

Technology Transfer Contracts and the TRIPS: Interpreting High and Low Consensus Norms

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ABSTRACT

China's rules and practices in relation to technology transfer have been of long-standing concern to its trading partners. These concerns are most strongly evident in the United States Trade Representative's Section 301 Report which foreshadowed the imposition of substantial increased tariffs on Chinese goods; a move which was quickly mirrored by China. This article subjects some of these concerns to legal scrutiny. Particular attention is given to China's treatment of grantback clauses in technology transfer contracts which speak to the ownership of improvements made to licensed technology. China's outgoing and recently revised rules are evaluated under two questions. The first is whether China's rules are discriminatory contrary to the TRIPS national treatment obligation. The second is the extent to which states are free under the TRIPS to interfere with freedom of contract in technology transfer. The article identifies a shift as between the two questions from high consensus, to low consensus norms. While the prohibition on discrimination must be strictly interpreted and applied, other TRIPS provisions which touch upon the control of anti-competitive practices in technology licensing, do not remotely reflect a stable international consensus. Interpretations of these provisions should therefore seek to accommodate different approaches, rather than presume that they reflect and prioritize one approach to the exclusion of others.

[Keywords] technology transfer; technology licensing; grantback clauses; TRIPS; national treatment

INTRODUCTION

The regulation of technology transfer contracts is an enduring challenge, both at the level of domestic rules and the development of international principles. While it is generally accepted that these contracts cannot be left entirely to the commercial freedom of the parties involved, there is no settled consensus on the optimum content and extent of intervention. Regulation tends to reflect state preferences in relation to the balance between intellectual property protection and competition law, an assessment which is influenced by their economic positions as primarily producers and creators, or users, of intellectual property.

Differences in regulatory approaches can lead to tension between states and the pursuit of solutions via diplomatic channels, economic pressure and legal remedies. On the resort to law, the most relevant international instrument in force is the TRIPS agreement. Indeed, this article uses as its background case study the dispute settlement proceedings initiated by the US¹ and EU² in relation to China's alleged interference with contractual freedom in technology licensing contracts.³ While nobody wins trade

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¹ WT/DS542 *China – Certain Measures Concerning the Protection of Intellectual Property Rights*.

² WT/DS549 *China – Certain Measures on the Transfer of Technology*.

³ The subject area has already attracted academic scrutiny, albeit that there is little thematic overlap with the current contribution. See, Weihuan Zhou, Huiqin Jiang & Qingjiang Kong, 'Technology Transfer under China's Foreign Investment Regime: Does the WTO Provide a Solution?' forthcoming, *Journal of World Trade Law*,

wars, China has moved swiftly, in response to imposed and threatened tariffs, to modify its legal regime. These changes have, for the present, defused the technology transfer dispute settlement proceedings.⁴ Nevertheless, there are sound reasons for considering the TRIPS compatibility of both the repealed measures originally referred to in the complaints, and China's current legal landscape. In particular, did China need to modify its measures in order to achieve TRIPS compliance? If so, has compliance now been achieved? Going forward, how much flexibility do WTO members have under the TRIPS when developing their regulation of technology licensing? The untested question here is the extent to which the TRIPS embodies a requirement for commercial freedom in technology transfers or, conversely, the extent to which government intervention is required or permitted by way of controlling anti-competitive licensing conditions.

The article appraises China's outgoing and new measures under two enquiries. The first is whether the measures are discriminatory as between national and non-national right holders contrary to the TRIPS Article 3.1 national treatment obligation. The second is the extent to which the TRIPS allows non-discriminatory government regulation of potentially anti-competitive conditions in technology licensing agreements under Article 40. The prevailing theme is to establish a shift, as between these two questions, from a high consensus norm which is universally accepted and generally well understood, to a low consensus norm resulting from historical compromises. This shift has implications for the interpretation and application of these norms by panels and the Appellate Body. The national treatment norm should be rigorously applied subject to its proper delimitation. In contrast, states should be afforded a high, but not unbounded, level of deference in relation to their non-discriminatory control of anti-competitive practices in technology licensing. This theme is explained below in the context of the overall structure of the article.

Section I sets the scene by providing an impression of the potentially anti-competitive licensing conditions in relation to which states have different views. Particular attention is given to grantback clauses which speak to the ownership of improvements made to licensed technology. Section II turns to the Chinese measures which seek to regulate these clauses. China is moving from a system which applies different rules depending on whether the technology transfer is internal or involves imported technology to a unified regime. Going forward, the default rules applicable to internal transfers will apply also to technology import contracts. The section assesses the extent to which this development increases contractual freedom for technology import contracts, finding that the uplift is more modest than at first sight appears. Sections III and IV provide the main thematic substance of the article via the proposed distinction between high and low consensus norms, as elaborated below.

National treatment is undoubtedly a high consensus norm throughout international economic law. However, there are outstanding questions under TRIPS Article 3.1. These relate to the precise method for identifying disparate impact between nationals and non-nationals, and the relevance of regulatory context understood as the idea that respondent states should have the opportunity to explain disparate impact with reference to legitimate policy objectives. Section III therefore proposes a framework for TRIPS national treatment analysis, and applies this to China's measures. With reference to the

available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3436484 (visited 9 January 2020); Julia Ya Qin, 'Forced Technology Transfer and the US-China Trade War: Implications for International Economic Law' 22 *Journal of International Economic Law* (2019) 743.

⁴ In relation to the US complaint, a request was made in June 2019 to suspend the work of the panel until 31 December. On 23 December, a further request was made to suspend the work until 29 February 2020. WT/DS542/11 *China – Certain Measures Concerning the Protection of Intellectual Property Rights* Communication from the Panel 10 January 2020. The EU complaint remains in consultations.

principles of treaty interpretation, it is argued that understandings developed in the trade in goods and services contexts should be carried over, in a modified and restricted form, to the TRIPS context.

Section IV considers the application of TRIPS Article 40 to non-discriminatory regulation of potentially anti-competitive conditions in technology licensing. This question arises because non-discriminatory regulation of grantback clauses can nevertheless severely restrict commercial freedom to allocate or share the benefits of improvements to licensed technology. The scope for negotiation is lost if grantback clauses are effectively prohibited by regulation which allocates improvements to the licensee, whether a national or a non-national. The question is therefore whether the TRIPS allows *per se* prohibitions, given their pronounced impact on commercial freedom, or whether more nuanced regulation is required.

Before engaging directly with Article 40, attention is given to the background against which it was drafted and now operates, in order to establish the shift to an area of low consensus. As indicated, domestic regulation here reflects state preferences in relation to the balance between intellectual property protection and competition law. These two bodies of law pursue common ends which can be expressed as fostering innovation, and the dissemination of its outcomes, for the benefit of consumers.⁵ However, the regulatory dilemma is that both limited and extensive regulation of technology licensing can be depicted as best achieving these ends. Limited regulation may increase the original patent holder's incentives. Licensing terms are an aspect of achieving an acceptable rate of return on viable technology against the background of costly research and development, much of which leads only to blind alleys.⁶ Without the permissibility of contract terms like grantback clauses, research leading to the discovery of new technology and applications may be impeded. Similarly, but for these contract terms, there might be a reluctance to disseminate the technology through licensing. Under this perspective, recognizing and protecting market power by prioritizing intellectual property fosters both innovation and dissemination. However, limited regulation becomes less appealing if the emphasis is more on the benefits created by competition between original patent holders and second-comers. The 'but for' arguments are inverted here. More intrusive regulation, involving the mandatory removal or review of certain contract terms, may increase the incentive of licensees to both enter into contracts and to improve on the licensed technology.

State preferences here are dynamic. The line of equilibrium is constantly shifting whether the focus is on differences between groups of states at any point in time, or the rules of individual states over time. New thinking from economists can result in the re-writing of rules previously expressed as self-evident and immutable. This background indicates that interpretations of the main TRIPS provision which speaks to the intellectual property / competition interface should seek to accommodate different approaches, rather than presume that it reflects and prioritizes one approach to the exclusion of others.

The analysis then proceeds to TRIPS Article 40. The first question here is whether this provision permits blunt *per se* prohibitions of potentially anti-competitive licensing conditions of the kind that China previously applied in relation to technology import contracts. Plausible textual interpretations to allow such prohibitions are identified, but dismissed as being incompatible with a standard canon of interpretation. The impermissibility of *per se* prohibitions is, therefore, the first respect in which state discretion in this area is not unbounded. However, the question which reveals more about the extent of regulatory autonomy is what Article 40 requires of states to show that they have gone beyond an

⁵ Czapracka describes this alignment as the 'current mainstream view' long since accepted by academia and regulatory bodies. Kararzyna Czapracka, *Intellectual Property and the Limits of Antitrust* (2009) Edward Elgar 37.

⁶ Marcus B. Finnegan, 'A Code of Conduct Regulating International Technology Transfer: Panacea or Pitfall', 1 *Hastings Int'l & Comp. L. Rev.* (1976) 57, at 58-59.

impermissible *per se* approach. It is argued here that the national law experience can be relevant by way of supplementary means of interpretation. Given that this experience is one of regulatory divergence, which depends to some extent on institutional capacity, a low threshold is suggested. Thus, *per se* prohibitions, without any accompanying explanation of the gravity of the competition based concerns, would breach Article 40. However, the need for individual assessment should be satisfied by such an explanation. This would be a check for a clearly expressed rationale, rather than a review of exactly where the balance between protecting intellectual property and competition has been located. This modest limitation on state discretion is linked with two meanings of the Article 40 ‘consistency requirement’ under which the regulation of anti-competitive practices must be consistent with the TRIPS as a whole. Section IV ends by considering whether China’s regulatory trajectory indicates that it has met the TRIPS Article 40 threshold. Section V offers an overall conclusion.

I. POTENTIALLY ANTI-COMPETITIVE LICENSING CONDITIONS

China’s restrictions on contractual freedom apply in relation to potentially anti-competitive licensing conditions. It is therefore necessary to provide an impression of such licensing conditions before turning to China’s measures and their TRIPS compatibility.

The exclusive grantback is a common example of a potentially anti-competitive licensing condition. While TRIPS Article 40 refers to ‘exclusive grantback conditions’, no definition of this term is provided. Of relevance here is the unadopted UNCTAD Draft International Code of Conduct on the Transfer of Technology [Draft Code].⁷ Near consensus was achieved with the definition, which is the first to be provided in a list of 14 practices:

Requiring the acquiring party to transfer or grant back to the supplying party, or to any other enterprise designated by the supplying party, improvements arising from the acquired technology, on an exclusive basis [or]* without offsetting consideration or reciprocal obligations from the supplying party, or when the practice will constitute an abuse of a dominant market position of the supplying party.

