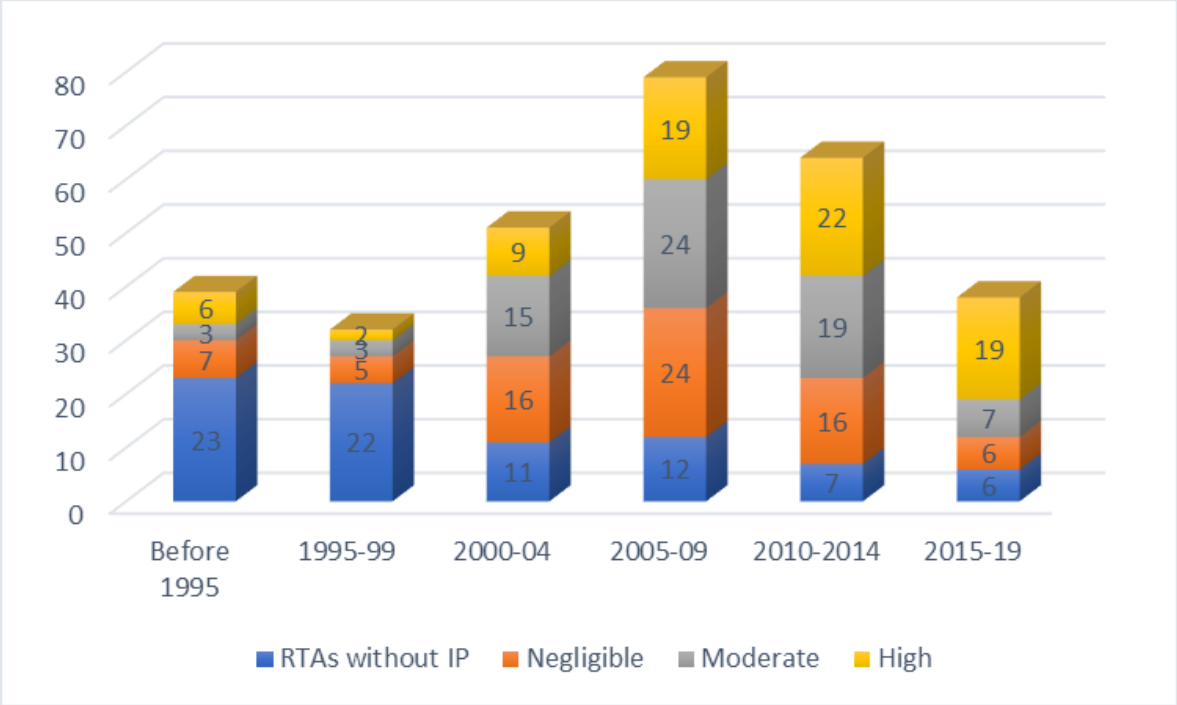
WIPO's involvement provided a deliberative process with extensive involvement of WIPO Member State governments, intergovernmental organizations, professional associations, corporations and individuals, as well as a panel of experts.[110] This process – not least due to the time pressure under which it was conducted – cannot be compared to the iterative process of committee meetings that led to earlier international treaties,[111] and was only the precursor to the subsequent internal ICANN stakeholder consultations and amendments of the policy before its adoption in August 1999.[112] While the UDRP has drawn repeated criticism – in terms of scope of application,[113] procedural justice,[114] and judicial oversight[115] – it is undisputed that this unique supra-national instrument has been an successful tool to resolve thousands of domain name disputes over the course of the last two decades.[116] Although recourse to national courts remains a theoretical possibility under the policy, the efficiency of the dispute resolution providers and the undeniable pecuniary advantages of arbitration means that few UDRP awards are challenged in courts.[117]

2.3 Regional Trade Agreements: regulatory responses to digital challenges

Bilateral and regional treaties (collectively regional trade agreements or 'RTAs') that regulate aspects of IP law are not a new phenomenon.[118] However, the recent dramatic increase in the number of those that address IP, and the degree of depth and detail of the IP provisions they contain, has made them a primary source of international regulatory responses to IP issues in recent decades.[119]

[109] Dinwoodie (2000), 511.
[110] See WIPO Final Report (n 98), paras. 26-31 for the 'Mechanics of the WIPO Process'.
[111] For doubts on WIPO's "capacity to engage in a balanced consultative process" under these circumstances see Helfer and Dinwoodie (n 105), p. 177.
[112] For a critical account of the ICANN process see above at n 105.
[113] See Helfer and Dinwoodie (2001).
[114] See Helfer and Dinwoodie (2001), Geist (2001), Geist (2002).
[115] Petillion and Janssen (2017).
[116] de Werra (2016).
[117] See Petillion and Janssen (2017) and Helfer and Dinwoodie (2001). For a recent reversal of a UDRP award by the Paris Court of Appeal, see Pôle 5, ch. 1, Monsieur X. / Team Reager AB et Stone Age Limited of 8 November 2016.
[118] For an account of bilateral IP treaties in force at the time of the conclusion of the Paris Convention see Ricketson (2015) 2.02.
[119] For a systematic quantitative analysis of IP provisions in RTAs see Valdés and Tavengwa, (2012) and Valdés and McCann (2014).

Figure 1: RTAs with increased IP content over time



(Source: Valdés and McCann (2014) and WTO RTA Database)

Since 2000, IP-intensive RTAs have grown in a distinct hub-and spoke architecture – originally around NAFTA, EFTA and the European Union – and have encouraged the convergence of domestic IP regimes among the respective RTA signatories linked to a common hub.[120] Higher standards agreed in such RTAs have fed back into the international arena, as countries tend to "re-export" such commitments in subsequent RTAs in order to achieve deeper integration and to lock in domestic reforms.[121]

Implementing these commitments into domestic law usually leads to a non-discriminatory application of these new IP standards to all WTO Member nationals, as the MFN principle enshrined in the TRIPS Agreement does not permit general exceptions[122] for RTAs as are foreseen in GATT or GATS,[123] where deeper integration in goods and services trade can be targeted exclusively to RTA partners. But even for provisions that fall outside the scope of the TRIPS MFN obligation,[124] crafting national IP provisions that exclude third country nationals may be exceedingly costly and complex, considering that national treatment obligations are also contained in the Berne and Paris Conventions.[125] Therefore, while RTAs themselves only bind their respective parties, the multilateral

[120] Valdés and McCann (2014) p. 36, and Charts 6 and 7.
[121] Valdés and McCann (2014) p. 39.
[122] Article 4 of the TRIPS Agreement provides that "[w]ith regard to the protection of IP, any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members." Exemptions exist only for general judicial assistance arrangements (Art. 4(a)), protection dependent on reciprocity under the Berne or Rome Conventions (Art. 4(b)), in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under this Agreement (Art. 4(c), and deriving from notified international IP agreements that entered into force prior to the WTO Agreement (Art. 4(d)). Contrary to GATT and GATS, the TRIPS Agreement does not contain a general MFN exemption for free trade agreements.
[123] See GATT Art. XXIV and GATS Art. V for exemptions from the respective MFN obligation for customs unions or free trade areas (or a corresponding interim agreement), or agreements liberalizing trade in services between or among parties, under certain conditions.
[124] See the limited exemptions from TRIPS MFN in Art. 4(a)-(d) at n 122.
[125] See Art. 5(1) Berne Convention (1971) and Art. 2(1) Paris Convention (1967).

context and the practicalities of implementation favour the creation of a unilateral "international standard" that RTA signatories apply to most, if not all, trading partners.

