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The Law of the WTO and the DVD Regional Coding System: The "Fragmentation" of International Trade Law Exemplified

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ABSTRACT

Fragmentation is a powerful phenomenon derived from human thinking, also finding expression in the context of the regulation of international trade under the World Trade Organization (WTO). Trade fragmentation is particularly found in the prevailing conception of international trade law, as being a discipline of public international law, on one hand with nation states as the sole actors of public international law, and, on the other hand, a discipline of private international commercial law with private persons and companies as the central actors. However, important changes to the international business and trading environment, often caused by an unprecedented pace of technological innovation, have occurred which threaten to render this perception not only obsolete but inapt to cope with the most imminent challenges to the regulation of international trade. For instance, as restrictions to trade at state borders are being removed by way of multilateral trade negotiations, increasingly non-tariff barriers in the form of domestic regulation are being erected. Paradoxically, state regulation is not the only source of new restrictions to trade capable of fragmenting the global market. These trade restrictions can also have their origin in the actions of private parties.

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This fragmentation and its inherent dangers is well exemplified in the so-called 'Digital Versatile Disc Regional Coding System (DVD-RCS)' which, for the purpose of the distribution of films on DVDs, divides the world in several different geographical regions to the effect that a movie on a DVD from one region can only be watched on the respective hardware (i.e. a computer or a DVD player) manufactured in the same region. Prima facie, the DVD-RCS appears to stand in stark contrast to the letter and the spirit of the law governing international trade established under the WTO system and to openly constitute a so-called "unnecessary obstacle to international trade." The reasons behind the adoption of the DVD-RCS are discussed and its possible incompatibility with the rules contained in the agreements established under the WTO examined in this article.

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I. Introduction

"In our mental outlook, which begets us in a habit of securing all our conquests by fortifying them and separating them from one another. We divide nation and nation, knowledge and knowledge, man and nature."

Rabindranath Tagore, Sãdhanã (1913).

Over the past centuries, the principle divide et impera ("divide and rule") appears not to have lost its wide appeal as it is believed that by fragmenting the complete picture of reality and breaking it into smaller units, better control and domination is possible. However, what is often forgotten in this context is the impact of fragmentation on the system as an entirety. The gain in control over a smaller constituent might well be offset by a loss in control over the system as a whole, an instance of which is the division of public and private international law based on a perceived domestic and international law dichotomy.2 This divide, based on 'apparently' divergent interests between individual private actors, on one hand and collective society (usually represented by the state) on the other, is largely illusory; in international business it is in truth mostly the sum of private activities and related interests that constitute the public interest. In addition to this divide, there exists a similar struggle between political and economic forces in international cooperation, reflected in the institutional separation between the UN and GATT/WTO system.3 The proliferation of international organisations and

See Maier, H.G., Extraterritorial Jurisdiction at a Crossroads: An Intersection between Public and Private International Law, 76 American Journal of International Law 280 (1982) and Lowenfeld, A., Public Law in the International Arena: Conflict of Laws, International Law, and Some Suggestions for their Interaction, 163 Recueil des Cours 315 (1979).

On the debate on the fragmentation of international law, see generally Dupuy, P.M., A Doctrinal Debate in the Globalisation Era: on the "Fragmentation" of International Law, 1 European Journal of Legal Studies (2007) and Benvenisti, E. & Downs, G.W., The Emperor's New Clothes: Political Economy and the Fragmentation of International Law, 60 Stanford Law Review 595 (2007); see also International Law Commission (ILC), Conclusions of the work of the Study Group on the Fragmentation of International Law: Difficulties arising from the Diversification and Expansion of International Law (2006), available at http://untreaty.un.org/texts/1_9.htm (last visited December 10, 2007).

regulations creates unnecessary duplication of activities and leads to divergent and often inconsistent solutions; the ultimate consequence is thereby the lack of systemic consistency and absence of policy coherence.⁴

This article, in the context of the Digital Versatile Disc Regional Coding System (DVD-RCS), argues that the persistent division between public and private international law and the negative effects of fragmentation constitute the biggest hurdles facing the international trading system today.

DVD-RCS is a system which, for the purpose of a better control of the distribution of films on DVDs, divides the world in different geographical regions to the effect that a movie on a DVD from one region can only be watched on the respective hardware (i.e. a computer or a DVD player) manufactured or distributed and sold in the same region. As such it appears to have a clearly trade restrictive and market distorting effect which will be subjected to a brief legal analysis of the relevant rules under the agreements administered by the World Trade Organization (WTO).