The core idea of what a grantback clause involves is reasonably clear here, albeit that the ‘[or]*’ preferred by the Group of 77 (developing countries) begins to reveal differences in negotiating positions.⁸

A further listed practice in the Draft Code can also be highlighted because of its connection with grantback clauses and relevance to China’s measures. The need for grantback clauses is obviated by a clause preventing the acquiring party from improving the technology. The Draft Code addresses ‘Restrictions on adaptations’ as the seventh practice in these terms:

Restrictions which [unreasonably]** prevent the acquiring party from adapting the imported technology to local conditions or introducing innovations in it, or which oblige the acquiring party to introduce unwanted or unnecessary design or specification changes, if the acquiring party makes adaptations on his own responsibility and without using the technology supplying party's name, trade or service marks or trade names, and except to the extent that this adaptation

⁷ Draft International Code of Conduct on the Transfer of Technology as at the close of the 6th session of the Conference on 5 June 1985: note by the UNCTAD Secretariat, TD/CODE TOT/47.

⁸ Read without this addition, the practice which is of concern is narrowed. Not only must the improvement belong exclusively to the licensor, but this must also occur without payment or reciprocal obligations from the licensor. Read with the addition, the position of the improvement belonging exclusively to the licensor is itself of concern irrespective of the position on payment and reciprocity.

unsuitably affects those products, or the process for their manufacture, to be supplied to the supplying party, his designates, or his other licensees, or to be used as a component or spare part in a product to be supplied to his customers.

Unpicking the meaning here, and reducing the content, the supplying party can legitimately contract for the acquiring party to make improvements on their own responsibility, and can also guard against an unsuitable adaptation of products to be supplied back to itself. In principle, however, the licensee should be permitted to improve the imported technology. The term ‘unreasonably’, which potentially increases the scope for clauses which prevent improvement, was promoted by the Group B developed countries.

II. CHINA’S MEASURES

The discussion can now turn to the Chinese measure which seeks to regulate these potentially restrictive business practices. As indicated, China moved swiftly to revise its legal regime in response to mounting trade tensions and the WTO complaints. There were two developments in March 2019, being the adoption of a new Foreign Investment Law⁹ (FIL), which entered into force on 1 January 2020, and the removal, with immediate effect, of certain provisions from the Technology Import and Export Administrative Regulations (TIER).¹⁰

Article 22 of the FIL provides that the ‘conditions for technological cooperation are to be determined through consultation by the various parties to the investment on the basis of equality and the principle of fairness’. This language should not be taken to indicate that China will now recognize full freedom of contract in the field of technology licensing and that it is unconcerned with potentially anti-competitive practices in this field. Rather, the question raised is how China will further specify the content of the commitments in Article 22. It is possible to envisage some specification of what ‘equality’ and ‘fairness’ mean in this context, along with restraints on commercial freedom when the indicators of these values are not sufficiently present. Moreover, the FIL covers technology transfer to the extent that it involves foreign investment.¹¹ Technology transfer, even from outside of China, may involve only licensing without any investment in an enterprise or project in China. In this situation, the TIER continues to apply as the FIL only abolishes and replaces identified laws governing foreign investment.¹² It does not abolish the Foreign Trade Law under which the TIER was adopted.¹³

This scope of the FIL explains why the TIER was amended separately in the same time-frame. It would have been anomalous to signal a move towards recognizing freedom of contract in principle under the FIL for technology transfers involving investment, while leaving in place stringent restrictions under the TIER for transfers not involving investment. This position might not have been enough to defuse the WTO complaints.

The now repealed TIER restrictions were as follows. Article 29(3) of the TIER provided for the outright prohibition of clauses, ‘restricting the receiving party from improving the technology supplied by the supplying party, or restricting the receiving party from using the improved technology’. Grantback

⁹ Foreign Investment Law of the People's Republic of China, adopted at the Second Session of the 13th National People's Congress on March 15, 2019.

¹⁰ State Council Decree No.709 was published on March 18, 2019 and took effect immediately. Paragraph 38 of the Decree deletes from the TIER Articles 24(3), 27 and 29.

¹¹ FIL Article 2 defines foreign investment in a manner indicating ownership by the foreign investor of a Chinese enterprise, or the acquisition of a share in such an enterprise.

¹² These are listed in FIL Article 42 as the Chinese-Foreign Equity Joint Ventures Law, the Wholly Foreign Owned Enterprises Law and the Chinese-Foreign Contractual Joint Ventures Law.

¹³ TIER Article 1.

clauses were also effectively subject to a *per se* prohibition. Under Article 27, this was achieved by a positive specification that an improvement, ‘belongs to the party making the improvement’.¹⁴ Now that these provisions have been repealed, the default provisions are contained in China’s Contract Law.¹⁵ This follows from the relationship between the TIER and the Contract Law. As might be expected, China’s Legislation Law envisages a ‘higher legal authority’ for national laws, such as the Contract Law, than administrative regulations such as TIER.¹⁶ However, the default hierarchy is reversed as the Contract Law establishes that it is subordinate to administrative regulations which contain different rules on technology transfer.¹⁷ The now repealed TIER provisions were a case in point. These provisions applied only to ‘technology import contracts’¹⁸ rather than also to internal technology transfers. With the repeal of these provisions, there is no longer a bifurcated regime for controlling clauses relating to improvements, and the ownership thereof. Rather, the Contract Law, as the default instrument, now applies to both internal technology transfers and transfers involving an imported technology.

Unlike the TIER, the Contract Law expresses a freedom of contract approach in principle, while also recognizing the potential for anti-competitive practices. Article 354 of the Contract Law (contained in Chapter 18) leaves the ‘method of sharing any subsequent improvement resulting from the exploitation of the patent’ to the commercial discretion of the parties ‘on the basis of mutual benefit’. Grantback clauses, under which any improvement would belong to the licensor, are therefore not prohibited. There is no express provision in the Contract Law which speaks to the potentially restrictive practice of preventing the licensee from improving the technology. However, it should not be inferred from this silence that contracting parties enjoy significant discretion here. The flexibility under Article 354 is tempered by Article 329:

Article 329 Invalidity of Technology-monopolizing and Infringing Contract

A technology contract which illegally monopolizes technology, impairs technological advancement or infringes on the technology of a third person is invalid.

Article 329 is among the General Provisions of Chapter 18 and therefore applies to Article 354. It clearly indicates that the Contract Law does not envisage unqualified freedom of contract at the expense of regulating potentially anti-competitive practices. This is confirmed by guidance issued by China’s Supreme Court.¹⁹ The following provision from the guidance is especially relevant to clauses restricting improvements and grantbacks:

Article 10 The following circumstances shall belong to ‘illegally monopolizing technology and impairing technological progress’ mentioned in Article 329 of the Contract Law:

¹⁴ Article 27.

¹⁵ Contract Law of the People’s Republic of China 1999 (Contract Law).

¹⁶ Legislation Law of the People’s Republic of China 2000, Article 79.

¹⁷ Contract Law, Chapter 18 Technology Contracts, Section 3 Technology Transfer Contracts, Article 355 Applicability of Other Laws or Administrative Regulations: Where the relevant laws or administrative regulations provide otherwise in respect of technology import/export contracts or in respect of patent contracts or contracts for patent application, such provisions prevail.

¹⁸ This phrase is used in both Articles 27 and 29(3). Article 2 defines ‘technology import’ as ‘acts of transferring technology from outside the territory of the People’s Republic of China into the territory of the People’s Republic of China’.

¹⁹ Interpretation of the Supreme People’s Court concerning: Some Issues on Application of Law for the Trial of Cases on Disputes over Technology Contracts Interpretation No. 20 [2004] of the Supreme People’s Court Adopted at 1335th meeting of the Judicial Committee of the Supreme People’s Court on November 2004.

(1) Restricting one party from making new research and development on the basis of the contractual subject technology, or restricting this party from using the improved technology, or the conditions for both parties to exchange the improved technologies with each other being not reciprocal, including such circumstances requiring one party to gratuitously provide the other party with the improved technology, to transfer the improved technology to the other party non-reciprocally, gratuitously and solely occupy, or jointly own the intellectual property of the improved technology ...

The impact of Article 329 and the accompanying guidance is to narrow the differences between the TIER and the Contract Law. The repeal of the noted TIER provisions, and the applicability of the Contract Law, does not mean that technology import contracts have moved from a regime in which some clauses are strictly prohibited to a regime in which such clauses are left entirely to the commercial discretion of the parties. Indeed, it is possible that there is no difference in the treatment of clauses restricting the licensee from improving the technology supplied. The opening example under subparagraph (1) above seems to indicate that such clauses are prohibited, just as they were under Article 29(3) of the TIER. In contrast, the Contract Law provides for more nuanced regulation of grantback clauses than the TIER. They were strictly prohibited under the TIER. Under the Contract Law, grantbacks would seem to be permissible in principle provided there is ‘mutual benefit’ which is likely to be absent for non-reciprocal or gratuitous grantbacks. It is this permissibility in principle of grantback clauses which makes the Contract Law a preferable regime for licensors to the TIER.

A further indication of China’s nascent policies here is provided by the March 2017 draft Anti-Monopoly Guidelines on the Abuse of Intellectual Property Rights.²⁰ While only in draft form, there are reasons to attribute a high weight to this document. The Guidelines aim to provide content to Article 55 of China’s 2007 Anti-Monopoly Law²¹ (AML). The approach developed under the AML is likely to be reflected in the FIL, by reason of the AML’s broader and more general scope of application.²² It is clear from the Guidelines that China intends to regulate exclusive grantbacks, rather than leave this area to the commercial freedom of the parties. Article 8 of the Guidelines refers to, ‘analyzing the impact of the exclusive grantback on the exclusion or restriction of the relevant market competition’, along with a number of criteria including ‘whether the licensor will provide material consideration for the substantial grant-back’ and ‘whether the exclusive grant-back will derogate the enthusiasm of the licensee to make improvements’.

The analysis now turns to the compatibility of the outgoing and current measures with the TRIPS Article 3.1 national treatment obligations.

III. TRIPS DISCIPLINES ON THE REGULATION OF TECHNOLOGY LICENSING - NATIONAL TREATMENT

²⁰ Hereinafter, Guidelines. The Guidelines are available at: <http://fdj.mofcom.gov.cn/article/zcfb/201703/20170302539418.shtml> (visited 9 January 2020).