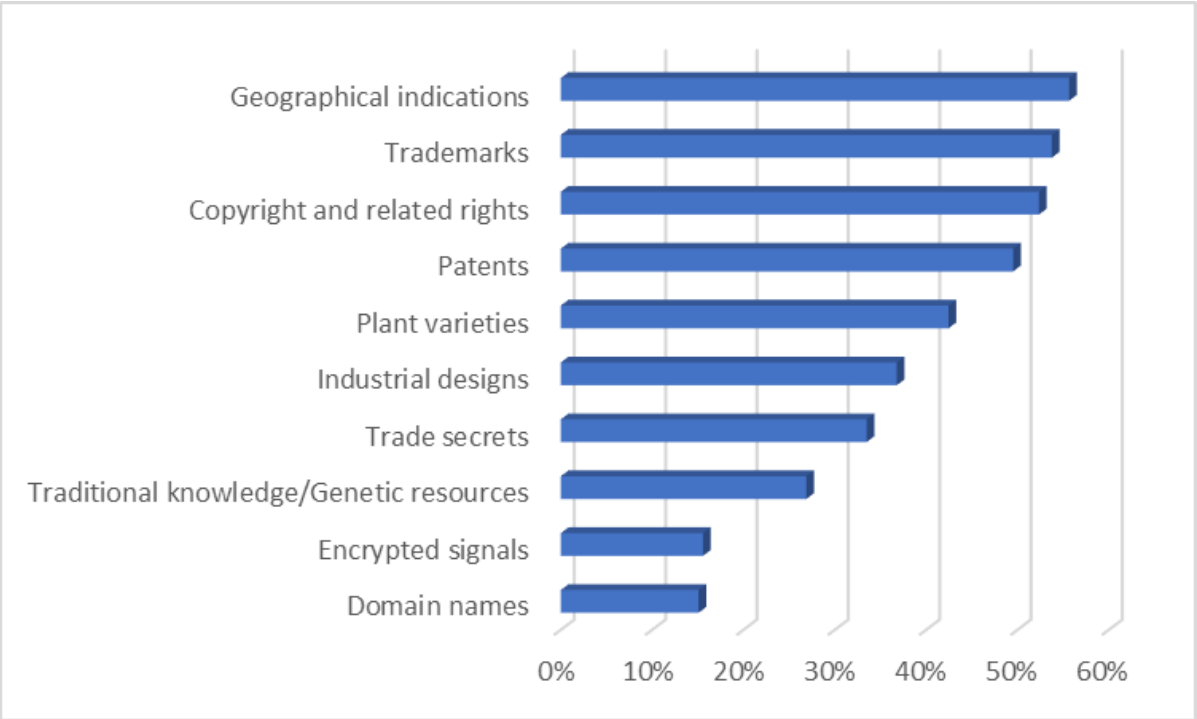
The proliferation of RTAs with elaborate IP chapters leads to noteworthy results. Unlike the 'spaghetti bowl'[126] of preferential trading relationships created by the more permissive GATT and GATS rules, the 'lasagne effect'[127] of strict TRIPS MFN means that third countries outside the RTA can benefit from the higher IP standards that RTA signatories have negotiated among themselves, without having to themselves provide the same level of protection. Third country nationals can benefit from higher IP standards agreed in an RTA – such as the availability of software patents or patent term extensions – by virtue of the TRIPS MFN and national treatment obligations without having to provide such standards to nationals of the RTA signatories. This means, inversely, that the value of accepting an IP commitment in RTA negotiations – for instance in exchange for market access in a certain agriculture sector – should take into account its non-discriminatory scope of application. While the benefits of a lower tariff for beef or rice can be limited to an RTA trading partner under the GATT MFN exceptions, IP commitments such as specific digital enforcement standards will have to be made available to nationals of all Members under TRIPS MFN and national treatment, and their scope and impact is thus more difficult to ascertain.

Against that background, the regulatory impact of provisions in RTAs goes well beyond the jurisdictions of signatories and has contributed significantly to an internationalization of certain approaches to emerging IP issues – including in the digital sphere. As the frequency and complexity of IP chapters in RTAs grow at dramatic speed, detailed qualitative analysis of IP commitments remains a challenge. Quantitative analysis shows a broad distribution of IP topics addressed in RTAs.

[126] The term was initially used by Bhagwati (1995) to denote the plethora of individual RTA trading relationships between WTO Members that are permitted by the MFN exceptions under GATT and GATS, and thus create a complicated web of relationships much like a spaghetti bowl.

[127] See Taubman (2008) and Taubman (2019). The absence of general exceptions from the TRIPS MFN obligation means that additional substantive obligations agreed in an RTA lead to a general "ratcheting up" of that country's IP obligations vis-à-vis nationals of all other WTO Members. Thus, in contrast to the situation of the GATT/GATS spaghetti bowl described at n 126, IP commitments in RTAs add general layers to the TRIPS obligations of that Member, much like – to extend Bhagwati's food metaphor - in a lasagne dish.

Figure 2: Specific IP provisions in RTAs[128] with IP



(Source: Valdés and McCann (2014) and WTO RTA Database)

RTAs frequently address digital IP issues concerning copyright law, trademark law, IP enforcement, and technology-specific, trade-related matters such as the ISP liability. RTA commitments on copyright include clarifying the application of existing remedies to online enforcement or undertaking to target specific copyright violations in the online environment.[129] Many IP chapters refer to the WIPO Internet Treaties,[130] variously *requiring compliance* with, *affirming existing obligations* pursuant to, and *requiring accession* to these treaties.[131] Among the most detailed copyright provisions concern technical protection measures (TPMs), reflecting the considerable variety in national implementation of the general obligation to provide for TPMs under the WIPO Internet

[128] RTAs that have been notified to the WTO and are in force 2019.

[129] **Example:** China – Korea, Republic of: Section J, Article 15.28 Each Party shall take effective measures to curtail repetitive infringement of copyright and related rights on the Internet or other digital network. .... Section K, Article 15.30: Under the established structure of this Agreement, each Party shall, upon request of the other Party, and in addition to the already existing forms of cooperation: ... (ii) exchanges and cooperation on online copyright enforcement

Side letter - Example: Korea, Republic of – US: Confirmation letter (Online Piracy Prevention): The Parties agree on the objective of shutting down Internet sites that permit the unauthorized reproduction, distribution, or transmission of copyright works, of regularly assessing and actively seeking to reduce the impact of new technological means for committing online copyright piracy, and of providing generally for more effective enforcement of IPRs on the Internet. Korea agrees that internet piracy of works and other subject matter protected by copyright ... Korea agrees to issue as soon as possible, but no later than six months after the date the Agreement enters into force, a policy directive establishing clear jurisdiction for a division or joint investigation team to engage in effective enforcement against online piracy....

[130] See Valdés and McCann (2014), p. 15.

[131] **Example:** EFTA – Peru: CHAPTER 6, ARTICLE 6.4.3 The Parties to this Agreement which are not a party to one or more of the agreements listed below shall ratify or accede to the following multilateral agreements within one year from the date of entry into force of this Agreement: (a) WIPO Performances and Phonograms Treaty of 20 December 1996 (WPPT); and (b) WIPO Copyright Treaty of 20 December 1996 (WCT).

Example: CETA: Article 20.7.1 The Parties shall comply with the following international agreements: (a) Articles 2 through 20 of the Berne Convention for the Protection of Literary and Artistic Works, done at Paris on 24 July 1971; (b) Articles 1 through 14 of the WIPO Copyright Treaty, done at Geneva on 20 December 1996; (c) Articles 1 through 23 of the WIPO Performances and Phonograms Treaty, done at Geneva on 20 December 1996; and […].

Treaties. Notably RTAs negotiated with the participation of the United States contain detailed provisions in this regard that may define the subject matter of TPM protection,[132] require protection of TPMs independently of any underlying copyright infringement,[133] and sometimes specify the legal remedy that must be available against the circumvention (i.e. "hacking") of such TPMs.[134]

In the area of trademark law, RTA commitments frequently refer to the 2001 WIPO Joint Recommendation on marks and signs on the internet (JR 2001), either *affirming* its importance, or providing *hortatory* language on applying it.[135] As mentioned above, this mechanism has helped spread and multiply pledges to apply the non-binding JR 2001 among RTA signatories and thus helped – to some extent - turn soft into hard law among RTA signatories. Many RTAs also contain provisions on domain names and trademark use on the Internet that address the bad-faith registration or use of a domain name that is confusingly similar to a trademark or, in the case of EU – CARIFORUM States EPA, a trademark or a GI.[136] Some of these provisions make explicit reference to ICANN's UDRP as a model for how such conflicts should be resolved.