As a starting point, Section II will take the case of a cineaste global consumer, and his experiences with electronic commerce in the global market. Section III provides general information about the DVD-RCS and the possible rationale for the introduction of DVD-RCS and discusses the various arguments put forward in support of it. Section IV addresses some of the more general questions related to the international trading system established under the WTO, such as the legal status of the Agreement Establishing the World Trade Organisation and its characterisation as an international organisation caught between a process of trade liberalisation or one of global market integration. In Section V the DVD-RCS is subjected to a legal analysis in order to establish either its compatibility or incompatibility with trading rules under various special agreements adopted under the aegis of the WTO. The article concludes with suggestions as to possible amendments to the WTO system, which would allow it to better meet the present and future challenges,

See also Hafner, G., Pros and Cons Ensuing From Fragmentation of International Law, 25 Michigan Journal of International Law 849, 849-853 and 858 (2004).

presented by new technological innovations. The critique is largely aimed at the dominant scientific method and its underlying paradigm, which is often too obsessed with specialisation as opposed to a more general analysis.

II. The Consumer and the Global Market: Frustration by Fragmentation?

An evaluation of the DVD RCS system can be aptly illustrated with the experience of the consumer with the same: In the nineties, a cineaste was invited by a friend to see the movie *No te mueras sin decirme adónde vas* (Don't Die Without Telling Me Where You Are Going) in a small local cinema in Vienna. The movie by the Argentinean director Elisco Subiela, became one of his favourite movies, and he was henceforth curious to see more of Mr. Subiela's work. However, it was not till a few years later in Paris, that he could see the second movie. This movie was *El lado oscuro del corazón* (The Dark Side of the Heart), made in 1992.

Since then almost a decade has passed, and important changes have occurred in the trading system, including the trade in films, especially with the progress of digitisation techniques and the proliferation of DVDs. This summer, our cineaste wanted to see the first movie again and therefore checked the Austrian mirror site of www.amazon.com but when he searched for "Eliseo Subiela," only the movie The Dark Side of the Heart appeared to be available in the DVD format. He immediately changed to the global domain of www.amazon.com, hoping to find greater variety there. Fortunately, he found several of Subiela's movies on sale and happily ordered all six movies available in the DVD format. After receiving the DVDs, when he tried playing them on his laptop (bought in Europe), the DVDs could not be played and it was then he realised that the playback of the content of other regions was not permitted by the programme of his laptop.

III. The DVD Regional Coding System (DVD-RCS)

A. The Facts

In general, DVD-RCS, which is also known as 'Regional Playback Control,' forms part of the concept of "Digital Rights Management (DRM)." DRM stands for new control technologies which are used by copyright holders to limit the usage of creative digital content stored on various media. These technologies also allow for the design of new business models based on new modes of distribution of music, movies and other content available in digital form. One such DRM scheme to protect intellectual property rights (IPRs) is the Content Scramble System (CSS) which is aimed at preventing movies from being illegally duplicated. However, it also allows for other restrictive measures, like the DVD Regional Coding System (RCS) system. Both, the CSS and the DVD-RCS have their origin in a licensing agreement administered by the DVD Copy Control Association (DVD CCA), which is said to be necessary in order to release copyrighted content into the market.

Hence, it is for the distribution of films on DVDs that the DVD-RCS divides the world in different geographical regions, to the effect that a movie on a DVD from one region can only be watched on hardware (i.e. a computer or a DVD player) set to the same region, unless one uses a multi-region DVD player. Thus, in this system, hardware and the content on the carrier are tied to one region. Some computers allow for a change of the regional coding setup up to five times before finally setting the coding to the region chosen last. It is also pertinent to note that the regions do not correspond to the geographically homogeneous areas or regional / continental considerations.

See generally Handler, D.A., The Copyright & Digital Mismanagement Chasm: Fair Use Implications of Digital Rights Management Technologies upon the Digital Versatile Disk Medium, 7 WAKE FOREST INTELLECTUAL PROPERTY LAW JOURNAL 173, 179-184 (2007).

This is a "not-for-profit corporation with responsibility for licensing CSS (Content Scramble System) to manufacturers of DVD hardware, discs and related products..." The license agreement includes several industries, such as the owners and manufacturer of the content of DVDs, creators of encryption engines, hardware and software decrypters, and manufacturers of DVD Players and DVD-ROM drives. See the homepage of the DVD Copy Control Association (DVD CCA), available at http://www.dvdcca.org/.html (last visited December 7, 2007).

The unscientific classification may, for instance, create a situation where a citizen of French Guiana cannot buy a DVD in a neighbouring country and play it on a DVD player sold in his territory. The same is true between Mainland China and Hong Kong, Macau and Taiwan, or between various North African Countries. Most of all, it punishes every traveler or tourist who purchases a legal copy of a DVD abroad and who subsequently will find out that s/he will not be able to play the discs on her/his DVD players upon her/his return home.

Additionally, different standards of video formatting such as such as PAL (Phase Alternating Line), SECAM (Séquentiel Couleur avec Mémoire) and NTSC (National Television System Committee); further reduce the accessibility of the content across regions. All the three systems, which are used in different parts of the world and do not correspond to the fragmentation by regional coding systems, are nevertheless mutually incompatible. Hence, recordings from one system cannot be played on DVD players using another system. Therefore, unless you are using a multi-system device or you convert the original video format to the one of your device, you will not be able to view a DVD from Japan on your device in the formatted for the UK region, despite the fact that both countries are in the same regional coding area.