The English translations appearing in the main text were provided by Cherry Chen (PhD candidate).

²¹ Anti-Monopoly Law (promulgated by Order No. 68 of August 30, 2007, of the President of the People's Republic of China). The English translation is provided by WIPO, <https://www.wipo.int/edocs/lexdocs/laws/en/cn/cn099en.pdf> (visited 9 January 2020).

²² This broad and general scope is clearly indicated by AML Article 1:

Article 1 This Law is enacted for the purpose of preventing and restraining monopolistic conducts, protecting fair competition in the market, enhancing economic efficiency, safeguarding the interests of consumers and the public interest and promoting the healthy development of the socialist market economy.

Throughout international economic law, including under the TRIPS, national treatment is a high consensus norm.²³ It follows that non-national patent owners must be permitted to conclude licensing contracts with domestic firms on terms that are no less favourable than those applicable to national patent owners. Nationals cannot, without sound justification, enjoy more commercial freedom than non-nationals.

The simplicity of these propositions is belied by the difficulty of elaborating and applying the exact methodology for revealing nationality based discrimination. This is especially so when the regulatory distinction embodied in measures is not explicitly framed in terms of nationality – so called cases of possible *de facto* or practical discrimination. Moreover, the TRIPS national treatment obligation is not as well understood as other GATT / WTO law non-discrimination norms. Disparate impact as between nationals and non-nationals is a required element. However, the Appellate Body has yet to adjudicate on whether this is sufficient for a TRIPS national treatment violation, or whether regulatory context must also be considered – the opportunity for respondent states to establish that any disparate impact can be explained with reference to a legitimate policy objective. This is a given outside of the TRIPS context by reason of general exceptions provisions in the GATT and the GATS. It is also clear from an interpretation developed by the Appellate Body that regulatory context is an indispensable element of the overall appraisal of technical regulations under the TBT Agreement despite the absence of an exceptions provision in this agreement. Yet, the only panel to have touched on this question to date in the TRIPS context appears to have considered that disparate impact is enough in itself to establish a national treatment violation.²⁴ A key purpose of this article is to provide a framework for non-discrimination analysis under the TRIPS. China's measures here (now repealed and present) provide an opportune moment to develop and test this framework.

A. The TRIPS Article 3.1 national treatment provision

TRIPS Article 3.1 provides as follows:

Each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection of intellectual property.

The term 'protection' is defined in note 3 as including, 'matters affecting the availability, acquisition, scope, maintenance and enforcement of intellectual property rights *as well as those matters affecting the use of intellectual property rights specifically addressed in this Agreement*' (emphasis added).

The emphasized phrase invites consideration of the intellectual property rights set out in the TRIPS. From here, the most relevant provision is within Article 28(2) which requires, in part, that patent owners shall have the right, 'to conclude licensing contracts'. It follows that non-national patent owners are entitled to be treated no less favourably than national patent owners in relation to the right to conclude licensing contracts.

²³ Howse has contrasted the Appellate Body's willing engagement with non-discrimination norms with its circumspect approach towards the 'post-discriminatory' provisions in the TBT and SPS agreements. This is explained with reference to level of consensus within the WTO's membership in relation to these norms. Robert Howse, 'The World Trade Organization 20 Years On: Global Governance by Judiciary' 27 *European Journal of International Law* (2016) 9.

²⁴ Panel Report, *European Communities - Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs* WT/DS174/290/R, adopted 20 April 2005 (*EC – Trademarks / GIs*).

The TRIPS Article 3.1 ‘treatment no less favourable’ (TNLF) standard has been at issue in a number of disputes and has a settled core meaning. TNLF requires ‘effective equality of opportunities’.²⁵ It seems incontestable that encountering measures which prohibit certain contract terms is less favourable than measures which provide for more flexibility. This was the position, until recently, in relation to grantback clauses under the TIER as compared with the Contract Law. This difference in treatment could have been subject to an ‘as such’ challenge – that is, a challenge against the law itself as opposed to a challenge against the law ‘as applied’ in individual instances.²⁶ It is no defence here to claim that the prohibition on grantbacks in the TIER was rarely enforced²⁷ so that such clauses were, in practice, left to negotiations between the parties. This is because the TIER provided for a definite and mandatory position in relation to each and every occasion of its enforcement, without allowing for the discretion to reach a different decision and outcome.

B. National treatment – establishing disparate impact

The position described above does not in itself establish a TRIPS Article 3.1 violation. It must also be established that the favourable treatment is accorded to Chinese nationals, while the detrimental treatment is accorded to nationals of other WTO Members. This is not explicitly evident from the face of the measures. As indicated, the less favourable treatment under the TIER which prohibited grantbacks depended on whether the contract involved the transfer of technology from outside of China into China, rather than the nationality of the licensor. Such a licensor might more commonly be a non-national of China, but could also be a Chinese national.

The lack of explicit correspondence between the different treatments and nationality was considered by the panel in *EC – Trade Marks / GIs*.²⁸ In this case, the protection of intellectual property in the form of geographical indications (GIs) was less favourable for GIs located outside the EC, than for GIs located in the EC. This led the panel to view the case as involving, ‘formally identical provisions vis-à-vis the nationals of different Members, with respect to the availability of GI protection’.²⁹ The panel began its analysis by drawing on a well-established principle of world trade law non-discrimination analysis. The TNLF standard may be breached both by measures requiring formally different treatment of nationals and non-nationals, and by those requiring formally identical treatment.³⁰ Expressed differently, either formally different or formally identical treatment may be required to avoid, or remedy, a breach.

²⁵ This language has its origin in a GATT panel report which interpreted the TNLF standard in GATT Article III:4 (GATT Panel Report, *United States Section 337 of the Tariff Act of 1930*, L/6439, adopted 7 November 1989, BISD 36S/345 para. 5.11 (*US – Section 337*)). It was first carried over to TRIPS Article 3.1 by the panel in Panel Report, *United States - Section 211 Omnibus Appropriations Act of 1998*, WT/DS176/R, adopted 1 February 2002, paras 8.131 – 8.133 with this usage being approved the Appellate Body in the same case at para 258.

²⁶ Further coverage of this distinction is provided in subsection D below.

²⁷ Infrequent enforcement by China’s Ministry of Commerce was reported in August 2019 by Financier Worldwide, ‘Tempered TIER Tantalises US-China Trade War Thaw’, <https://www.financierworldwide.com/tempered-tier-tantalises-us-china-trade-war-thaw#.XW1LdPBKjIV> (visited 9 January 2020).

²⁸ Above n 24.

²⁹ *Ibid*, para 7.172.

³⁰ *Ibid*, paras 7.172 – 7.174. When the comparison is between domestic and imported goods, this principle has its origin in the GATT panel report in *US – Section 337* (above n 25) para. 5.11. In the trade in services context, the principle has been elevated to the status of treaty text by the GATS Article XVII National Treatment provision.

There is scope for misunderstanding here in terms of accurately locating the case within the overall body of non-discrimination analysis. Measures involving formally identical treatment can undoubtedly involve less favourable treatment in practice for imported products or non-nationals. However, this area is most closely associated (perhaps exclusively so) with cases in which there is only one treatment at issue. For example, in *Dominican Republic – Cigarettes*, all cigarettes, domestic and imported, had to bear a tax stamp in order to be lawfully marketed. This breached the GATT Article III:4 TNLF standard on the basis that the one identical treatment was, in practice, more burdensome for imported cigarettes.³¹ As there is only one treatment here, encountered by all cigarettes, it cannot be part of the analysis to consider the overall distribution and relative proportions of domestic and imported goods (nationals and non-nationals) encountering differing treatments.

This cannot be what the *EC – Trade Marks / GIs* panel had in mind when it referred to ‘formally identical provisions’. It must, rather, have had in mind the situation when there is more than one treatment at issue, but where each treatment is at least identical in the one respect of being formally available to nationals and non-nationals. The contortion in this explanation and scope for misunderstanding could have been avoided by not framing the case as involving formally identical provisions. The case is easier to understand by emphasizing that it involved different treatments which were, in principle, accessible to nationals and non-nationals. For these kinds of cases, the TNLF analysis differs because it is possible to consider the overall distribution and relative proportions of nationals and non-nationals encountering the different treatments.

Under world trade law TNLF standards, evidence of this kind is key to revealing *de facto* discrimination. An alternative approach, involving a much lower threshold, was raised by the US in *EC – Trade Marks / GIs*.³² Under this extreme, it is sufficient that there is one non-national subjected to the less favourable treatment, and one national eligible for the favourable treatment. This approach is not unknown in international economic law. It is at least prevalent, if not even the dominant approach in investor state dispute settlement. The term ‘best treatment’ is used here, because the focus is on the most favourable treatment accorded to a national to which the non-national claimant is then entitled.³³ However, world trade law has preferred an approach referred to as the ‘group comparison’.³⁴ This comparison is required when there are different treatments, one less favourable than the other, which are not explicitly allocated based on nationality or a direct proxy for nationality. The comparison is between the group of non-nationals wishing to access the favourable treatment with the group of nationals wishing to access the favourable treatment. Within both groups, there can be persons entitled to and debarred from the favourable treatment. The question is whether, overall, or disproportionately, non-nationals are debarred from the favourable treatment.

Upon applying the group comparison test, the panel found there to be a very strong correspondence between the location of the GI (the formal criterion on which the different treatments turned) and the

³¹ Panel Report, *Dominican Republic – Measures Affecting the Importation and Internal Sale of Cigarettes*, WT/DS302/R, adopted 19 May 2005, paras 7.184 – 7.194.

³² Above n 24, para 7.187.

³³ Interpreting the NAFTA Article 1102 national treatment principle, the Pope & Talbot tribunal noted that, ‘...“no less favorable” means equivalent to, not better or worse than, the best treatment accorded to the comparator’. *Pope & Talbot Inc. v Government of Canada* (Award on the Merits of Phase 2, 2001) para 42. For analysis of this area, see, Arwel Davies, ‘Group Comparison Vs. Best Treatment in International Economic Law Non-discrimination Analysis’ in Andrea K. Bjorklund (ed.) *Yearbook on International Investment Law & Policy* (2014-2015) Oxford University Press 111.