Finally, on enforcement, RTA provisions range from general commitments on cooperation and best efforts to address internet piracy, to providing specific remedies or adopting specific interpretations of elements for criminal liability.[137] Among the most elaborate provisions in this area are commitments relating to the liability of ISPs for IP infringements committed by their users, or via their platforms, which are discussed in detail below.[138]

The impact of bilateral treaties on the international normative landscape of IP regulation has produced a considerable body of literature by academia and international organizations over recent decades[139] which provide a rich and detailed discussion of the strategic and institutional particularities involved in their conclusion. The present paper concentrates on several distinctive characteristics of RTAs as international regulatory responses to emerging digital challenges.

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[132] **Example:** Korea, Republic of – US: Article 18.4.7 (f) Effective technological measure means any technology, device, or component that, in the normal course of its operation, controls access to a protected work, performance, phonogram, or other protected subject matter, or protects any copyright or any rights related to copyright.

[133] **Example:** US – Singapore: ARTICLE 16.4.7.(d) Each Party shall provide that a violation of the law implementing this paragraph is independent of any infringement that might occur under the Party's law on copyright and related rights.

[134] **Example:** CPTPP: CHAPTER 20, Article 20.66: Technological Protection Measures

1. In order to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that authors, performers, and producers of phonograms use in connection with the exercise of their rights and that restrict unauthorized acts in respect of their works, performances, and phonograms, each Party shall provide that a person who: (a) knowingly, or having reasonable grounds to know, circumvents […]; or (b) manufactures, imports, distributes, offers for sale or rental to the public, or otherwise provides devices, products, or components, or offers to the public or provides services, that:[…] is liable and subject to the remedies provided for in Article 20.81.18 (Civil and Administrative Procedures and Remedies).

[135] See US-Singapore: Article 16.2(b) (shall give effect to JR 1999) and EU – CARIFORUM, Article 145 (shall endeavor to apply JR 2001).

[136] **Example:** CPTPP: CHAPTER 18, Article 18.28.1 In connection with each Party's system for the management of its country-code top-level domain (ccTLD) domain names, the following shall be available: (a) an appropriate procedure for the settlement of disputes, based on, or modelled along the same lines as, the principles established in the Uniform Domain-Name Dispute-Resolution Policy, as approved by the Internet Corporation for Assigned Names and Numbers (ICANN)…

2. In connection with each Party's system for the management of ccTLD domain names, appropriate remedies shall be available at least in cases in which a person registers or holds, with a bad faith intent to profit, a domain name that is identical or confusingly similar to a trademark. See also EU-CARIFORUM Art 145.

[137] See digital enforcement measures contained in Australia–Chile; Dominican Republic–Central America–United States Free Trade Agreement (CAFTA-DR); EC; EU–Colombia; EU–Republic of Korea; EU–Peru; Japan–Peru; Japan–Switzerland; Republic of Korea–United States; Mexico–Nicaragua; North American Free Trade Agreement (NAFTA); United States–Australia; United States–Bahrain; United States–Chile; United States–Colombia; United States–Morocco; United States–Panama; United States–Oman; United States–Peru; United States–Singapore.

[138] Section 3.1.2 .

[139] See Seuba (2015) and references at fn 8.

The inclusion of IP chapters in RTAs does not directly advance the goal of a unified body of IP rules for universal application, as did the early international IP conventions. Nevertheless, most of these IP chapters are expressly situated in the context of the multilateral IP treaties by reaffirming their importance, exhorting compliance with them, or specifically recognizing their precedence over the RTA rules.[140] The focus of RTA IP chapters – when they venture beyond general affirmations – lies on regulating IP areas or issues outside the scope of the multilateral rules, or where those rules provide discretion for national implementation. In some cases, this will mean inciting partners to adopt international standards they had hitherto not joined on their own account, thus reinforcing linkages to the international IP treaties and increasing their membership. In areas where no examples of international codification exist, the dynamic of RTA IP negotiations will typically be to assess whether to resist or accept demands for adoption of particular regulatory IP approaches that already exist in one of the RTA partners – leading to what is often referred to as 'transplantation'.[141]

The distribution of interests in these negotiations is distinct from international rulemaking not only because of the limited number of participants – where differences in negotiating capacity take on greater significance – but also because RTAs are typically negotiated across a number of trade-related areas, inviting linkages and trade-offs across different subject areas that have been ostensibly absent, or at least more difficult to bring to bear, in traditional international negotiations that have been focused on IP.

These elements also impact on the degree of expert participation in these negotiations, a factor which had arguably enabled the traditional international treatymaking process to develop or adapt original solutions to specific IP issues, such as in the WCT and the WPPT. The time pressure associated with RTA negotiations and the constellation of interests described above indicates that the predominant perspective in RTA IP negotiations is the assimilation of systems by adoption, not necessarily the development of new substantive solutions to IP challenges. It seems that it is only in negotiations between partners with strongly divergent interests in a particular area that RTA negotiators attempt to craft creative solutions espousing common principles.[142]

2.4 Conclusion

The mechanisms of international regulatory responses to emerging IP issues have evolved significantly in the digital era. For most of the 20th century the institutionalized deliberative process of the traditional treatymaking model provided an ecosystem in which systemic considerations and comparative assessment enabled a broader and potentially more comprehensive assessment of regulatory solutions that could often led to a common, and sometimes original, multilateral outcome.

The arrival of digitization and online distribution represents a significant acceleration and proliferation of technological change. The corresponding speed and urgency of regulatory reaction could be argued to have tilted the balance – also in the international process described above - towards demands for individual short-term responses which are difficult to resist, thus reflecting the realisation that "it is easier to reach a shared understanding on specific issues, where there is a demonstrable and manageable need for international action, than to achieve a shared understanding across the whole range of IP, which now underlies most economic and cultural activities."[143]

Thus, coinciding with the advent of the digital era, this traditional treatymaking scenario has given way to more varied landscape where a variety of tools and legal instruments embody regulatory

[140] See examples for TRIPS and WIPO treaties' affirmation in RTAs in Valdés and McCann (2014) paras. 45-54.
[141] Valdés and McCann (2014), para. 150. Seuba (2015), p. 63.
[142] See the provisions on geographical indications in CETA, US-Korea and the USMCA.
[143] See 'Acceptance Speech by Francis Gurry on his Reappointment', WIPO Assemblies 2014, 8 May 2014, at http://www.wipo.int/about-wipo/en/dgo/speeches/a_53_dg_speech.html (accessed March 2020).

responses to digital challenges. The preceding section sought to identify the factors that shape different regulatory responses to new issues.

3. READY FOR A COMMON REGULATORY RESPONSE? – SELECTED EMERGING DIGITAL ISSUES

In the global, potentially seamless markets for digital products that have been created by digital communication technologies, common – or at least interoperable – regulatory solutions to IP issues are essential to ensure the viability of digital business models through which much of the continuously increasing share of online trade is conducted. This part briefly surveys several salient digital IP issues with regard to an available international regulatory response.

3.1 ISP liability

The degree of liability of ISPs for IP infringements by their users directly impacts the viability of digital platforms in a global market. A common international approach to this question would therefore be particularly valuable. Indeed, the pervasive view that the important role in facilitating access justifies a certain privilege for ISPs, requiring their action and collaboration only when they are notified of infringing content by rights-holders, was developed through years of jurisprudence and – once the "right of making available" had been established by the WCT and WPPT[144] – led to national legislative responses centred on similar, yet not identical, principles.

3.1.1 Regulatory approaches in national legislation

Two early legislative implementations of the WCT and the WPPT, the US DMCA (1998) and the European E-Commerce Directive (2000), enshrined systems of ISP liability limitations into national law. While their evolution and case law has been amply discussed in the literate, this focuses on aspects that illustrate similarities and differences to regulatory responses taken in other jurisdictions.