An important final element is that the practice of regional coding of films appears to evolve with technology, as shown by the use of Regional Code Enhanced (RCE) DVD software. Similarly, the same practice continues with the invention of new optical disc formats designed for the storage of data and high-definition video. The struggle for dominance has only recently been decided in favour of the Sony-backed Blu-ray Disc technology to replace the HD-DVD (High Definition-Digital Versatile Disc) technology backed by Toshiba and Microsoft.⁸ An interesting difference between the two is that only Blu-ray Disc technology foresaw the possibility of regionally encoding the content stored on them, whereas HD-DVD technology was planned to be region-free instead. Between the Blu-Ray technology and the present DVD-

⁷ For a good overview of different formats, see Television Standards – Formats and Techniques, available at http://www.paradiso-design.net/videostandards_en.html (last visited December 3, 2007).

⁸ See Beaumont, C., Blu-ray Wins, The Daily Telegraph 19 (February 23, 2008).

RCS the main difference is that the former only foresees the division of the world in three regions as opposed to the six DVD regions.⁹

Like in the present system, the usage of region coding on a Blu-ray Disc movie title remains a publisher's option and a Blu-ray Disc player will play any movie title that does not have region coding applied, plus all titles of its corresponding region. ¹⁰ It is pertinent to explore the possible reasons underlying the practice of film production and film distribution companies to regionally segment the market. This practice clearly has implications for trade in movies and affects first and foremost consumers and travellers who are prepared and willing to purchase a legal copy of a movie as opposed to pirated copies.

B. The Reasons: Minimising the Risk, Maximising the Revenues

The first and foremost reason that comes to mind is clearly economic and closely related to the peculiar dynamics of the motion picture industry, in particular, and other related 'cultural industries,' 'copyright-based' or 'creative industries,' in general. Shortly after the invention of cinema, critical studies into the special characteristics of these cultural goods and services evaluated the motion picture's impact on a great variety of issues, such as the business and finance structure of the industry, its effect as a trade getter, its educational and social value, and related problems of censorship to mention

Region A/1: North America, Central America, South America, Japan, North Korea, South Korea, Taiwan, Hong Kong and Southeast Asia: Region B/2: Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand; and Region C/3: India, Nepal, Mainland China, Russia, Central and South Asia; See DVD REGION ENCODING, available at http://www.amazon.com//help/mer/display.html?nodeId=3193231 (last visited December 3, 2007).

See Blu-ray Disc for Video, available at http://www.blu-raydisc.com//Section-14003/Section-14006/ Index.html (last visited February 28, 2008).

See also the Conference Paper of the United Nations Conference on Trade and Development (UNCTAD), Creative Industries and Development, TD(XI)/BP/13 (June 4, 2004) at 3, stating as follows: "While creativity is becoming an increasingly important input into the production process of all goods and services, there is a group of activities in which it is used intensively and with a particularly high degree of professional specificity. These activities are the so-called creative industries."

See Benjamin, W., Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit, in Walter Benjamin – Gesammelte Schriften 436 (Tiedemann, R. & Schweppenhäuser, H. Eds., 1978).

but a few.¹³ These special characteristics made them different from other ordinary goods and also resulted in a growing interest of economists in 'cultural products.'¹⁴ Generally, given the peculiar nature of such cultural products and the creativity involved, the importance of intellectual property rights is increasing in the knowledge-based economy. Thus, these peculiarities account for a different financing and pricing as well as other structures.¹⁵

It is pertinent to note that in the case of motion pictures the peculiarity stems from the dual economic and cultural character of films and other similar products. Also, the products of these industries are referred to as possessing so-called 'public goods' features, which means that they are non-rival and non-excludable in consumption, or, in other words, that the consumption of the good by one person does not diminish the possibility of another person to consume it. ¹⁶ Additionally, such products also generate cross-product externality, which in turn indicates that their consumption promotes the consumption of another good. This certainly applies not only to pop corn and soft drinks but to all sorts of goods displayed in the film and has been recognised by the denomination of film as the 'silent salesman' or 'trade getter.'¹⁷

Perhaps the principal, and in the context of DVD-RCS, crucial element common to these industries is the high risk in the initial production of these goods and the close to zero cost of reproduction and distribution. The high risk also stems from the fact that the films can be qualified as so-called 'experience goods' in the sense that the products' features and characteristics

See The Motion Picture Industry and Its Economic and Social Aspects, 128 Annals of the American Academy of Political and Social Sciences 1-186 (1926) and The Motion Picture Industry, 254 Annals of the American Academy of Political and Social Sciences 1-222 (1947).