³⁴ Appellate Body Report, *European Communities - Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R, adopted 5 April 2001, para 100.

nationality of the GI holder.³⁵ Indeed, there was no clear evidence in the case of even a single non-national eligible for the favourable treatment – that is a non-national holding a GI located in the EC.³⁶ Therefore, the group comparison test revealed very pronounced *de facto* discrimination in this case.

It seems likely that the same outcome would be reached when applying the group comparison test to the different treatments envisaged (until the recent changes) in the Contract Law and the TIER in relation to grantbacks. Complaining states are likely to be able to readily establish that non-nationals disproportionately transfer technology from outside of China into China thereby encountering the less favourable treatment under the TIER (grantbacks prohibited). Conversely, the internal transfer of technology encountering the relatively favourable treatment under the Contract Law (grantbacks permitted in principle) would be more likely to involve a national as the licensor than a non-national. While the distinction between transferring technology from outside of China and internal transfers does not amount to a direct proxy for nationality, the phrase ‘close substitute criteria’³⁷ is probably apt.

C. TRIPS national treatment and regulatory context

The next question is whether disparate impact, as revealed by the group comparison, suffices to establish a violation of TRIPS Article 3.1, or whether regulatory context can be raised by the respondent state in order to prevent or exonerate a violation. In world trade law, arguments in relation to regulatory context are most closely associated with the general exceptions in GATT Article XX. In the Uruguay Round agreements, this provision was included in an amended form in GATS Article XIV, but not in the TRIPS or the TBT Agreement. However, general exceptions-based arguments are possible under the main TBT non-discrimination provision by reason of the Appellate Body’s interpretation of the TBT Article 2.1 TNLF favourable standard. Detrimental impact is not dispositive; the remaining question is, according to the Appellate Body, whether it ‘stems exclusively from a legitimate regulatory distinction’.³⁸ The open question here is whether this interpretation applies equally, or in some modified form, under the TRIPS Article 3.1 TNLF standard.

The coverage below sets out the strongest points for why, as a matter of treaty interpretation, the meaning of TNLF under TBT Article 2.1 should be carried over in a modified and restricted form to TRIPS Article 3.1. The points relate to how the Appellate Body found a right to regulate to be embodied in the TBT, and how these considerations carry over to the TRIPS.

Under the General Rule of Interpretation set out in Article 31 of the Vienna Convention on the Law of Treaties³⁹ (VCLT), a treaty preamble is relevant in two ways. It provides relevant context for the interpretation of terms within a treaty and sheds light on the object and purpose of the treaty; a matter which itself informs the process of attributing meaning and content to treaty terms. When the Appellate Body first interpreted the TNLF standard in TBT 2.1, much weight was attributed to the sixth recital of the TBT preamble:

Recognizing that no country should be prevented from taking measures necessary to ensure the quality of its exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate,

³⁵ *EC – Trade Marks / GIs*, above n 24, paras 7.194 – 7.197.

³⁶ *Ibid.*

³⁷ *Ibid.*, para 7.199.

³⁸ Appellate Body Report, *United States – Measures Affecting the Production and Sale of Clove Cigarettes*, WT/DS406/AB/R, adopted 24 April 2012, para 182.

³⁹ Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980), United Nations, Treaty Series, vol. 1155, No. 18232.

subject to the requirement that they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade, and are otherwise in accordance with the provisions of this Agreement

This recital is clearly inspired by the text GATT Article XX, albeit that it reverses the structure by placing a list of policy objectives before language which is found in the chapeau of Article XX. The phrase ‘at the levels it considers appropriate’ is new, but this reflects the Appellate Body’s jurisprudence to the effect that it will not interfere with the chosen level of protection of the value at stake.⁴⁰ More genuinely new is the closing safeguard of the measure at issue being ‘otherwise in accordance with’ the TBT. It is difficult to give any separate and distinct meaning to this language while avoiding circularity. Members can protect public health provided the measure is not discriminatory contrary to TBT Article 2.1. However, this is merely to beg the question of what a full analysis under Article 2.1 should look like, and whether it should involve consideration of regulatory context. Bearing in mind that the sixth recital mainly sets out a permission to regulate in specific and familiar terms, it is unlikely that the more general closing language was intended to significantly constrain this permission. Ultimately, the closing language is best interpreted as an admonition against abuse of the undoubted right to regulate. It is possible to question whether this additional language was required, just as it is possible to question whether the GATT Article XX chapeau is required when the ‘necessary’ standard, also found in the sixth recital above, arguably provides a sufficient safeguard against abuse of the exceptions. When the Appellate Body drew interpretative guidance from the sixth recital, it did not explicitly link the closing language with its incorporation of regulatory context into TBT 2.1. Nevertheless, there is perhaps a link between the closing language (consistency with Article 2.1 must be achieved) and the strictness of the test that any disparate impact must be capable of being explained ‘exclusively’ with reference to a legitimate purpose.

More generally, the recital merely reflects an indispensable tenet of trade law non-discrimination analysis. It is no exaggeration to state that disparate impact cannot possibly be enough to establish discrimination under TBT 2.1.⁴¹ Such an interpretation would have eviscerated the right to regulate, since even pronounced disparate impact can be a feature of measures which can be fully explained with reference to a legitimate non-protectionist purpose. When such explanation is possible, the detrimental impact must be accepted and exonerated as an incidental consequence of protecting the value at stake.

When assessing the extent to which this reasoning carries over to TRIPS Article 3.1, the logical starting point is to identify the provision which bears the strongest resemblance to the sixth recital of the TBT preamble. The closest TRIPS provision provides as follows:

Article 8

Principles

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of

⁴⁰ Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R, adopted 17 December 2007, para 156; Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, WT/DS285/AB/R, adopted 20 April 2005, para 308. See, Michael Ming Du, ‘Autonomy in Setting Appropriate Level of Protection Under WTO Law: Rhetoric or Reality?’, 13 *Journal of International Economic Law* (2010) 1077.

⁴¹ See Federico Ortino, ‘From “non-discrimination” to “reasonableness”: a paradigm shift in international economic law?’ Jean Monnet Working Paper 01/05.

vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.

Much like a preamble, this provision is also relevant by way of context, and object and purpose when interpreting any other TRIPS provision.⁴² While Article 8.1 is not a direct analogue for the sixth recital, the two provisions have much in common. Both embody a list of public policy objectives which can permissibly inform regulatory developments, and both specify the ‘necessary’ standard for the nexus between measures adopted and the pursuit of the objective. Both provisions also end with the safeguard of measures having to be otherwise consistent with the Agreement. As argued above, this language is best interpreted as directed towards preventing abuse of the right to pursue the listed objectives. If it is arguably otiose under the sixth recital of the TBT preamble, it is less so in TRIPS Article 8.1 because this provision does not reproduce the chapeau of GATT Article XX.

A credible argument can be made that, within the TRIPS, Article 8.1 informs the interpretation of Article 3.1 in the same way as, within the TBT, the sixth recital informs the interpretation of Article 2.1. If this is correct, disparate impact does not in itself establish an Article 3.1 violation. This disparate impact will not reflect discrimination if it can be explained exclusively with reference to a policy objective specifically referred to in the TRIPS, including in Article 8.1. This argument can be tested from two perspectives. First, why is the broader formulation of any ‘legitimate regulatory distinction’ which, according to the Appellate Body, applies under TBT 2.1 not recommended here? From the opposite perspective, are there valid arguments to the effect that disparate impact is enough in itself under TRIPS Article 3.1?

1. Why not any ‘legitimate regulatory distinction’?

There is a strong basis for the broader non-exhaustive approach under TBT 2.1, which does not carry over to TRIPS 3.1. Under TBT 2.2, even non-discriminatory technical regulations can be reviewed for imposing ‘unnecessary obstacles to international trade’. This provision uses the term ‘*inter alia*’ in connection with a list of policy objectives which members can pursue. The explicitly non-exhaustive list under TBT 2.2 strongly indicates that the same approach should apply under 2.1.

The TRIPS does not have a directly equivalent provision to TBT 2.2 which sets out a non-exhaustive list of policy objectives. This suggests that the policy objectives which can be considered under the TRIPS Article 3.1 TNLF standard should be limited to those listed in other TRIPS provisions. This position is reinforced by considering the differences between TRIPS Article 3.1, and TBT Article 2.1 – the respective national treatment provisions. TBT Article 2.1 does not refer to any policy objective and does not itself contain any exception. In isolation, the provision leaves the question of policy objectives entirely open. However, as indicated, the interpretative context only needs to be extended to Article 2.2 to find a list of non-exhaustive policy objectives. In contrast, TRIPS 3.1 incorporates by reference the exceptions in pre-existing intellectual property instruments. These exceptions are focused and narrow⁴³ and have no bearing on a general right to regulate - the question of balancing intellectual property rights

⁴² While this approach to interpretation is already required by VCLT Article 31(1), its applicability is reinforced by paragraph 5 of the Doha Declaration, adopted by Ministers on 14 November 2001, which provides that, ‘[i]n applying the customary rules of interpretation of public international law, each provision of the TRIPS Agreement shall be read in the light of the object and purpose of the Agreement as expressed, in particular, in its objectives and principles’.

⁴³ For example, under the Paris Convention, Article 2.3 provides: The provisions of the laws of each of the countries of the Union relating to judicial and administrative procedure and to jurisdiction, and to the designation of an address for service or the appointment of an agent, which may be required by the laws on industrial property, are expressly reserved.

with broader legitimate policy objectives. The point, however, is that the drafters clearly considered what exceptions should be explicitly incorporated in Article 3. When combined with the absence of a non-exhaustive list of policy objectives in any TRIPS provision, this makes it difficult to interpret the TRIPS Article 3.1 TNLF standard in exactly the same manner as the TBT Article 2.1 TNLF standard. As noted, however, TRIPS Article 8.1 does provide an exhaustive list of objectives. Respondent states should therefore be permitted to raise these objectives in order to explain detrimental impact under TRIPS Article 3.1. To deny this opportunity would amount to interpreting a TRIPS provision in isolation from its context and the object and purpose of the Agreement.⁴⁴ The discussion now turns to the opposite perspective of whether there are plausible arguments to the effect that disparate impact should be enough to establish a TRIPS Article 3.1 violation.