3.1.1.1 United States and European Union

The US Digital Millennium Copyright Act (DMCA)[145] establishes limitations on the copyright liability of online service providers[146] that maintain a policy providing for termination of network services for repeat infringers in appropriate circumstances[147] and do not interfere with standard technical measures used by copyright owners to identify and protect copyrighted works.[148] For such service providers, "safe harbours" are available for transitory communications,[149] system caching,[150] storage of information on systems or networks at the direction of users (i.e. hosting),[151] and information location tools (i.e. search engines).[152] A notice and takedown procedure[153] prescribes the conditions under which the ISP can be considered to have actual knowledge of infringing material on its services, and monetary liability is waived, if after receiving the notification, the ISP quickly removes

[144] See above section 2.2.1
[145] Public Law 105–304—OCT. 28, 1998.
[146] Service providers are defined in section 512(k)(1)(A) as "an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received."
[147] 17 U.S.C. § 512(i)(1)(A).
[148] 17 U.S.C. § 512(i)(1)(B).
[149] 17 U.S.C. § 512 (a). Transitory Communications are activities where the service provider acts as a "mere conduit" of digital information from one point to another including transmissions, routing and connection services.
[150] 17 U.S.C. § 512 (b). System caching is the activity carried out by a service provider, when it retains, for limited time, copies of material that has been uploaded by a third party to be transmitted to an internet user, in order to simplify interactions online and reduce the service provider bandwidth requirements.
[151] 17 U.S.C. § 512 (c).
[152] 17 U.S.C. § 512 (d).
[153] 17 U.S.C. § 512(c)(3) for hosting services and 512(d) for information location tools.

or blocks access to the material identified in the notification,[154] while the subscriber has the possibility of counter-notification[155] to respond to any erroneous or fraudulent notifications. The act permits injunctions against ISPs that may include ordering the ISP to restrain from providing access to the infringing material or activity, restraining the service provider from providing access to a subscriber who is engaging in infringing activity and is identified in the order or any other injunctive relief necessary to prevent infringement.[156]

This DMCA approach to ISP liability, as developed and confirmed in subsequent case law, set a relatively high threshold for knowledge of the ISP necessary to trigger its obligation to act,[157] and has expressly excluded an obligation to monitor or filter content on its own accord,[158] that has recently come under criticism.[159]

In the European Union, broad exemptions from ISP liability – covering also IPRs beyond copyright, as well as unfair competition and criminal acts - were established in the E-commerce Directive.[160] Under the Directive an information society service provider can enjoy exemption from liability for mere conduit,[161] caching[162] and hosting[163] of third-party information. Exemption from liability for caching and hosting is conditional on the service provider acting expeditiously to remove or to disable access to the information, upon obtaining "actual knowledge or awareness" of illegal activity or information.[164] Under the E-commerce Directive Member states were expressly prohibited from imposing a general monitoring obligation on ISPs,[165] although monitoring obligations under national law "in a specific case" – arguably including content already identified as infringing (so-called "stay down" obligation) – were expressly contemplated.[166] The 2001 Directive on Copyright in the Information Society (InfoSoc Directive)[167] that implemented the WCT and WPPT did require that injunctions can be addressed to ISPs "whose services are used by a third party to infringe a copyright

[154] As an additional safeguard for the ISP for this diligent action, Section 512(g)(1) establishes that there will be no liability to any third party if the ISP took down allegedly infringing material in "good faith".

[155] 512(g)(1). If a counter notification is filed in compliance with the requirements, and the copyright owner does not file an action seeking court order against the subscriber, the service provider has to re-grant access to the material within 10-14 business days after receiving the notification. Knowing misrepresentation that material is an infringement incurs liability for subsequent injury (section 512(f)).

[156] Section 512(j).

[157] See the discussion of "actual" and "red flag" knowledge in *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19 (2d Cir. 2012); *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 523 (S.D.N.Y. 2013); *Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 633-34 (S.D.N.Y. 2011) ("MP3tunes I"). See also the references in La France (n 145).

[158] Section 512(m)(1). See also *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19 (2d Cir. 2012) and *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 523 (S.D.N.Y. 2013).

[159] See *Artists Urging Reforms of the DMCA Safe Harbor: 'Our Culture Is At Stake'* (14 March 2017) available at https://blog.jipel.law.nyu.edu/2017/03/artists-urging-reforms-of-the-dmca-safe-harbor-our-culture-is-at-stake/.

[160] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')

[161] Article 12 E-commerce Directive provides that where an information society service is provided that consists of the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network", ISPs will not be liable if the ISP does not initiate the transmission; the ISP does not select the receiver of the transmission; and the ISP does not select or modify the information contained in the transmission.

[162] Article 13.

[163] Article 14.

[164] For caching see Article 13(e). For hosting see Article 14.

[165] Article 15.1 "Member States shall not impose a general obligation on providers, when providing the services covered by Articles 12, 13 and 14, to monitor the information which they transmit or store, nor a general obligation actively to seek facts or circumstances indicating illegal activity."

[166] Recital 47: (47) Member States are prevented from imposing a monitoring obligation on service providers only with respect to obligations of a general nature; this does not concern monitoring obligations in a specific case and, in particular, does not affect orders by national authorities in accordance with national legislation.

[167] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

or related right",[168] but otherwise left the remaining question of what liability ISPs retained in the area of copyright infringements largely to Members states.[169]

Characteristically, these early systems focused on establishing the conditions for *liability exemptions* for ISPs, rather than clarifying the boundaries of (primary or secondary) copyright *liability* of ISP for their activities. The specific ISP liability for injunctions to take down or disable access to infringing material – available under both the DMCA and the E-commerce directive[170] – was a recognition of *accountability* for terminating, not *liability* for committing,[171] third-party infringements and was not systemically embedded to the overall conceptual regime of liability for copyright infringement. It reflected the then current perception of intermediaries as passive participants in the transmission of information, without any technical capacity to monitor third party content,[172] who are nonetheless well placed to help in terminating the infringements of other – third-party – infringers.[173]

There has thus developed a rich body of subsequent jurisprudence and debate to calibrate the exact balance of obligations between right owners and ISPs, to ensure systemic consistency with the concepts of primary and secondary liability for copyright infringements and to take account of the dramatically increased economic impact and technological ability of ISPs today.[174] In the US context, where monitoring duties of ISPs had been categorically excluded by legislation, the main area of engagement was the precise contours of the knowledge – "red flag" or actual- required to trigger the ISPs' obligations to take action and how primary liability could be established for ISPs falling outside the safe harbour.[175] In the European Union, this also included the contemplation of certain ISP monitoring duties – which remained available under national systems – a thorough debate of weighing different fundamental rights, and more recently the "value gap" discussion.[176]

Although these two early systems of ISP "safe harbours" were conceptually very similar, their subsequent reception in jurisprudence and debate has clearly pulled in different directions. Despite growing criticism, U.S. jurisprudence interpreting the DMCA has maintained a broad scope of the "safe harbour" and a high threshold for triggering ISP liability for removal of infringing material. In stark contrast, in the European Union, the contemplation of certain monitoring duties[177] and the CJEU's development of sector-specific liability rules for the right of making available[178] prepared the ground for a significant reversal of direction in the 2019 Directive on Copyright in the Digital Single Market (DSMD)[179] which European Member states will have to implement by 2021.

[168] Article 8.3 InfoSoc Copyright Directive.

[169] EU Parliament (2018).

[170] For the EU see Article 8(3) Copyright Directive (for copyright) and Article 11, 3rd sentence Enforcement Directive (for other IPRs). For the US see DMCA section 512(j).

[171] EU Parliament (2018), 20, "Precisely put, Article 8(3) Copyright Directive is not about a provider liability, but helping duties. Husovec called this "accountable, not liable"." See Husovec (2016).

[172] Rotaru (2017).

[173] See InfoSoc Directive, Recital 59 *in fine*: "In the digital environment, in particular, the services of intermediaries may increasingly be used by third parties for infringing activities. In many cases such intermediaries are best placed to bring such infringing activities to an end."

[174] La France (2020).

[175] See the discussion of "actual" and "red flag" knowledge in *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19 (2d Cir. 2012); *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 523 (S.D.N.Y. 2013); *Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 633-34 (S.D.N.Y. 2011) ("MP3tunes I"). See also La France (2020).

[176] See the succinct overview of the value gap argument in Senftleben (2020).

[177] See EU Parliament (2018) p.17 on the lack of decisive CJEU jurisprudence on the scope of Article 15 E-Commerce Directive.

[178] CJEU of 8 September 2016, C-160/15 – GS Media/Sanoma; CJEU of 26 April 2017, C-527/15 – Brein/Wullems (Filmspeler); CJEU of 14 June 2017, C-610/15 - Ziggo /Brein.

[179] Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC, *O.J.* (L 130) 92.