See e.g. Benhamou, F., L'économie de la culture (2001), Throsby, D., Economics and Culture (2001) and Frey, B.S., Arts & Economics: Analysis & Cultural Policy (2000).

See also Orbach, B.Y., Antitrust and Pricing in the Motion Picture Industry, 21 Yale Journal on Regulation 317 (2004). See Drahos, P., The Regulation of Public Goods, 7 Journal of International Economic Law 321, 321 (2004).

¹⁶ See Drahos, supra note 15.

See Klein, J., What are Motion Pictures doing for Industry, 128 Annals of the American Academy of Political and Social Sciences 79, 79 (1926) and Tichenor, F.A., Motion Pictures as Trade Getters, 128 Annals of the American Academy of Political and Social Sciences 84, 84 (1926).

cannot be easily evaluated before purchase. This increases the risk of a so-called 'box office bomb' (i.e. a film for which the production and marketing costs greatly exceeded the revenue retained by the movie studio), which has induced the studios to develop special risk-minimising but revenue-maximising business practices. There is a plethora of such practices, from horizontal and vertical integration to concentration, the star system, the development of prototypes, and to peculiar contractual arrangements like block booking, or zoning. These practices repeatedly caused and continue to cause concern and conflict with competition rules and antitrust authorities. 19

Two risk minimising practices which are of major interest here, and are in close interplay with each other, are the 'order of the economic exploitation' among the cultural industries and 'zoning' (i.e. the release of a movie at different times in different zones of the world). With regard to the order of exploitation, it starts usually with a book, of which is then made a film, which is first released in the cinema and followed by the exploitation on the video rental market (nowadays mainly DVDs and High Definition DVDs) before it will be screened on television (first pay-television and later free-to-air television). To minimise the risk, this line of exploitation is sometimes limited to different zones in order to test the potential appeal of the movie before it is marketed on a wider scale. This marketing-driven approach is however not the sole explanation for zoning in the form of the DVD-RCS. More closely linked to revenues is the following explanation for the encoding of DVDs, presented by the DVD CCA:

"Movies are often released at different times in different parts of the world. Regional DVD coding allows viewers to enjoy films on DVD at home shortly after their region's theatrical run is complete by enabling regions to operate on their own schedules. A film can be released on DVD in one region even though it is still being played in theatres in another region because regional coding ensures it will not interfere with the theatrical run in another region. Without

See e.g. Breton, A., Introduction to an Economics of Culture: a Liberal Approach in UNESCO, CULTURAL INDUSTRIES: A CHALLENGE FOR THE FUTURE OF CULTURE 40 (1982).

One of the oldest and still one of the most interesting cases is the following: United States v. Paramount Pictures, Inc. et al., 334 U.S. 131 (1948); for a more recent account, see e.g. K.G. Fox, Paramount Revisited: The Resurgence of Vertical Integration in the Motion Picture Industry, 21 Hofstra Law Review 505 (1992).

regional coding, all home viewers would have to wait until a film completes its entire global theatrical run before a DVD could be released anywhere."²⁰

Hence, better control of the successive marketing of motion pictures on various carriers and through different services appears to be the central purpose of the regional coding system. This was also summarised as follows:

"The regional coding system was put into place so that movie studios can control when and where DVDs are distributed so as not to interfere with schedules for sequential release of movies, which includes theatrical runs, Pay TV broadcast, video rental release, retail video release, and free-to-air television broadcast." ²¹

However, with the advent of the Internet, the accessibility of information has improved globally, leading to the delay in the release of the movies becoming shorter. For instance, *Casino Royale* was released globally in slightly more than two months and *The Lord of the Rings: The Fellowship of the Ring* was released globally within four months. Nonetheless, if marketing and release were the only reasons, one might wonder why old movies, such as the James Bond 007 – *From Russia With Love*, which was released long before the DVD era in 1964, are still sold in a regionally encoded format. Equally, it remains to ask why artistic movies like *No te mueras sin decirme adónde vas*, which are never released on a global scale, are sold on regionally encoded DVDs.

In addition to the temporal 'zoning' for marketing purposes, this practice also allows for legal 'price discrimination' and has two related features:

1. Price discrimination may serve as a profit-maximising measure; once the production and marketing costs of the movie have been recouped, for instance in the domestic market, every additional sale of the movie in

The DVD Copy Control Association (DVD CCA) gives this as the sole reason for regional encoding the differences in the dates of release of movies, available at http://www.dvdcca.org/faq.html (Last visited December 5, 2007).

See the Report on Disclosure Issues Related to the Use of Copy Control and Digital Rights Management Technologies, issued by the Committee on Consumer Policy, OECD Directorate for Science, Technology and Industry, cited as DSTI/CP(2005)15/FINAL (April 18, 2006) at 4 and 10, available at http://www.oecd.org/dataoecd/47/31/36546422.pdf (Last visited November 10, 2007). [Hereinafter 'OECD Report on Disclosure'.]

another country, maximises revenues and improves the overall box office results. This particular practice of price discrimination is a form of dumping, i.e. the sale of a good in an export market below the actual production costs (plus a reasonable addition for selling cost and profit) or the sales price in the domestic market.