2. *Should disparate impact suffice?*

In a rather opaque section of its report entitled ‘Defences based on systemic considerations’, the *EC – Trade Marks / GIs* panel seemed to be of the view that it would not be appropriate to import a GATT Article XX like analysis into the TRIPS. The panel was responding to an argument made by the EC that ‘one must take account of the absence in the TRIPS Agreement of a general exceptions provision analogous to Article XX of GATT 1994’.⁴⁵ Part of the panel’s rationale for rejecting this argument was as follows:

...the TRIPS Agreement does not generally provide for the grant of positive rights to exploit or use certain subject matter, but rather provides for the grant of negative rights to prevent certain acts. This fundamental feature of intellectual property protection inherently grants Members freedom to pursue legitimate public policy objectives since many measures to attain those public policy objectives lie outside the scope of intellectual property rights and do not require an exception under the TRIPS Agreement.⁴⁶

This is a prescient statement in light of the panel report in *Australia – Tobacco Plain Packaging*. TRIPS Article 16.1 sets out the negative right under which trademark owners must be recognized as having the exclusive right to prevent certain unauthorized uses of their trademarks by third parties. This negative right, which does not refer to the use of a trademark by its owner, is not infringed by measures restricting or prohibiting the use of trademarks on tobacco packaging. This is the position irrespective of the public policy objective which informed the measures. The provision also ‘does not imply a trademark owner’s right to maintain or develop distinctiveness of a trademark or constitute a general obligation for Members to refrain from taking regulatory measures that may negatively affect the distinctiveness of trademarks’.⁴⁷ Rather, Article 16.1 is infringed if domestic law fails to provide the trademark owner with the right to challenge and prevent certain activities by unauthorized third parties.⁴⁸

In contrast, TRIPS Article 20 recognizes the entitlement of ‘[t]he use of a trademark in the course of trade’. It is clear that such an entitlement could be infringed by plain packaging legislation. Therefore, we would not expect a violation to be confirmed without consideration of regulatory context, whether within Article 20 itself or under an exceptions provision. The former possibility applies under Article

⁴⁴ This position of allowing states to invoke at least the policy objectives envisaged in the TRIPS can be found in the academic literature. See, Graeme B. Dinwoodie & Rochelle C. Dreyfus, *A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime* (2012) at 102.

⁴⁵ *EC – Trademarks / GIs* (above n 24, para 7.207). It is unclear what the EC had in mind here although, as respondent state, it is reasonable to suppose that it was arguing in favour of a GATT Article XX like analysis within TRIPS Article 3.1.

⁴⁶ *Ibid* para. 7.210.

⁴⁷ Panel Report, *Australia – Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging*, WT/DS435,441,458,467/R, adopted 27 August 2019, para 7.2402 (*Australia – Tobacco Plain Packaging*) para 7.2038.

⁴⁸ *Ibid*, para 7.1978.

20 which is infringed only when the use is ‘unjustifiably encumbered by special requirements’. The term ‘unjustifiably’ led the panel to undertake an analysis strongly resembling aspects of GATT Article XX and TBT Article 2.2.⁴⁹

It follows that the reasoning in the quoted passage from *EC – Trade Marks / GIs* is compelling when applied in the context of negative rights under the TRIPS, but it cannot be used to deny the availability of a GATT Article XX like analysis under Article 3.1. The passage is carefully qualified. The TRIPS does not ‘generally’ provide for positive rights, but sometimes it does. While ‘many’ measures to attain public policy goals lie outside the scope of intellectual property rights, some measure lie within this scope. The main right at issue in this article is a case in point. Under TRIPS Article 28.2, patent owners must have the positive right to conclude licensing contracts and this right must be available consistently with the national treatment obligation of TRIPS Article 3.1. When the principles of treaty interpretation are applied, which require the taking into account of context and object and purpose, the meaning which emerges is that this right is only infringed if there is disparate impact in relation to the scope of its availability which cannot be explained exclusively with reference to the public policy objectives explicitly envisaged in the TRIPS.

3. Applying the proposed test

As indicated above, it is unlikely that the established disparate impact would withstand scrutiny under what has now been proposed as the final stage of analysis under the TRIPS Article 3.1 TNLF standard. Within this final stage, there would be three considerations. First, the regulatory objectives of the challenged measures would need to be established. The second question is whether these objectives resonate sufficiently with those envisaged in the TRIPS. Thirdly, it would need to be determined whether the disparate impact can be explained *exclusively* with reference to an objective which, by this stage of the analysis, would be accepted as legitimate under the TRIPS.

It is not known what policy objectives China might have invoked in order to explain the detrimental impact caused by the difference between the Contract Law and the TIER. Some limited guidance may be drawn from the Section 301 investigation which refers to the TIER as necessary to ‘safeguard the legitimate rights and interests of the licensees who have a weak position in international technology transfer negotiations’.⁵⁰ For ease of exposition, it will be supposed both that this policy objective might have been accepted as the true objective of the TIER⁵¹ and that this objective might have been accepted as legitimate under the TRIPS.⁵²

A more definite position can be offered on the third test. The conclusion here would inevitably be that the disparate impact reflects discrimination rather than the exclusive pursuit of a legitimate objective. The regulatory distinction which creates the disparate impact is between technology transfer within China and transfer from outside of China. The problem is that imbalanced licensing contracts could be present and absent on both sides of the regulatory distinction. The distinction is therefore overly blunt. It results in false positives, in the sense of catching some transactions involving no imbalance, and false negatives, in the sense of failing to catch some transactions which do involve an imbalance. Put differently, the distinction would only be acceptable if all technology transfers from outside of China into China involved an imbalance, while no technology transfer within China involved an imbalance.

⁴⁹ Ibid, paras 7.2957 – 7.2958.

⁵⁰ United States Trade Representative, Findings of the Investigation into China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 Of The Trade Act Of 1974, 22 March 2018, p 55.

⁵¹ The Appellate Body has clarified that it is for panels to make an independent assessment of the proposed objective of challenged measures. Appellate Body Report, *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/AB/R, adopted 13 June 2012 para 314.

⁵² The objective of avoiding imbalanced licensing contracts does seem to resonate with several TRIPS provisions including Articles 8.2 and 40.2 which are provided in Section V(B).

In *US – Tuna II (Mexico)*, the ideas of ‘calibration’ and ‘even-handedness’ can be seen as involving the detection and assessment of false positives and negatives. Eligibility for the dolphin safe label was insufficiently calibrated to the risk that dolphins may be harmed when tuna is caught. While the measure responded strongly to this risk when arising from setting on dolphins in the eastern tropical Pacific (a true positive), it did not address this risk when arising from other fishing methods outside this region (a false negative). The measure was not therefore even-handed as between different fishing methods and locations.⁵³ Similarly, in *EC – Seal Products*, there was ‘arbitrary or unjustifiable discrimination’ contrary to the chapeau of GATT Article XX, by reason of a false negative. The regulatory distinction here was between seal products derived from commercial hunts from Canada and Norway, which were banned, and seal products from Inuit Community (IC) hunts in Greenland, which were permitted to be placed on the EU market.⁵⁴ Under the chapeau, there was, in effect, a false negative caused by insufficient regulatory concern for seal welfare arising from IC hunts.⁵⁵ This meant that the regulatory distinction could not be sufficiently reconciled with the policy objective of public morals. It is interesting that the search for false positives and negatives provides a means of understanding and reconciling the analysis which is effectively occurring under formally different treaty language in TBT Article 2.1 and the chapeau of GATT Article XX. This observation strengthens the view that the same approach should apply under the same treaty language – TNLF under TBT Article 2.1 and TRIPS Article 3.1.

To conclude, the TRIPS requires that patent owners must have the right to conclude licensing contracts without discrimination between national and non-national patent owners. It is reasonably clear that China’s different treatment of grantback clauses in the TIER and Contract Law was not in conformity with this obligation.

D. National treatment – China’s revised regulation

Staying with TRIPS Article 3.1, the analysis now moves to China’s current treatment of grantbacks. Now that Article 27 of the TIER has been removed, grantbacks are subject only to the Contract Law both when the contract involves a transfer from outside of China, and internal transfers. The main point here is the move away from the possibility of an ‘as such’ challenge, at least when this concept is understood in its traditional sense as directed against the law itself. This is because the treatment of grantbacks is now subject to one written instrument which is not on its face, or via its inherent operation in practice, more burdensome for non-nationals. In particular, the Contract Law does not operate on the basis of close substitute criteria for nationality. However, the Contract Law does provide for the exercise of discretion in the review of grantback clauses, and it is possible that this process could be tainted with nationality based considerations.

Traditionally in the trade law *acquis*, a challenge here would be against the law ‘as applied’ in an individual instance. In the event of a successful claim, the individual application of the law is confirmed as a violation, while leaving intact the law itself. This could be a satisfactory outcome, at least in terms of obtaining a confirmation that a violation has occurred, rather than obtaining a retrospective remedy. An example might be when a grantback is disallowed explicitly on the basis that the licensor is a non-national – in other words an isolated case in which what ought to have been an objective assessment has clearly been tainted with nationality-based considerations. In contrast, the ‘as applied’ challenge is less satisfactory when there is a consistent pattern of behaviour in the application of national laws, which calls into question whether non-nationals are systematically being treated less favourably than nationals. There may well be a desire to address this pattern of behaviour directly, rather than for each and every instance of its manifestation. This limitation of the ‘as applied’ challenge has led the Appellate Body both to broaden the understanding of the ‘as such’ challenge and to clarify that the

⁵³ Appellate Body Report, *US – Tuna II (Mexico)* above n 51 para 297.

⁵⁴ Appellate Body Report, *European Communities – Measures Affecting the Importation and Marketing of Seal Products*, WT/DS400,401/AB/R, adopted 18 June 2014, para 5.316.

⁵⁵ *Ibid*, para 5.320.

types of measures subject to challenge are not exhaustively identified by the ‘as such’ / ‘as applied’ distinction.

In *US – Zeroing (EC)*,⁵⁶ the Appellate Body recognized that ‘as such’ claims are not limited to rules or norms expressed in writing. They are also available, in principle, for unwritten rules such as the lines of computer code in software used for anti-dumping calculations. The criteria for establishing the existence of an unwritten rule or norm capable of challenge on an ‘as such’ basis are no different to those applying to written rules or norms. The complainant must establish that the rule or norm is attributable to the responding member, its precise content, and that the rule or norm has general and prospective application.⁵⁷ The difference, of course, is that the second and third elements here will often be substantially more difficult to satisfy in relation to unwritten measures.⁵⁸ This problem did not arise in the case itself by reason of the nature of the unwritten measure at issue. The lines of computer code were a constant feature, which had in all instances and over an extended period, excluded ‘comparison results with negative margins in the numerator of the dumping margin’.⁵⁹ In contrast, real and pronounced difficulties are far more likely to be encountered for alleged unwritten measures in the form of a hidden policy to disallow grantback clauses in transfers involving non-nationals. As noted by the Appellate Body, the existence of unwritten rules or norms should not be lightly assumed.⁶⁰ Evidence of the ‘systematic application’ of the alleged rule or norm will be of high relevance here.⁶¹

Formally, the tests above only establish the existence of a measure susceptible to an ‘as such’ challenge. In practice, however, satisfying these tests would also go some way towards establishing a TRIPS Article 3.1 violation. It is clearly of relevance here to establish that grantback clauses are systematically disallowed in transfers involving non-nationals. However, this would only amount to the disparate impact required for a national treatment violation to the extent that use of grantback clauses by national licensors is permitted. A panel would need to be satisfied that non-nationals disproportionately encounter the less favourable treatment (grantbacks disallowed) relative to nationals, and regulatory context would then need to be considered.