Significantly, the DSMD establishes primary copyright liability for large commercial platforms carrying user-generated content[180] for unauthorized acts of making available or communication to the public unless best efforts were made to obtain authorization, to ensure unavailability (i.e. monitors and filters) specific identified works in accordance with high industry standards of professional diligence, and operates a "notice and stay down" system – all this while maintaining availability of content which is - including by virtue of exceptions such as criticism or parody – non-infringing.[181] This paradigm-shifting rebalancing of the burden of monitoring the internet for copyright violations – from the right owners to the hitherto more privileged ISPs – is setting ISP liability on a new course in the European Union, and is already shifting the debate towards the merits of the expected large scale application of automated algorithmic enforcement.[182]

3.1.1.2 Non-signatories of the WIPO Internet treaties

The early systems of safe harbours for ISP liability set up by the US and the EU, including the subsequent jurisprudence and debate, have also influenced national regulatory approaches in other jurisdictions – including in non-signatories of the WIPO Internet treaties, which did thus not necessarily have the "making available" right defined in their legislation. They also sought to balance the obligations of right owners and ISPs concerning online copyright infringement.

India

India, a non-signatory of the Internet Treaties until 2018,[183] introduced successive ISP safe harbours in a 2008 amendment to its Information Technology Act 2000 (IT Act), and in a 2012 amendment of its Copyright Act 1957.

The 2008 amendment of the IT Act introduced a broad liability exemption for intermediaries whose functions were limited to providing access to a communication system as long as they observed "due diligence" in discharging their functions, and expeditiously remove or disable access to the offending material upon receiving actual knowledge or on being notified by a government agency.[184] Uncertainty on the extent of "due diligence", and on the broader question whether this safe harbour would be available also regarding copyright violations led to jurisprudence contemplating broad monitoring duties for ISPs. In *Super Cassettes Industries Limited v MySpace Inc*[185], the Single Judge Bench of the Delhi HC granted an interim injunction on the grounds that there was no safe harbour for intermediaries under the Copyright Act[186] and implied that intermediaries should screen all user generated content to check for infringement prior to making the content available online.[187] Although Division Bench upheld the eligibility of the ISP for safe harbour under the IT Act,[188] uncertainty remains how to ensure harmonious interpretation of the different statues in different scenarios, and what degree of knowledge is necessary to trigger ISP action.

A copyright-specific safe harbour was added in the 2012 amendment of the Copyright Act, which expressly pursued the aim of implementing the Internet Treaties.[189] It introduced an exemption from secondary liability for copyright infringement for 'transient or incidental storage' of material unless the ISP is 'aware or has reasonable grounds' for believing that such storage is of an infringing

[180] See Article 17(1) and Article 17(6) for the definition of "online content-sharing service provider" and the scope of application.
[181] Articles 17(4) and 17(7).
[182] See Senftleben (2020) and Schwemer and Schovsbo (2020).
[183] India acceded to the Internet Treaties on 25 September 2018. The treaties entered into force for India on 25 December 2018.
[184] See Articles 2(w) and 79(1) - (3) Information Technology Act (2000) as amended.
[185] In Super Cassettes Industries Limited v MySpace Inc. & Another, IA Nos. 15781/2008 &3085/2009 in CS (OS) No. 2682/2008.
[186] Agarwal and Agarwal (2017).
[187] Kumar (2014).
[188] Agarwal and Agarwal (2017).187
[189] See statement by the Indian Copyright office at http://copyright.gov.in/.

copy.[190] A notice and take-down procedure requires that access must be withheld upon receiving a written complaint from the right owner for twenty-one days, awaiting a court order.[191]

The coexistence of these two Indian safe harbour regimes, in s. 79 of the IT Act and in s. 52.1(c) the Copyright Act, for which jurisprudence has developed different knowledge standards[192] and whose respective scope of application have not been clearly delineated[193] means that concrete litigation outcomes continue to rely on courts applying and interpreting principles of copyright liability and statute concordance, rather than on a predictable tool to preserve ISP business models.

Brazil

Not being a signatory to the Internet Treaties, judges and prosecutors in Brazil had to identify and interpret national law in order to encompass the concept of "making available" by platforms and ISPs. In the absence of specific rules before 2014, the application of general principles of civil law akin to strict liability had led to a number of private agreements between copyright holders and ISPs that established voluntary notice and take-down procedures that reflected industry demands.[194]

Against this background, the vigorous discussion around a controversial far-reaching 2008 proposal regarding internet activities more generally,[195] followed by an elaborate public consultation during 2008-2009 and a protracted legislative process led to the adoption of the 2014 Law No. 12.965, also known as the "Marco Civil da Internet"[196] which sets out the regulatory framework for internet activities, and presents a complex compromise with regard to ISP liability. of ISPs activities of "mere conduit" are exempted from liability[197] without the conditions required in other jurisdictions. Internet application providers (i.e. content hosts) are exempt if they remove content upon receipt of a specific judicial order.[198] Only material that constitutes a breach of privacy[199] must be removed at the simple – extra-judicial – requests of an interested party.[200] While the retention of a judicial notice as a requirement for ISP action was seen as a success of the civil rights movement,[201] this was achieved at the cost of a carve-out of liability for copyright and related rights violations, which is excluded from the safe harbour provisions described above pending specific legislation.[202] In the National Congress' discussions of an amendment of the Copyright Bill currently contemplate the instruments of "notice and notice" – an obligation on the ISP to notify the alleged infringer upon receiving a notification by the right holder, and a proposal to provide right holders with a remuneration right for each improper use.[203]

[190] 52.1 (c) Copyright Act 1957, as amended.
[191] 52.1 (c) Copyright Act 1957, as amended.
[192] Sethia (2017), Saha an Saha (2018).
[193] Agarwal and Agarwal (2017). See also Vodafone India Ltd v RK Productions, 2013 (54) PTC 149 (Mad), in which hthe Madras High Court upheld the application of s. 79 IT Act to copyright infringement.
[194] Zingales (2015).
[195] The so-called "Azeredo Bill" proposed 3-year mandatory data retention and other duties for ISPs, as well as the criminalisation of access to data "without authorization of the legitimate owner". See Zingales (n. 195).
[196] Law No. 12.965 of April 23, 2014, available in English at https://www.publicknowledge.org/assets/uploads/documents/APPROVED-MARCO-CIVIL-MAY-2014.pdf.
[197] Article 18
[198] Article 19.
[199] Essentially private acts of nudity or sexual activity (also known as "revenge-porn").
[200] Article 21.
[201] Mulholland (2018).
[202] See Article 19.2 "Application of the provision in this article to infractions of copyright or related rights depends on a specific legal provision, which must respect freedom of expression and other guarantees set forth in article 5 of the Federal Constitution"
[203] Mulholland (2018) at 1.9.

In the absence of a specific law as required by the statute, courts continue to rely on general principles of secondary copyright liability, under which the current practice remains removal of infringing material upon extra-judicial notification by the right holder.[204]

The above examples illustrate areas of commonality, but also of considerable variety that continues to exist in national ISP safe harbour regimes. Common ground seems to exist for establishing the susceptibility of ISPs to injunctions for removing access to infringing material, although there is considerable diversity as to whether such liability is rooted in secondary liability for copyright infringement or whether it is a general 'helping duty' due to an ISPs practical ability to terminate infringement by a third party. A certain commonality also exists with respect to the types of ISP activities that may benefit from a safe harbour, with caching and hosting being identified in most regimes, while location services are already more infrequently covered. Beyond these - rather basic – concepts, considerable variety exists with respect to the degree of ISP knowledge required to trigger co-operation, the nature of the ISP's co-operation that might be triggered, and, in particular, the question how ISP activity outside the safe harbour would incur liability for copyright infringement.

The latter question is further complicated by the rapid economic and technological development of internet enterprises that provide access and host content, representing business models that have long surpassed the original perception of passive access providers with little technological means to control or monitor the content to which they provide access.

3.1.2 Provisions in Regional Trade Agreements

Considering the interest of internet companies in minimizing the cost of compliance with diverse liability regimes in different markets – and reflecting the role of RTAs described earlier in this paper – it is no surprise that provisions on ISP liability occur with increasing frequency and depth in recent RTAs. In line with the purpose of this paper, the below examples are by no means exhaustive but attempt to briefly illustrate the assimilation of regulatory responses in the field of ISP liability under current RTAs.