2. Price discrimination makes it possible to restrict "the resale across markets thereby allowing sellers to exploit regional difference in demand patterns". ²² In this case, it is not necessarily the dumping of products in other markets as much as "blocking" of prices at artificially higher levels in either the domestic or selected export markets. In fact, the available information suggests that the geographically random drawing of the different regions follows economic considerations linked to the per capita gross domestic product (GDP) of countries or the respective purchasing power of consumers. ²³ However, DVD-RCS disregards some large disparities also, which indicates links to considerations of a different kind, such as market size, or significance as a sales market for DVDs.

An economic perspective, however, suggests that "market segmentation" and price discrimination need not always lead to a loss in social welfare. As a possible result of the removal of such regional price discrimination, prices could be expected to move to an average level which is likely to benefit those consumers located in the regions where the per capita income is higher and harm their counterparts in regions where it is lower. This, however, may not be the case, if the final retail prices in the stronger economies were beforehand artificially 'blocked' at a much higher price than its actual production costs plus the profit margin. If this was the case, the removal of the system might introduce a more competitive price even below the average level and possibly even below the lower price in the weaker economies. Altogether, the authors of an economic analysis of the regional coding system

²² See Dunt, E., Gans, J.S., & King, P., The Economic Consequences of DVD Regional Restrictions, 7 (Papers issued by the University of Melbourne, 2001) available at: http://www.mbs.edu///papers/.pdf (last visited November 12, 2007).

²³ Ibid at 9.

²⁴ See Dunt, Gans & King, supra note 22, at 9.

²⁵ See Dunt, Gans & King, supra note 22, at 10.

come to the following result: "We conclude that the conditions that may theoretically allow such restrictions to be efficient are unlikely to hold in the case of DVDs and that social welfare is likely to be significantly enhanced by eliminating such technical restrictions." ²⁶

A further reason for the regional coding system appears to be copyright protection²⁷ (or prevention of free-riding), the prevention of parallel imports and the generation of market power as well as the possible protection of different distribution systems in an industry which is generally characterised by a high degree of vertical integration. However, what speaks against this argument is that, first of all, why is then other copyrighted content on DVDs (such as for instance Microsoft Encarta) not vested with a regional coding system. Secondly, an even more powerful argument against this assumption is that pirated copies are generally region-free and can be played on every device as opposed to legal copies. This fact ultimately means that the DVD-RCS directly *encourages* consumers, who wish to see a particular movie which may not be available in their regional coding system, to get an illegal copy rather than to purchase a legal one.

Thus it is probably more appropriate to state that regional coding is for the motion picture industry what 'gerrymandering' is for the electoral system, namely the re-designing of electoral constituents to the advantage of one candidate or political party. Similarly, by randomly subdividing the global market in different regions, it is possible for the motion picture industry or at least their major global players to secure a competitive advantage by way of an increase of their market power vis-à-vis their main local or regional competitors.

The regional coding system itself is subject to criticism by consumer protection motivated policy considerations as it can lead to confusion amongst lay men. A relevant OECD Report questions the labelling practice as follows:

²⁶ See Dunt, Gans & King, supra note 22, at 1 and 17.

²⁷ See the 'Frequently asked Questions' section of the homepage of the DVD Copy Control Association (DVD CCA), available at http://www.dvdcca.org/faq.html (last visited December 7, 2007).

"To those who are familiar with the region system, this labelling appears to be clear. For those who are not aware of the region system, however, a number on a globe is perhaps not enough information to indicate what playback restrictions are included. Explanatory text about the region code system is not usually included on or inside the DVD." 28

One unwanted side-effect of the regional coding system is the technical possibility to target special consumer preferences or other cultural idiosyncrasies, or, else, to exercise censorship. Accordingly, the same product can be sold in different versions on each regional code.

Moreover, the practice of regional coding not only effectively 'misleads' consumers in the purchase of DVDs but also in the purchase of hardware, such as DVD players or computers. The choice then is limited to either spending extra for deactivating regional coding in the hardware or circumventing the technology though 'hacks' which are illegal. ²⁹ Additionally, the consumer is also required to bear higher costs if he buys a multi-zone DVD player. In some jurisdictions, doubts also arose with regard to the legality of such multi-zone DVD players. ³⁰

C. The Consumer Response

During 2000 and 2001, this issue was given some attention in the context of competition rules in Australia and the European Union (EU). For example, the former Commissioner competent for Competition, Mr. Mario Monti, mentioned the DVD-RCS in a speech, announcing that the European Commission would carry out an investigation. He is reported to have said:

"The thrust of the complaints that we have been receiving is that such a system allows the film production companies to charge higher DVD prices in the EU because EU consumers are artificially prevented from purchasing DVDs from overseas. As a direct result of these complaints, we have initiated contacts with the major film production companies. We will examine closely

²⁸ See e.g. OECD REPORT ON DISCLOSURE, supra note 21, at 4.