As indicated, the further doctrinal development is the recognition in *US – Continued Zeroing* that the ‘as such’ / ‘as applied’ distinction does not govern and exhaust the definition of measures capable of challenge in WTO dispute settlement.⁶² Members enjoy discretion in how to describe the measure being challenged with the only ultimate requirement being that it is an act or omission attributable to another member.⁶³ In turn, the manner in which the measure is characterized bears upon the evidence which is relevant to proving the existence of the measure. Thus, going back a step, if the measure is characterized as a written or unwritten rule or norm of general and prospective application, this characterization also provides the key test for the existence of the measure – the idea of general and prospective application. In contrast, if a member chooses not to describe a measure as having general and prospective application, this will not be a factor in determining the existence of the measure. The Appellate Body has signalled that some elements are of a universal nature. It will always be necessary to establish attribution and the precise content of the measure.⁶⁴ In contrast, any further elements depend on how

⁵⁶ Appellate Body Report, *United States – Laws, Regulations for Calculating Dumping Margins (‘Zeroing’)*, WT/DS294/AB/R, adopted 9 May 2006.

⁵⁷ *Ibid*, para198.

⁵⁸ See, CheriseValles, VitaliyPogoretskyy, TatianaYanguas ‘Challenging Unwritten Measures in the World Trade Organization: The Need for Clear Legal Standards’ 22 *Journal of International Economic Law* (2019) 459 at 460.

⁵⁹ *US – Zeroing*, above n 56, para 199.

⁶⁰ *Ibid*, para196.

⁶¹ *Ibid*, para198.

⁶² Appellate Body Report, *United States – Continued Existence and Application of Zeroing Methodology*, WT/DS350/AB/R, adopted 19 February 2009, para 179.

⁶³ Appellate Body Report, *United States – Sunset Review of Anti-Dumping Duties on Corrosion-Resistant Carbon Steel Flat Products from Japan*, WT/DS244/AB/R, adopted 9 January 2004, para 81.

⁶⁴ Appellate Body Report, *Argentina – Measures Affecting the Importation of Goods*, WT/DS438,444,445/AB/R, adopted 26 January 2015, para 5.108.

the measure is described. In the example of a written or unwritten measure involving ‘ongoing conduct’, the Appellate Body has identified the further element as ‘evidence of its repeated application, and the likelihood that such conduct will continue’.⁶⁵

It will be a challenge to conceptualize this development. It is difficult to see how a measure involving ‘ongoing conduct’ is anything other than an interchangeable way of describing a measure involving ‘general and prospective application’. It may be that what the Appellate Body recognized in *US – Continued Zeroing* is the possibility of aggregating a number of individual ‘as applied’ claims into one complaint, thereby enabling an efficient tightening of the net in relation to zeroing at different points in the life-cycle of an anti-dumping measure.

In sum, the main point here is the increased evidential burden for establishing the existence and content of alleged measures which find no expression in laws, or regulations, or in the individual discretionary decisions of state officials – in the present context an unwritten policy to systematically reject grantback clauses in transfers involving non-nationals. It is also difficult in a national treatment analysis to keep separate the existence and content of the measure, from the question of whether the measure amounts to a violation. As indicated, establishing that grantback clauses are systematically disallowed in transfers involving non-nationals is the first step in establishing a violation. In order to establish disparate impact, it would then need to be established that non-nationals disproportionately encounter this less favourable treatment compared to nationals.

Finally, the coverage of regulatory context above can be briefly revisited. A definite conclusion was previously offered in relation to the different treatment of grantbacks in the TIER and the Contract Law. The disparate impact here could not possibly be exonerated with reference to the objective of preventing unfair and imbalanced licensing contracts due to the regulatory distinction resulting in false positives and negatives. In the different context of a single set of rules under the Contract Law involving the exercise of discretion in individual cases, there would be scope for filtering out these false positives and negatives. It is at least possible that true positives might be more likely in contracts involving a non-national than in contracts involving nationals. The key point is that regulatory context must be part of the TRIPS national treatment analysis if raised by a respondent. Disparate impact, even if pronounced, is not enough in itself to establish a violation.

IV. TRIPS DISCIPLINES ON THE REGULATION OF TECHNOLOGY LICENSING – BEYOND NATIONAL TREATMENT

The question here is the extent to which the TRIPS embodies a requirement for commercial freedom in technology transfers, or, conversely, the extent to which government intervention is required or permitted. Consideration is first given to the background against which the relevant TRIPS provisions were developed and now operate in order to establish the shift to an area of low consensus. The analysis then turns to the relevant provisions. It is argued that they are correctly interpreted as affording a high, but not unbounded, level of flexibility towards national legal systems.

A. Background considerations – Absence of stable international consensus

Before turning to the relevant TRIPS provisions, attention is first given to the background against which they were developed and now operate. There is no stable international agreement on the optimal extent of regulation of potentially anti-competitive practices in licensing. The absence of consensus is illustrated below at both a macro and micro level. At the macro level, the unadopted UNCTAD Draft Code⁶⁶ represented a failure to reconcile the positions of developed and developing countries in this area. As will be explained, it was understood by the time of the TRIPS negotiations that a firm common

⁶⁵ Ibid.

⁶⁶ See Section 1.

agreed position could not be achieved, thereby affirming ‘residual sovereignty’.⁶⁷ At the micro level, an example of an about-turn in the EU’s internal rules is offered in the direction of a tightening of control over grantback clauses.

1. From the unadopted UNCTAD Draft Code to the TRIPS

The unadopted UNCTAD Draft Code was referred to above with reference to the definition of grantbacks and clauses restricting improvements by the licensee. As noted, developing countries generally preferred more expansive and less qualified definitions of potentially anti-competitive licensing conditions. In addition, it may be noted that there was no agreement on how these practices should be regulated.⁶⁸ The contentious nature of the legal status of any international instrument on technology transfer was understood at an early stage of the UNCTAD negotiations. The matter was effectively deferred in 1976 with drafting of the code to proceed ‘without prejudice to its legal nature’ and decided upon by UNCTAD when it received a text for consideration.⁶⁹ Almost a decade later, the criteria for the application of restrictive business practices was identified by an UNCITRAL report as an outstanding issue.⁷⁰ The narrative here is unclear on whether any negotiating group called for the *per se* unacceptability of the listed practices, or whether there was agreement that case by case assessment would always or generally be required.⁷¹ Any such agreement would have amounted to a softening in the position of the Group of 77 countries.⁷²

The TRIPS negotiations presented a new opportunity for establishing international rules on the control of intellectual property related anti-competitive practices. Developed countries were disinclined to revisit this matter⁷³ indicating they must have viewed the area as falling within their residual sovereignty. In contrast, developing countries sought explicit recognition of this residual sovereignty and wished to see it specified in broad terms. In particular, they sought recognition of the permissibility of a *per se* approach towards certain practices, which would be deemed to be inherently unacceptable.⁷⁴ There is a subtle but significant movement here away from the earlier failed UNCTAD negotiations. There is no longer an attempt by developing countries to establish an international instrument setting out practices which are prohibited on a *per se* basis. Rather, the more limited ambition in the TRIPS negotiations was to enshrine a discretion for individual states to adopt a *per se* approach in their domestic legislation. This movement narrowed the scope of disagreement between developed and developing countries. By the TRIPS negotiations, there was broad agreement that the control of anti-competitive licensing

⁶⁷ This term is used by J. H. Reichman and David Lange, ‘Bargaining around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions’, 9 *Duke Journal of Comparative and International Law* 11(1998) at 22.

⁶⁸ The most relevant provision here is in Chapter 2 which identifies the ninth objective of the Draft Code as being: ‘To specify restrictive [business] practices from which parties to technology transfer transactions [shall] [should] refrain.’

⁶⁹ Davidow and Chiles detail several decisions to this effect. Joel Davidow and Lisa Chiles, ‘The United States and the Issue of the Binding or Voluntary Nature of International Codes of Conduct Regarding Restrictive Business Practices’, 72 *American Journal of International Law* (1978) 247 at 252-253.

⁷⁰ Legal Aspects of Technology Transfer: Current Activities of the International Organizations Within the United Nations System, UNCITRAL A/CN.9/269, 14 March 1985.

⁷¹ *Ibid.* This ambivalence is evident in para 27.

⁷² The Draft Code of 1985 was preceded by separate instruments drafted by developed countries and the Group of 77. The latter instrument envisaged a *per se* prohibition against non-reciprocal grantback clauses. Draft Texts Submitted to the Intergovernmental Group of Experts on an International Code of Conduct on Transfer of Technology, 17 I.L.M. 453 (1978), Annex II, Chapter IV.

⁷³ *Resource Book on TRIPS and Development: An Authoritative and practical guide to the TRIPS Agreement by UNCTAD and ICTSD* (2005) (UNCTAD Resource Book) at p 543.

⁷⁴ Gervais refers to the original draft text in the 1990 Brussels draft as having been submitted by a group of developing countries. Daniel Gervais, *The TRIPS Agreement: Drafting History and Analysis* (2008) at p 552. Article 40 paragraph 2B of this draft provided: ‘PARTIES may specify in their legislation licensing practices or conditions that may be *deemed* to constitute an abuse of intellectual property rights or to have an adverse effect on competition in the relevant market ...’ (emphasis added). The term ‘deemed’ is used a further two times in the provision and provides a clear indication of the desired permissibility of a *per se* approach.

conditions is a matter for individual states. The only disagreement pertained to how much the TRIPS should limit the exercise of residual sovereignty in this area by, for example, prohibiting a *per se* approach.