As is to be expected from the hub-and-spoke architecture described above, the RTAs with the US and the EU largely reflect their domestic systems and approaches to the issue. While early agreements with these partners may contain individual provisions regarding ISPs,[205] more elaborate RTAs such as CETA, EU-Korea, US-Singapore, US-Korea, TPP and USMCA contain elaborate specific obligations that essentially mirror the entire domestic EU and US systems described in the previous section.

Beyond the EU and US agreements, general provisions regarding ISP cooperation in RTAs take the form of permissive contemplation of limiting ISP liability[206] or individual provisions requiring that user identity can be obtained from the ISP in the context of internet copyright enforcement,[207] or that ISP liability shall be limited to encourage cooperation with right holders.[208]

[204] Ibid.

[205] See for example EU - CARIFORUM States EPA: Section 2, Article 158 (permit injunctions against ISPs).

[206] China-Australia Article 11.20: Service Provider Liability Each Party may take appropriate measures to limit the liability of, or remedies available against, internet service providers for copyright infringement by the users of their online services or facilities, where the internet service providers take action to prevent access to the materials infringing copyright in accordance with the laws and regulations of the Party.

[207] China-Korea, Article 15.29 and Japan-Switzerland, Article 126.2.

[208] Japan-Switzerland, Article 126.1.

Table 1: Selected ISP provisions in selected EU and US RTAs

	EU – Korea	CETA	US - Korea	USMCA
Liability of ISPs	Article 10.62 The Parties recognise that the services of intermediaries may be used by third parties for infringing activities. To ensure the free movement of information services and at the same time enforce intellectual property rights in the digital environment, each Party **shall provide** for the measures set out in Articles 10.63 through 10.66 for intermediary service providers where they are in no way involved with the information transmitted.	Article 20.11(1) Subject to the other paragraphs of this Article, each Party **shall provide limitations** or exceptions in its law regarding the liability of service providers, when acting as intermediaries, for infringements of copyright or related rights that take place on or through communication networks, in relation to the provision or use of their services.	Article 18.10(30) 1. For the purpose of providing enforcement procedures … each Party **shall provide** … : (a) legal incentives for service providers to cooperate with copyright [fn 35: and related rights] owners in deterring the unauthorized storage and transmission …; and (b) limitations in its law regarding the scope of remedies available against service providers for copyright infringements that they do not control, initiate, or direct, … .[fn 36: without prejudice to general defences for copyright infringement]	Article 20.88: Legal Remedies and Safe Harbors 1. The Parties recognize the importance of facilitating the continued development of legitimate online services operating as intermediaries and, in a manner consistent with Article 41 of the TRIPS Agreement, providing enforcement procedures that permit effective and expeditious action … This framework of legal remedies and safe harbors **shall include**: (a) legal incentives for Internet Service Providers to cooperate with copyright owners to deter the unauthorized storage and transmission of copyrighted materials …; and (b) limitations in its law that have the effect of precluding monetary relief against ISPs for copyright infringements that they do not control, initiate or direct, …
ISP functions covered	Article 10.63 '**mere conduit**' 1. Where … service … consists of the transmission in a communication network … Article 10.64 '**caching**' 1. Where an information society service … consists of the transmission in a communication network of information provided by a recipient of the service, … Article 10.65 **'hosting'** 1. Where an information society service … consists of the storage of information provided by a recipient of the service, the Parties shall ensure that the service provider is not liable for the information stored …	Article 20.11(2) The limitations … (a) shall cover at least the following functions: (i) **hosting** of the information at the request of a user of the hosting services; (ii) **caching** carried out through an automated process, when the service provider: … (iii) **mere conduit**, which consists of the provision of the means to transmit information provided by a user, or the means of access to a communication network; and (b) may also cover other functions, including providing an information location tool, ….	Article 18.10(30) 1.(b) … (i) These limitations shall preclude monetary relief and provide reasonable restrictions on court-ordered relief … for the following functions, and shall be confined to those functions: (A) **transmitting, routing**, or providing connections for material without modification of its content, or the intermediate and transient storage of such material in the course thereof; (B) **caching** carried out through an automatic process; (C) **storage** at the direction of a user of material residing on a system or network controlled or operated by or for the service provider; and (D) referring or linking users to an online location by **using information location tools**, including hyperlinks and directories.	Article 20.88 2. The limitations described in paragraph 1(b) shall include limitations in respect of the following functions: (a) **transmitting, routing, or providing connections** for material without modification of its content or the intermediate and transient storage of that material done automatically in the course of such a technical process;120 (b) **caching** carried out through an automated process; (c) **storage**, at the direction of a user, of material residing on a system or network controlled or operated by or for the Internet Service Provider; and (d) referring or linking users to an online location by **using information location tools**, including hyperlinks and directories.
Conditions to qualify for limitation of liabilty	Article 10.66 (2) The Parties **may establish obligations** for information society service providers to promptly inform the competent authorities of alleged illegal activities undertaken or information provided by recipients of their service, or to communicate to the competent authorities, at their request, information enabling the identification of recipients of their service with whom they have storage agreements.	Article 20.11(4) Each Party **may prescribe** in its domestic law, conditions for service providers to qualify for the limitations or exceptions in this Article. Without prejudice to the above, each Party may establish appropriate procedures for effective notifications of claimed infringement, and effective counter-notifications by those whose material is removed or disabled through mistake or misidentification.	Article 18.10(30) 1.(b)(v) With respect to functions referred to in clauses (i)(C) and (D), the limitations **shall be conditioned** on the service provider: (A) **not receiving a financial benefit** directly **attributable to the infringing activity**, in circumstances where it has the right and ability to control such activity; (B) **expeditiously removing or disabling access** to the material residing on its system or network on obtaining actual knowledge of the infringement or becoming aware of facts or circumstances from which the infringement was apparent, such as through effective notifications of claimed infringement in accordance with clause (ix); and (C) publicly designating a representative **to receive such notifications**.	Article 20.88 3. To facilitate effective action to address infringement, each Party **shall prescribe in its law** conditions for Internet Service Providers to qualify for the limitations described in paragraph 1(b), (a) With respect to the functions referred to in paragraphs 2(c) and 2(d), these conditions shall include a requirement for Internet Service Providers to **expeditiously remove or disable access** to material residing on their networks or systems upon obtaining actual knowledge of the copyright infringement or becoming aware of facts or circumstances from which the infringement is apparent, such as through receiving a notice of alleged infringement from the right holder or a person authorized to act on its behalf. (b) An Internet Service Provider that removes or disables access to material in good faith under subparagraph (a) shall be exempt from any liability for having done so, provided that it takes reasonable steps in advance or promptly after to notify the person whose material is removed or disabled.

Prohibition of requiring monitoring	Article 10.66 No general obligation to monitor 1. The Parties **shall not impose** a general obligation on providers, when providing the services covered by Articles 10.63 through 10.65, to monitor the information which they transmit or store, nor a general obligation to actively seek facts or circumstances indicating illegal activity	Art. 20.11(3) The eligibility for the limitations or exceptions referred to in this Article **may not be conditioned** on the service provider monitoring its service, or affirmatively seeking facts indicating infringing activity.	Article 18.10(30) 1.(b)(vii) Eligibility for the limitations in this subparagraph **may not be conditioned** on the service provider monitoring its service, or affirmatively seeking facts indicating infringing activity, except to the extent consistent with such technical measures.	Article 20.88 7. Eligibility for the limitations in paragraph 1 **shall not be conditioned** on the Internet Service Provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with the technical measures identified in paragraph 6(b).

The geographical reach and overlap of the elaborate EU and US agreements illustrates the successful exportation and thus a high degree of assimilation among the relevant RTA partners that will arguably contribute to seamless digital markets in which the basic determinants of ISP liability will be the same, providing some of the desired legal certainty sought by businesses. Although the purpose of each RTA may have been to export the domestic system, countries subject to both obligations will likely comply by adopting the 'higher' standard, illustrating the *de facto* cumulative effect of RTA IP obligations that are formulated as minimum standards. Past experience indicates that signatories of these RTAs are likely to include substantively similar provisions in future agreements further extending the hub-and-spoke architecture, and thus reinforcing this trend of a common regulatory response by virtue of RTAs.