²⁹ The cost of modifying DVD players has been reported to range between \$100-150; see Dunt, Gans & King, supra note 22, at 14.

For a discussion of the problem of circumvention in the U.S. context, see e.g. Sun, Q., The DMCA Anti-Circumvention Provisions and the Region Coding System: Are Multi-Zone DVD Players Illegal after the Chamberlain and Lexmark Cases?, 317 University of Illinois Journal of Law, Technology & Policy (2005).

what they have to say. Whilst I naturally recognise the legitimate protection which is conferred by intellectual property rights, we do not permit a system which provides greater protection than the intellectual property rights themselves, where such a system could be used as a smoke-screen to allow firms to maintain artificially high prices or to deny choice to consumers."

The author has noted with great interest the Australian Competition and Consumer Commission's conclusion that the regional coding system imposes a 'severe restriction of choice' on consumers.³¹ Although a Member of European Parliament asked written questions to the European Commission at roughly the same time period,³² there is no indication for a positive or negative outcome of the European Commission's investigation into the matter.

More recently, the coding system was mentioned in the context of the European Commission consulting on the functioning of the internal market, where a reply by the Global Entertainment Retails Association – Europe described the regional coding of and territorial restrictions on the distribution of DVDs as contributing "directly to distortions in the market" and artificially restricting "the free flow of goods from outside the EU, making sourcing from non-EU countries illegal and thus unavailable."³³ Unfortunately, no more mention is made of it in the final document summarising the consultation

MONTI, M., (former European Commissioner for Competition Policy), CONTENT, COMPETITION AND CONSUMERS: INNOVATION AND CHOICE (PRESS Release Speech/01/275), available at http://europa.eu/rapid/pressReleases.do?reference=SPEECH/01/275& format=HTML&aged=0&language=EN&guiLanguage=en (Last visited December 7, 2007) [Emphasis in the original].

See Written Question E-1890/02 by Glyn Ford (PSE) to the Commission. Regional coding of DVD players, [2003] O.J. 137 E/34; Written Question E-2371/00 by Glyn Ford (PSE) to the Commission. DVD discs and competition, [2001] O.J. 103 E/138; Written Question E-1510/00 by Glyn Ford (PSE) to the Commission. DVD players, [2001] O.J.53 E/158, and Written Question E-1509/00 by Glyn Ford (PSE) to the Commission. DVD players and free competition, [2001] O.J. 53 E/157. In this context, the author made numerous attempts to directly contact Mr.Ford (MEP) but until today he has still not received a reply answering the questions in substance. The only information received was a copy of the 2005 OECD REPORT ON DISCLOSURE which obviously had no contextual and obviously also no institutional relation to the questions asked by Mr. Glyn Ford.

Global Entertainment Retail Association – Europe, Reply to the European Commission's Consultation on the Internal Market (June 15, 2006), available at http://ec.europa.eu/_market/strategy//replies/global_entertainment_retail_association_europe__gera_en.pdf (Last visited December 7, 2007).

process.³⁴ Further, an electronic mail from the European Commission Directorate General for Competition revealed that apparently the Commission did not pursue the case of DVD region coding further since "the significant price differences between region 1 and 2 DVDs had disappeared in recent years due to a convergence in prices between these two regions.³⁵ As will be shown below, in individual cases, however, huge differences in the pricing can still be found. Moreover, price differences are certainly not the only distortions to trade and negative effects that are related to the practice of the DVD-RCS.

A case was decided by the Australian Federal Court concerning the regional coding system on CD-ROMs sold to the owners of Sony Playstations, i.e. gaming consoles.³⁶ In the judgment, the Federal Court ruled that so-called "mod chips" (i.e. a device to circumvent a regional coding system) breached the anti-circumvention provisions of the Australian Copyright Act.³⁷ The Australian Competition and Consumer Organisation (ACCO), which had expressed the belief that "region coding is detrimental to consumers as it severely limits their choice and, in some cases, access to competitively priced goods," decried the decision.³⁸

IV. The DVD Regional Coding System and International Trade Law under the WTO

A. General Remarks

In order to find out whether the DVD-RCS is compatible with the rules contained in various agreements both establishing the WTO as well as

European Commission, A single market for 21st century Europe, COM(2007) 724 final (November 20, 2007) available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0724en01.pdf (Last visited December 7, 2007).

³⁵ Email of the Head of Unit of DG Competition of January 22, 2008, on file with the author.

³⁶ Kabushiki Kaisha Sony Computer Entertainment v. Stevens, [2003] FCAFC 157 (30 July 2003).