The extent to which this disagreement is resolved in the TRIPS is considered in the next section. However, the point here is that the absence of a stable consensus on regulating anti-competitive licensing practices is reflected in the lack of any attempt in the TRIPS negotiations to establish a list of practices which all signatories would recognize as inherently problematic on a *per se* basis. At the micro level, the evolution of the EU's internal rules indicates that consensus achieved within jurisdictions can be ephemeral, indicating a need for international rules to preserve room for manoeuvre.

2. Evolution of EU rules

As between the current and previous Commission Regulations⁷⁵ on the application of the so called 'block-exemption', there has been a tightening of the level of scrutiny over exclusive grantback clauses. The previous 2004 Regulation (in common with its predecessor⁷⁶) distinguished between severable and non-severable improvements; terms which conveyed the idea of whether the improvement could, or could not, be exploited without infringing upon the licensed technology. Exclusive grantbacks in relation to severable improvements were within the category of 'excluded restrictions' – those outside of the block exemption and requiring individual assessment. In contrast, exclusive grantbacks in relation to non-severable improvements were within the block exemption. This was explained by the accompanying Commission Guidelines as if there was a self-evident and immutable position here. These clauses were 'not restrictive of competition ... since non-severable improvements ... [could not] be exploited ... without the licensor's permission'.⁷⁷ It is therefore surprising that the distinction between severable and non-severable improvements, as well as any reference to these terms, was removed by the current Regulation without explanation in the revised Guidelines.⁷⁸ Exclusive grantbacks in relation to all of the licensee's improvements are now excluded restrictions requiring individual assessment. This amounts to a narrowing of the block exemption and a tightening of the control over exclusive grantback clauses.

The rationale for this change sheds light on how new understandings can modify apparently firmly established positions. It appears to be provided in a study prepared for the Commission.⁷⁹ The authors consider interactions between the licensor and licensee likely to occur in the absence of a grantback clause in relation to a non-severable improvement. They envisage the possibility of bargaining leading to 'an agreement that splits the total surplus to be gained from using the new knowledge between licensee and licensor'.⁸⁰ This would enable the licensee to gain a return even for non-severable innovation. This possibility, along with the incentive to innovate, is much diminished in the presence of a grantback clause 'without a properly specified – and enforceable – *quid pro quo*'. The authors therefore call into question the common reasoning, as found in the Commission's 2004 Guidelines, under which 'the licensor "controls the use of non-severable improvements anyway" so that there is

⁷⁵ Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements (2004/L123/11); Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements (2014/L93/17).

⁷⁶ Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 85 (3) of the Treaty to certain categories of technology transfer agreements (1996/L31/02).

⁷⁷ Commission Notice — Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements (2004/C 101/02), para 109.

⁷⁸ Communication From the Commission - Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements (2014/C 89/03).

⁷⁹ Pierre Regibeau and Katharine Rockett, 'Assessment of Potential Anticompetitive Conduct in the Field of Intellectual Property Rights and Assessment of the Interplay Between Competition Policy and IPR Protection', COMP/2010/16, Nov 2011.

⁸⁰ *Ibid*, p 50.

nothing to worry about in such a case'.⁸¹ In relation to grantback clauses in general, the authors question the strength of the traditional arguments in favour of their use and suggest that the extent of regulation here might be 'too lenient'.⁸²

The absence of stable consensus is a common theme in the academic literature, both at the level of individual jurisdictions and as between jurisdictions. Gu detects a pendulum effect at work in the US in terms of the intensity of scrutiny of IP rights under antitrust disciplines.⁸³ It is interesting that he identifies the high point of this scrutiny with the Department of Justice's 'Nine No-No's' dating from the 1970's, comprising licensing practices considered to be 'unlawful in virtually every context'; the second of these being to require a licensee to assign back subsequent patents.⁸⁴ New economic learning led to the demise of the 'Nine No-Nos' which, in 1981, were renounced as containing 'more error than accuracy'.⁸⁵ Reichman and Lange write of varying levels of protection available to foreign rights holders as between one intellectual property subculture to another when 'second-comers borrow from pre-existing innovations'.⁸⁶ They consider it unlikely that the Appellate Body would interfere with exercises of residual sovereignty 'except when the end result appears clearly to contradict an express provision of the TRIPS Agreement'.⁸⁷ This is an appropriate threshold for Appellate Body intervention bearing in mind the background against which the relevant provisions were developed and now operate. The analysis now turns to these provisions.

B. Interpreting the relevant TRIPS provisions

It is argued here that China's outgoing *per se* prohibition of grantback clauses under the TIER amounted to a TRIPS breach over and above the Article 3.1 national treatment violation. However, it is also argued that the threshold for states to show that they have applied something other than a *per se* approach is a low one. The Supreme Court guidance under the Contract Law strongly indicates that this threshold has been exceeded, and the regulatory trajectory indicated by the draft Anti-Monopoly Guidelines strengthens this impression.

The most relevant TRIPS provisions are as follows:

Article 8

Principles

2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.

⁸¹ Ibid.

⁸² Ibid, p 51.

⁸³ Minkang Gu, 'Anti-Abuse of Intellectual Property Rights Under The Anti-Monopoly Law: China's Approaches' 10 *Frontiers of Law in China* (2015) 488 at 497-499.

⁸⁴ Ibid, p 498. This automatic illegality and its substitution with an approach which evaluates the competition based effects of grantbacks is similarly referred to in 'To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy: A Report by the Federal Trade Commission', October 2003, p 7 and pp 14-23, available at: <https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf> (visited 9 January 2020).

⁸⁵ Abbott B. Lipsky, Jr., 'Current Antitrust Division Views on Patent Licensing Practices', 50 *Antitrust Law Journal* (1981) 515, at pp 517-24, cited in the FTC Report *ibid*, at p 22.

⁸⁶ Jerome H. Reichman and David Lange, 'Bargaining around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions', 9 *Duke Journal of Comparative and International Law* (1998) 11 at p 21.

⁸⁷ Ibid, p 22.

SECTION 8: CONTROL OF ANTI-COMPETITIVE PRACTICES IN CONTRACTUAL LICENCES

Article 40

1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.

2. Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member.

...

1. Is government intervention required or merely permitted?

These provisions clearly do not require complete freedom of contract in technology licensing. On the contrary, regulatory intervention to address anti-competitive practices is, at the very least, permitted or, in the language of Article 8.2, 'may be needed'. The UNCTAD Resource Book on TRIPS goes further than this to argue that states are required to act against anti-competitive practices.⁸⁸ This position is based in part on a comparison between the language in Articles 8.2 and 40.1. According to the Resource Book, the 'may be needed' language in Article 8.2 leaves members with discretion over whether or not to act. In contrast, the agreement of members referred to in Article 40.1 to the effect that there exist certain problematic and unacceptable licensing conditions, is taken to indicate that regulatory intervention is required.

It is difficult to agree with this position. What members have agreed on under Article 40.1 is of an extremely limited nature – no more than a recognition of possible tension between intellectual property rights and competition in the field of technology licensing. There is no agreement even on which licensing practices should be addressed. As stated in Article 40.2, this is left to 'the relevant laws and regulations' of individual members. As covered above, regulatory approaches vary as between different groups of states and evolve over time. The 'may adopt' language in Article 40.2 also reflects the 'may be needed' language in Article 8.2 indicating no more than that regulatory intervention is permitted. Institutional capacity is also relevant here. It is difficult to accept that states with weak capacity, which have not embarked upon the task of regulating potentially anti-competitive practices in technology licensing, are in breach of the TRIPS. Moreover, the question may be of limited practical importance. A challenge to the absence of national regulation in WTO dispute settlement seems remote. This would involve a complainant state taking up the cause of licensees in other states, who are insufficiently protected by their national legislation from the market power of licensors from the complainant state. As the complaints against China demonstrate, the focus is more on the presence of regulation, which may be discriminatory, and is perceived to overly interfere with contractual freedom.

2. Are per se prohibitions permitted?

The next question is therefore the extent to which the TRIPS imposes limitations on states which choose to regulate in this area. Article 40.2 is the most relevant provision here.

⁸⁸ UNCTAD Resource Book, above n 72, pp 554-555.

As noted above,⁸⁹ the draft text preferred by developing countries referred to members being able to specify licensing conditions that may be deemed to be unacceptable on a *per se* basis. This high level of discretion has been reduced by the use of the phrase ‘in particular cases’ which suggests that individual assessment of potentially problematic licensing conditions on a case by case basis is always required. There are possible textual arguments to the effect that this amounts to a misreading of the phrase ‘in particular cases’. As will be explained however, these arguments must be rejected on the basis that they reduce the phrase to a tautology, thereby rendering it redundant and inutile.⁹⁰

The phrase ‘in particular cases’ could be interpreted as referring not to individual instances of the use of a licensing condition, but rather to the particular cases non-exhaustively exemplified in the second sentence of Article 40.2. This is not entirely far-fetched as the meaning given to a phrase in Article 40.2 first sentence is informed by the immediate context provided by the second sentence. Also, this would result in a different meaning to that preferred by developing countries and rejected by developed countries. The provision would be compatible both with a *per se* approach, and with individual assessment rather than only expressly authorizing a *per se* approach. However, this very same overall meaning could have been achieved by omitting the phrase ‘in particular cases’. Therefore, if the phrase is interpreted as something other than a tautology,⁹¹ it cannot be read as referring to the non-exhaustive examples in the second sentence. This is confirmed by the identification of these examples as ‘practices’ in the second sentence, corresponding, therefore, with ‘practices or conditions’, rather than ‘particular cases’ in the first sentence.

A further textual argument must be rejected on the same basis. The phrase ‘in particular cases’ might be read as referring to anything from one individual case of the use of a grantback clause to all such cases. In support of this interpretation, it could be argued that the alternative phrase ‘in a particular case’ could have been used to more strongly signal that individual assessment is always required. Moreover, the second sentence uses the phrase ‘prevent or control’; the term ‘prevent’ arguably indicating *per se* prohibition. On this interpretation, Article 40.2 would be compatible with both a *per se* approach and individual assessment. Again, however, this would be the meaning of the provision without the phrase ‘in particular cases’, so that accepting this interpretation would reduce it to a tautology.

3. *What rigour and depth of individual assessment is required?*

It must therefore be accepted that Article 40.2 mandates individual assessment on a case by case basis. The question then pertains to what is required by way of the rigour and depth of the assessment. It is submitted that there are compelling reasons for maintaining a high degree of flexibility for members. For a number of reasons, demonstrating that something other than a *per se* approach has been applied should not be onerous.