3.2 Online Exhaustion

The question whether exhaustion – the principle that once an IP-protected good has legitimately entered distribution channels, its further distribution (e.g. of a second-hand book) no longer requires the agreement from the original right-owner – could also apply to downloaded digital products (e.g. eBooks or software) is determinative for whether a potentially significant global market for 'second-hand' digital products could exist.

3.2.1 Exhaustion in international treaties

While the concept of exhaustion – or, for that matter, territoriality – is not explicitly mentioned in the Paris or Berne Conventions,[209] a number of interpretations have taken the territoriality of IP protection arguably implied in these conventions to indicate a preference for national exhaustion.[210] In the TRIPS context, the intense yet inconclusive discussion of pharmaceutical parallel imports led to the exclusion of exhaustion from dispute settlement considerations[211] which leaves WTO Members free to establish its own regime for exhaustion without challenge.[212] Where TRIPS text does – indirectly – articulate the concept, exhaustion is formulated exclusively with respect to goods, put on the market by, or with the consent of, the right holder.[213] As has been described above,[214] the

[209] See Art. 4bis Paris Convention and Art. 5 Berne Convention.

[210] See Gervais (2012), para. 2.99. See also Gosha and Calboli (2019). Regarding the Paris Convention, see German Federal Supreme Court, Centrafarm and Dirk de Fluiter v. Eli Lilly & Co., 8 IIC 64 (1977) – *Tylosin* (supporting national exhaution); and Tokyo High Court, 27 IIC 550 (1996) (rejecting implications for exhaustion).

[211] Article 6 TRIPS Agreement.

[212] See Doha Declaration on TRIPS and Public Health WT/MIN(01)/DEC/W/2 of 14 November 2001, para. 5(d): "The effect of the provisions in the TRIPS Agreement that are relevant to the exhaustion of IPRs is to leave each Member free to establish its own regime for such exhaustion without challenge, subject to the MFN and national treatment provisions of Articles 3 and 4."

[213] See Footnote 13 to Article 51 TRIPS, excluding from the obligation of border measures "imports of goods put on the market in another country by or with the consent of the right holder. This formulation tracks Article 6.5 of the Treaty on Intellectual Property in Respect of Integrated Circuits (1989) which has been incorporated into the TRIPS Agreement by virtue of Article 35 TRIPS Agreement.

[214] See above section 2.2.1 .

discussion on exhaustion during the negotiations of the Internet Treaties led to the agreed statement to Article 6 and 7 of the WCT, affirming that only physical copies were subject to the new distribution right. While this has generally been understood to mean that exhaustion does not apply to digital products downloaded from the internet (i.e. 'made available' rather than 'distributed'), the purported flexibility of the 'umbrella solution' as a background to the making available right would also seem to permit a more nuanced interpretation.[215]

3.2.2 National jurisprudence on online exhaustion – filling the gaps?

In the absence of international agreement on these issues, the role of the courts in applying domestic law can be significant in determining the scope of exhaustion in practice. The increasing use of electronic channels for the purchase of digital products raises the question whether legal distinctions associated with the different modes of online and offline transfer should continue to apply where they create counter-intuitive distinctions between otherwise – from the consumer perspective – identical products.[216] In the words of the EU Advocate General Spuznar:

> The digitisation of content and the development of the new means of supplying that content to users made possible by the internet have upset the balance that existed in the analogue environment between, on the one hand, the interests of copyright holders and, on the other hand, the interests of users of the works. The rule of the exhaustion of the right of distribution is one of the instruments that help to maintain that balance. The question is whether the balancing of the interests involved also requires the application of that rule in the case of the supply of works by downloading.[217]

In the landmark case *UsedSoft*,[218] the Court of Justice of the European Union decided in the affirmative that copies of software that had been legitimately acquired and downloaded could be resold if the transfer had been definitive and no residual copy remained with the seller. While the decision was taken in the specific context of the EU Software Directive,[219] and hence much of its appreciation centred around its characterization of software licensing as tantamount to a "first sale" under Article 4(2) of the Software Directive,[220] the court expressly rejected the Commission's argument drawn from the WCT background above and confirmed:

> In those circumstances, it must be considered that the exhaustion of the distribution right under Article 4(2) of Directive 2009/24 concerns both tangible and intangible copies of a computer program, and hence also copies of programs which, on the occasion of their first sale, have been downloaded from the internet onto the first acquirer's computer.[221]

Subsequent European jurisprudence has been reluctant to apply this approach outside the scope of the Software Directive and, in the recent *Tom Kabinet*[222] case relating to second-hand e-books, expressly rejected the assimilation of tangible and intangible copies under the Copyright Directive,[223] citing – inter alia – its purpose as implementing Art. 6(1) and 8 WCT and referring the agreed statement in that regard.

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[215] See above section 2.2.1 .
[216] For a more elaborate discussion and background see Taubman (2020).
[217] *Tom Kabinet*, C-263/18, OPINION OF ADVOCATE GENERAL SZPUNAR, para 79.
[218] *UsedSoft,* C-128/11, 3 July 2012, available at curia.europa.eu/juris/liste.jsf?num=C-128/11.
[219] Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs.
[220] See HILTY et al. (2013).
[221] *UsedSoft,* C-128/11, 3 July 2012, para. 59.
[222] *Tom Kabinet*, C-263/18, 19 December 2019.
[223] *Tom Kabinet*, C-263/18, para. 56.

Although this appears as a reversal to the traditional view that exhaustion is limited to the distribution of tangible copies only, the tension of this approach with the economic reality is apparent in the Advocate General's opinion in this case:

> The foregoing considerations lead me to conclude that arguments, of both a legal and a teleological nature, are in favour of recognition of the rule of exhaustion of the distribution right with respect to works supplied by downloading for permanent use. In particular, the permanent possession by the user of a copy of such a work shows the similarity of that mode of supply with the distribution of tangible copies. However, I am of the view that, as EU law now stands, the arguments to the contrary should prevail. These are, in particular, the arguments […] concerning the EU legislature's clear intention that downloading should be covered by the right of communication to the public, the limitation of the distribution right to acts of transfer of ownership of a copy, and the right of reproduction.[224]

A similar tension between the limits of existing legislation and the realities of digital trade is apparent in the US jurisprudence related to this question in the cases *ReDigi* and in *ClearCorrect*. In *ReDigi*[225] the 2nd Circuit Court of Appeals in New York rejected applying exhaustion to lawfully purchased iTunes tracks that were transferred to the purchasing customer while ensuring deletion from the seller's network. It argued that uploading the music files on ReDigi's server "inevitably involved" the creation of new *unauthorized* phonorecords by reproduction, which are excluded from the scope of exhaustion, and rejected a *fair use* defence in light of the negative impact the use would have on the music market.

The *ClearCorrect*[226] case did not concern exhaustion as such, but rather whether the International Trade Court (ITC) had jurisdiction to bar the import of digital datasets related to teeth aligning models.[227] The Federal Circuit found that 19 U.S. Code § 1337(a) – relating to importation of 'articles' - limited to the ITCs jurisdiction to "material things" and did not include the ability to bar digital imports. In a dissenting opinion, Judge Newman, argued for a broad interpretation of 'articles' to include intangible products, citing several US statutes and administrative statements that had already assimilated tangible and intangible articles and goods.[228]

3.2.3 Prospects for a common regulatory response

This national jurisprudence highlighted above illustrates the increasing tension between the traditional approach to exhaustion as applying only to tangible products and the reality of pervasive digitization. While sympathetic to considering the new business models that challenge traditional exhaustion, the courts consider themselves constrained by existing statutes that enshrine the traditional distinction between tangible and intangible products under copyright. In their efforts to fill existing gaps by creative solutions no common approach has yet emerged around which initiatives for an international regulatory response could coagulate.