³⁷ See also Weatherall, K., Before the High Court: On Technology Locks and the Proper Scope of Digital Copyright Laws - Sony in the High Court, 26 Sydney Law Review 613 (2004).

THE AUSTRALIAN COMPETITION AND CONSUMER COMMISSION HAS DECRIED A RULING BY THE FEDERAL COURT THAT MOD CHIPS DESIGNED TO CIRCUMVENT COPY PROTECTION FEATURES ON GAMING CONSOLES ARE ILLEGAL, available at http://news.zdnet.co.uk/hardware/0,1000000091,39115420,00.htm (Last visited December 6, 2007).

administered by it, we must first look at the origin of the DVD-RCS and try to determine the nature of the measure at issue. As mentioned before, the DVD-RCS has been developed as a by-product of the CSS administered by the DVD Copy Control Association (DVD CCA). However, this licensing body³⁹ does not have a transparent executive, with little information on its ownership, membership or composition of the board of directors, available in the public domain.⁴⁰

From the highly cryptic statement on the homepage of the DVD CCA it appears that the DVD-RCS would be a measure derived from private actions. Hence what would be of great significance is the question of a possible governmental endorsement of the DVD-RCS by one or more WTO Members. The reason for this is in line with the dominant understanding of the WTO as an organisation of public international law; private parties' actions are held to be only to a very limited extent capable of establishing responsibility of a WTO Member for an alleged violation of WTO rules. This is in particular reflected in the clarification of the WTO Panel in the Report on the *Kodak-Fuji Case*, where it states as follows:

"As the WTO Agreement is an international agreement, in respect of which only national governments and separate customs territories are directly subject to obligations, it follows by implication that the term measure in Article XXIII:1(b) and Article 26.1 of the DSU, as elsewhere in the WTO Agreement, refers only to policies or actions of governments, not those of private parties."

However, this relatively narrow interpretation of the term "measure" and its restriction to governmental policies or actions, excluding those of private parties, is immediately being put into perspective in the following sentence, where it reads as follows:

The Association gives licenses for the use of the CSS to various industries, such as the "owners and manufacturers of the content of DVD discs; creators of encryption engines, hardware and software decrypters; and manufacturers of DVD Players and DVD-ROM drives. See the homepage of the DVD Copy Control Association (DVD CCA), supra note 7.

⁴⁰ Ibid.

⁴¹ Refer to para. 10.52, Japan – Measures Affecting Consumer Photographic Film and Paper, WT/ DS44/ R (March 31, 1998). [hereinafter referred to as *Kodak/Fuji*].

"But while this 'truth' may not be open to question, there have been a number of trade disputes in relation to which panels have been faced with making sometimes difficult judgments as to the extent to which what appear on their face to be private actions may nonetheless be attributable to a government because of some governmental connection to or endorsement of those actions."

Without this partial attenuation, it might be easy for a government to evade its trade obligations by simply delegating governmental authority to the private sector, or merely informally encouraging the private sector to adopt certain practices. As mentioned by the Panel, there have indeed been cases where the line of distinction between governmental action and private parties' action appeared as thin and sharp as a razor blade.⁴³ Already, the GATT 1947 system was confronted with this issue several times.⁴⁴ Equally, in the short time period since the establishment of the WTO system, three cases arose which dealt with the question about alleged violations of WTO rules based on private actions or at least a governmental endorsement of private actions.⁴⁵

One important aspect deriving from these cases is that the differences in the underlying measures make it difficult for the dispute settlement body to establish clear guidelines. Instead, the Panel has stated the following:

"These past GATT cases demonstrate that the fact that an action is taken by private parties does not rule out the possibility that it may be deemed to be governmental if there is sufficient government involvement with it. It is difficult to establish bright-line rules in this regard, however. Thus, that possibility will need to be examined on a case-by-case basis."

⁴² Ibid.

⁴³ See also Zedalis, R.J., When Do the Activities of Private Parties Trigger WTO Rules?, 10 JOURNAL OF INTERNATIONAL ECONOMIC LAW 335 (2007).

See Japan – Restrictions on Imports of Certain Agricultural Products, GATT Doc. L/6253, 35th Supp. BISD 163, 18 November, 1987 (1988), Japan – Trade in Semi-conductors, GATT Doc. L/6309, 35th Supp. BISD 116, 4 May, 1988 (1988), and European Economic Communities – Restrictions on Imports of Dessert Apples, GATT Doc. L/6491, 36th Supp. BISD 93, 18 April, 1989 (1990).

⁴⁵ See Kodak/Fuji, supra note 41, Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather, WT/DS155/R (December 19, 2000), Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161 & 169/AB/R (December 11, 2000).

⁴⁶ Refer to para. 10.56, Kodak/Fuji, supra note 41.