First, a different interpretation would call into question the TRIPS compatibility of highly developed regulatory systems such as that maintained by the EU. If TRIPS Article 40.2 did not permit the regulation of certain practices and conditions with reference to a pre-established and firm rule, under

⁸⁹ See Section V(A)(1) .

⁹⁰ WTO Members have extensively raised redundancy and inutilty arguments. It is more common for these arguments to be raised across different provisions, sometimes within different agreements, than within the same provision. For an example of the latter, see Appellate Body Report, *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*, WT/DS431,432,433/AB/R adopted 29 August 2014, para. 2.225. The arguments usually fail on the basis that harmonious interpretation is possible. For an example of a successful argument to the effect that certain provisions within the Agreement on Agriculture cannot be read so as to render inutile provisions of the GATT, see Appellate Body Report, *Indonesia – Importation of Horticultural Products, Animals and Animal Products*, WT/DS477/AB/R adopted 22 November 2017, para 17.

⁹¹ The UNCTAD Resource Book (above n 73, p 559) also refers to the phrase ‘in particular cases’ as a tautology. However, this is in connection with the different point that abusive conditions necessarily and self-evidently occur only in individual cases.

which the competition based effects have been determined *ex ante*, the hardcore restrictions⁹² in the EU's technology transfer Regulation might not be permissible. In common with China's draft Anti-Monopoly Guidelines,⁹³ the first of these hardcore restrictions covers 'the restriction of a party's ability to determine its prices ...'.⁹⁴ While China's Guidelines presently go no further than setting out this prohibition (a purely *per se* approach), the EU Commission Guidelines provide the impression of a reasonably definite position, subject to possible limited exceptions.⁹⁵ It would be excessive to require this level of nuance under TRIPS Article 40.2. The Appellate Body should take into account institutional capacity and the level of regulatory experience. It is not realistic to expect members in general to introduce regulatory systems which, from the outset, approximate the level of sophistication of systems which are the product of decades of development and refinement. This is especially so bearing in mind that significant divergences can be found between these systems.⁹⁶

Within the principles of treaty interpretation, the national law and practice relating to the control of anti-competitive licensing practices is potentially relevant under VCLT Article 32 as Supplementary Means of Interpretation. A potential barrier here may be that Article 32 refers to 'supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion'. It can be argued that the expressly identified supplementary means are directly referable to the treaty itself, unlike the national law at issue here which may well have a much less direct connection with the TRIPS – it may pre-date the TRIPS or may have been amended or enacted without TRIPS having been directly in mind. It is submitted, however, that even such national law and practice should be admitted as supplementary means under Article 32. This is because TRIPS Article 40.2 itself refers to national law and regulation. It is therefore entirely natural that this experience should inform the meaning of the provision. The further limitation relates to the circumstances in which recourse may be had to supplementary means. One possibility here is where 'the interpretation according to article 31, [I]eaves the meaning ambiguous or obscure'. Article 40.2 is at the very least ambiguous on the rigour and depth of the required individual assessments. Recourse to national law and practice as supplementary means here is extremely helpful. It will reveal divergent positions on exactly which licensing practices are the most problematic and how they should be regulated.

The provision cannot, therefore, be interpreted as requiring any particular depth and rigour of assessment. However, state discretion here also cannot be completely unbounded. It must be exercised in accordance with the consistency requirement within Article 40.2.

4. The Article 40.2 consistency requirement

Article 40.2 requires that all measures must be consistent 'with the other provisions of this Agreement'. This requirement can be understood in two senses. Most obviously in the context of this article, other provisions such as the Article 3.1 national treatment obligation must be met. Before commenting on this, it is notable that the UNCTAD Resource Book views the consistency requirement in the more abstract light of ensuring that competition rules are not extended and applied in such a manner as to interfere with the normal protection of intellectual property rights.⁹⁷ A high threshold for determining that members have departed from this standard is suggested: 'It is ... the systematic development of

⁹² The Commission Guidelines (above, n 78) clarify that hardcore restrictions result in the entire agreement falling outside of the block exemption without the possibility of severing the restriction from the rest of the agreement (para 95).

⁹³ Guidelines (above, n 20) Chapter 2.

⁹⁴ Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements (2014/L93/17), Article 4(1)(a).

⁹⁵ Commission Guidelines (above, n 78) paras 18, 94, 99 and 102.

⁹⁶ The UNCTAD Resource Book (above, n 73) contrasts the treatment of no-challenge clauses in the US and Germany before remarking that, 'even the clauses listed as examples by the second sentence of Article 40.2 are not necessarily good examples of bad clauses' (pp 559-560).

⁹⁷ *Ibid*, p 543.

national competition law as a general curtailment of intellectual property protection (as required by TRIPS) that the consistency requirement is intended to prevent.’⁹⁸ The Resource Book does not comment on the justiciability of this meaning, or on how it should be operationalized in practice. It can be suggested that there is a role for panels and the Appellate Body here when they encounter *per se* prohibitions without any accompanying explanation of the gravity of the competition based concerns. Without such explanation, there might be insufficient evidence that consideration has been given to locating the balance between sometimes conflicting interests and values. This would merely be a check for a clearly expressed regulatory rationale, rather than a review of exactly where the balance has been located. The lack of need for a more rigorous review is suggested by the first meaning ascribed to the consistency requirement above.

Consistency in the sense of compliance with the Article 3.1 national treatment requirement is among the control mechanisms at work in this area, which mean that strong oversight via dispute settlement is not required. The need to remove discrimination focuses the collective regulatory mind. The question is no longer about the treatment to be accorded overwhelmingly to non-national right holders, but rather about the treatment to be accorded to right holders in general. It is possible to downplay the moderating influence of the national treatment obligation. Take a state in which the volume and value of technology licensing is strongly weighted towards transfers from outside. Such a state could have a non-discriminatory technology licensing regime which is favourable for licensees, without this significantly impacting domestic licensors other than in the low volume and value of internal transfers. However, a second control mechanism, which is market based, would operate here. Technology licensing may simply not occur to an acceptable level if the regulation is not sufficiently balanced as between the interests of licensors and licensees.⁹⁹

The combination of these control mechanisms suggests a limited role for judicial oversight beyond checking for discrimination under the first mechanism. The outright prohibition of grantback clauses in the TIER, without any accompanying explanation, would probably have amounted to a breach Article 40.2. However, had China been minded (and if other WTO Members are minded) to maintain a very strict approach towards grantbacks, it is suggested that this breach could have been removed by enacting an explanation of the competition based rationale for this approach. Individual assessment to satisfy Article 40.2 would then occur on a quasi-automatic basis with reference to the enacted explanation, rather than involve a detailed assessment.¹⁰⁰ The individual assessment here need be no more than a statement to confirm that the condition or practice is prohibited. This may seem like a recommendation for permitting a rather blunt approach. However, the message, in particular to developing countries with limited institutional capacity, is that members are permitted (so far as the TRIPS is concerned) to embark upon regulating anti-competitive practices in such a manner. As seen above,¹⁰¹ there is strong evidence from Article 8 of the draft Anti-Monopoly Guidelines that China is moving towards a more nuanced approach – something that can also be expected of other states. It is clear that application of the criteria referred to in Article 8 would satisfy the limited threshold for individual assessment in

⁹⁸ Ibid, p 552.

⁹⁹ It has been reported that the repeal of the TIER provisions was connected as much with increasing the transfer of technology from US and EU firms, as it was with ensuring compliance with the TRIPS. In particular, the TIER restrictions are reported to have resulted in deals being, ‘abandoned when a Chinese company was unwilling to pay the increased costs associated with a foreign company automatically having to issue full indemnity, as well as giving up marketing and improvement rights’. ‘Tempered TIER Tantalises US-China Trade War Thaw’, *Financier World*, August 2019 <https://www.financierworldwide.com/tempered-tier-tantalises-us-china-trade-war-thaw#.XW1LdPBKjIV> (visited 9 January 2020).

¹⁰⁰ On this point, the main text in Gervais’ work (above n 74) insists that, ‘a priori determination ... leading to the automatic imposition of a remedial measure’ is excluded (p 554). However, the accompanying note provides: ‘Of course if a particular behaviour infringes a well-established principle, the determination is almost automatic, but the wording of the Agreement requires a determination that a particular practice is anti-competitive’. Drawing from accounts of the negotiating history, the UNCTAD Resource Book (above n 73) notes that, ‘the industrialized countries conceded that, upon a circumstantial assessment of the effects of a licensing stipulation on competition, illegality may be found in individual cases’ (p 545).

¹⁰¹ Section II.

TRIPS Article 40(2), even though it will likely to be some time until this system resembles the level of sophistication found in the EU. The same can be said of the criteria currently found in Article 329 of the Contract Law and the accompanying Supreme Court guidance.¹⁰²

V. CONCLUSION

This article has considered the application of TRIPS disciplines to the regulation of technology transfer contracts. Particular attention has been given to grantback clauses which speak to the ownership of improvements to licensed technology made by licensees. China's regulation has long been criticized by its major trading partners as overly constraining contractual freedom to reach negotiated outcomes on the rewards and risks in this area. Using the theme of high and low consensus norms, clear conclusions can be offered.

The level and limitations of contractual freedom in technology licensing is subject to one high consensus norm under the TRIPS, being the prohibition on discrimination. Non-national right holders must be treated no less favourably than national right holders in relation to government regulation of technology licensing. However, over and above this high consensus norm, the TRIPS does not significantly constrain state regulation of this area. WTO members are permitted to decide on how best to foster innovation and the dissemination of its outcomes by identifying the point at which the exercise of intellectual property rights tips over into anti-competitive behaviour. The conspicuous absence of a single best answer on the location of this point, means that the relevant TRIPS norms must be interpreted so as to preserve flexibility. WTO members may, if they so wish, prohibit licensing conditions such as grantback clauses, provided that the competition law rationale for the prohibition is articulated and explained. To the extent that this is viewed by some states as the wrong approach, the question becomes whether the failure of historical negotiations should be lamented, and whether further effort should be devoted to developing different and better international rules. China's regulatory trajectory indicates otherwise. Going forward, its non-discriminatory regime does not seek to extend and replicate the prohibition on grantback clauses previously encountered overwhelmingly by non-nationals. At the very least, non-discriminatory regulation can be viewed as genuinely reflecting the position of the regulating state on the intellectual property / competition law interface, even if viewed as sub-optimal by other states.

¹⁰² Ibid.