Characteristically, in the European context, many of the arguments resisting a relaxation of exhaustion centre around the interpretation of the WCT's 'right of making available' as a communication to the public, and hence the exclusion of downloaded products from exhaustion under the guidance of the agreed statement to Article 6 WCT. As highlighted above in the section the Internet Treaties, WCT signatories that have chosen the alternative means of implementing the 'right of making available' as a form of the distribution right[229] should feel less constrained by such

[224] *Tom Kabinet*, C-263/18, Opinion of Advocate General Szpunar, para 79.
[225] *Capitol Records, LLC et al. v. ReDigi Inc.*, No. 16-2321 (2d Cir. 2018).
[226] *ClearCorrect Operating, LLC v. ITC*, No. 2014-1527, Slip Op. at 3 (Fed. Cir. Nov. 10, 2015).
[227] Discussed in Taubman, Antony, 'The shifting contours of trade in knowledge: the new 'trade-related aspects' of intellectual property', WTO Staff Working Paper ERSD-2020-14, p. 22.
[228] *Ibid.* at 1304 *et seq*.
[229] See the references to the US implementation above at n. 39 and 40.

considerations to apply exhaustion in the digital context. Considerations of compelling WCT interpretation in this regard are thus notably absent from the US jurisprudence cited above.

Any recalibration of the balance of interests between right holders and users with regard to digital products will need to be addressed in light of economic realities, taking into account the purpose an objective of the tool of exhaustion. In digital situations that emulate offline exhaustion – such as a permanent transfer of a digital product with no residual copy, as elaborated in *UsedSoft* – court opinions and policy considerations have shown sympathy for an application of the same principle. It is recognized that in the absence of accessible evidentiary tools to verify such conditions on a large scale as would be required for, say, the monitoring of a particular e-book copy, the application of online exhaustion will need further consideration. However, the new technologies that have upset the traditional balance in the analogue world may yet be instrumental in establishing a new balance. If technologies like blockchain could create a reliable technical standard for evidence for how many copies continue to exist of a particular digital product, this may help address the evidentiary side of a concept of online exhaustion and help spur a common regulatory response in this area.

3.3 New issues – rapidly approaching: Data mining and Artificial Intelligence

Rapid progress in technology and its widespread use means that the next issues requiring a – preferably common – regulatory response are already approaching. Among them are the questions of how to address the increasing commercial and ethical relevance of 'big data', and how address the occurrence of artificial intelligence (AI) in the traditionally human-centric system of intellectual property protection.

3.3.1 Big Data and emerging data mining exceptions

Cutting across a number of different disciplines, the policy approaches to harnessing the welfare potential of using 'big data' collection and use have often been characterized as being similar to that of IP – namely striking the right balance between incentivizing the creation (i.e. collection) of data while ensuring sufficient access and benefit for users from the general public. Seeking to contribute to the latter, the practice of text and data mining – i.e. provisions intended to permit the analysis of large volumes of digital text and data to identify patterns, trends and correlations – has been recognized in legislative initiatives in Europe,[230] and under the *fair use* principle in the United States.[231] The, as yet divergent and incomplete, regulatory approaches in this area reflect that the application of IP protection or exceptions to large collections of data have not yet been fully settled. Challenges lie not only in different approaches to traditional database approaches – such as *sui generis* database right in the European Union[232] – but also stem from the evolving nature of data collections that resist categorization in traditional IP right categories.[233]

3.3.2 Artificial Intelligence in a human-centric IP system

AI tools and their outputs pose a number of conceptual challenges to the IP system which has traditionally rewarded inventive and creative activity associated with humans. AI tools, such as machine learning, big data analysis and evolutionary algorithms pose questions as to IP ownership, standards for IP protection criteria such as 'obviousness'[234] and 'originality', as well as the protectability of AI outputs. Responses to these challenges have so far triggered clarifications in

[230] See Articles 3 and 4 of the DSM Directive and the background to criticism of its limited scope in EU Parliament (2008a) and EU Parliament (2008b), and Benhamou (2020).

[231] See *Authors Guild v. HathiTrust*, 755 F.3d 87 /2d Cir. 2014), White v. West (S.D.N.Y. 2014), Fox v. TVEyes (S.D.N.Y. 2014), Authors Guild v. Google, 770 F.Supp.2d 666 (S.D.N.Y. 2011).

[232] See Benhamou (2020) and Gervais (2019).

[233] See Gervais (2019) "Beyond the protection of software used to collect and process Big Data corpora, copyright's traditional role is challenged by the relatively unstructured nature of the non-relational (noSQL) databases typical of Big Data corpora."

[234] Abbott (2018)

patent examination guidelines[235] and isolated national jurisprudence applying existing concepts,[236] but broader conceptual engagement with AI at the policy level remains at an early stage.

At the international level, at the time of writing, WIPO launched a public consultation process on AI and IP policy to identify the most-pressing questions likely to face IP policy makers in this area.[237] While responses to the first issues paper[238] suggest that considerable clarification is still necessary to properly frame the relevant questions, international coordination in this area could benefit from considerable WIPO groundwork on AI that reaches back as far the early 1990s.[239]

4. CONCLUSION

The mechanisms that influence the creation of international regulatory responses to emerging IP issues have undergone significant change since the advent of the digital era. The primacy of state sovereignty in international affairs in the 19th and 20th century, coupled with the unique demands of rapid internationalization of arts and technology at the turn of the century, led to a dominance of international organizations as the forum for developing and agreeing international regulatory responses in the area of IP. The favouring of consensus decisions and the iterative process of revising the treaties created a situation in which technical regulatory responses developed and experienced at the national level could directly be translated into binding international rulemaking.

Coinciding with the advent of the digital era, this scenario has given way to more varied landscape where a variety of tools and legal instruments embody regulatory responses to digital challenges. While TRIPS, the WCT and the WPPT are examples of the traditional model of multilaterally negotiated treaties in existing institutions, the adoption of non-binding instruments – such as the Joint Recommendations - show the limits of consensus and momentum in this model. International non-state solutions such as ICANN and the UDRP emerge as separate, technically determined solutions to specific IP issues. Proliferating FTAs emerge as a new platform to formulate and agree IP-related regulatory responses that can be used to project the national solutions of one FTA-partner but can also serve to give legally binding status to internationally agreed non-binding recommendations.

Today, these different modes of international regulation co-exist and interact reflecting "the reality of a multi-speed and multi-tiered world in which multilateralism, while being the highest expression of inclusiveness and legitimacy, is nevertheless the slowest solution."[240]

This paper shows how these diverse approaches interact in recent IP-regulatory responses to emerging digital issues that are particularly relevant for digital business models. In the relatively mature area of ISP liability, global regulatory responses show broad agreement in principle that limitation of liability is essential for the viability of internet platforms and the important functions they perform in the global digital marketplace. While the methodology on conditions and sanctions of the various "safe harbour" models still varies, broad agreement in principle has meant that the concept has been included in bilateral and regional trade agreements. Whether this means that this issue is closer to becoming an international rule will have to be assessed in light of the recent policy changes at the domestic level – notably under the European DSMD. Still further behind are the

[235] See, for example, Singapore's April 2019 AI-related revision of Examination Guidelines for Patent Applications.

[236] See patent applications in the name of an IT tool "DABUS" filed in multiple jurisdictions by The Artificial Inventor Project (artificialinventor.com). In November 2019 the EPO rejected two such applications (EP 18275 163 and EP 18275174) on the basis of the requirement that an inventor designated in the application has to be a human being, not a machine (see https://www.epo.org/news-issues/news/2020/20200128.html).

[237] See WIPO press release PR/2019/843 of 13 December 2019.

[238] See MPI (2020) for an elaboration of the conceptual challenges.

[239] See WIPO Worldwide Symposium on the Intellectual Property Aspects of Artificial Intelligence held at Stanford University 25-27 March 1991 (https://www.wipo.int/edocs/pubdocs/en/wipo_pub_698.pdf).

[240] See Gurry acceptance speech 2014 (n 143).

emerging issues of online exhaustion, data mining and IP-related questions of artificial intelligence. As regards the former, domestic jurisprudence in different countries is still struggling to find a consistent understanding under what evidentiary circumstances the offline concept can be applied to digital works. With regard to the latter two, a conceptually consistent policy approach is yet to unite the hitherto diverse regulatory reactions ranging from IP office guidelines on IP ownership to data mining exceptions in national law.

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