Based on the increasing interdependence and complexity of business relations in a global market, it is argued here that the number of disputes concerning the potential public endorsement of private actions in view of a possible violation of international trade rules will only increase in the future. This question is also inextricably tied to the increasing removal of tariff barriers and to the introduction of new forms of non-tariff barriers in combination with changes to the industries organisational structure, such as, notably, their frequent privatisation and their growing concentration based on mergers and acquisitions.

Generally, in such a changing business and trading environment, the initial argument about the persistent gap between issues of private international and public international law is thus gaining prominence. This will ultimately require some further thoughts on the nature of the WTO and its covered agreements, as well as the extent to which private actions may cause a violation of WTO rules.

For the DVD-RCS system, this means that the question of whether a private party's action, which in this case would be the system administered by the DVD CCA, is capable of violating trade rules, depends on the degree of governmental endorsement of the said action. Such endorsement would have to be established on a case-by-case basis. Given that no detailed background information is available on the activity and especially the membership of the DVD CCA, this question cannot be answered at this point. Moreover, it is not the focus of this article to adjudicate a potential dispute, but instead to try to detect deficiencies in the present trading system and to find ways for its improvement. For this reason, we will now turn to the question of the overall context and the conceptual framework of the WTO system.

B. Private Action under the International Trade Regime: The WTO – Bargain or Constitution?

Obviously, the crucial question in the analysis of the legality of the DVD-RCS is the exact origin of the system in terms of public or private, or in other words governmental or non-governmental origins. As has been mentioned, this aspect is highly important but again depends not only on the degree of economic integration obtained by the WTO system, but also to some extent

on the way it is perceived in legal terms. Thus, closely related to the previous controversy, there is also lack of consensus on the nature of the WTO as a legal regime, whether its Members have concluded 'a bargain' or perhaps even drafted a 'constitution of international trade'?⁴⁷ This initial distinction has wider implications for the question of the applicable law, otherwise framed by the distinction of the body of WTO rules in a self-sufficient (selfcontained) regime or one requiring the interpretation of its rules "in accordance with customary rules of interpretation of public international law" as it is laid down in Article 3 (2) DSU. This initial distinction may also have an impact on the question concerning the role of private parties in the WTO dispute settlement system, i.e., whether they can have access or not.48 Generally under the traditional perception of public international law, private persons (both natural and legal) cannot (at least directly) be subjects of rules of international law, because it is said to be the law governing the relations between states, and between states and international organisations only. However, under a more 'realistic' approach, in a sense that it takes the present reality of global business into account, the necessity to weave the regulatory web smaller in order to encompass more complex forms of restrictions to international trade is definitely gaining importance. Especially pro futuro and in a de lege ferenda approach, this issue is absolutely crucial for not only the legitimacy⁴⁹ but certainly also the efficiency of the WTO, as private actions will assume greater legal relevance under the international trading regime.⁵⁰

⁴⁷ See Japan – Taxes on Alcoholic beverages, WT/DS1/AB/R, WT/DS10/AB/R, WT/DS22/AB/R (October 4, 1996) [The decision states that, "the WTO is a treaty – the international equivalent of a contract. It is self-evident that in an exercise of their sovereignty, and in pursuit of their own respective national interests, the Members of the WTO have made a bargain"; but see Jackson, J.H., The World Trade Organization – Constitution and Jurisprudence (1998).

So far the maximum involvement of private parties in the WTO system is the acceptance of amicus curiae briefs by non-governmental organisations, Refer to paras. 79-91, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R (October 12, 1998); See also the useful discussion in Trachtman, P. & Moremen, P.M., Costs and Benefits of Private Participation in WTO Dispute Settlement: Whose Right Is It Anyway?, 44 (1) HARVARD INTERNATIONAL LAW JOURNAL 221 (2003).

See also Howse, R. & Nicolaidis, K., Enhancing WTO Legitimacy: Constitutionalization or Global Subsidiarity?, 16 Governance: An International Journal of Policy, Administration, and Institutions 73 (2003).

J.H.H. Weiler supports a strengthening of the role of private parties in several trading regimes; see Weiler, J.H.H., Cain and Abel – Convergence and Divergence in International Trade Law, in The EU, the WTO and the NAFTA: Towards a Common Law of International Trade? 4 (Weiler, J.H.H., Ed., 2000).

C. The Global Market and the WTO: Between Trade Liberalisation and Market Integration

As mentioned earlier, the debate on the fragmentation of international law has gained momentum and aroused greater interest. While the parallel process of the juridification of international law and the proliferation of international organisations has advanced, the process of continuous liberalisation of trade has also changed the picture of global trade relations. What began as a process of trade liberalisation on the basis of the reduction of tariffs and the removal of obstacles to cross-border trade appears to have turned into a process of global market integration. ⁵¹

It can be argued that the significance of private parties' involvement in the international trading regime increases in proportion with the degree of market integration. This is because trade liberalisation consists mainly in the mentioned reduction of tariffs and removal of obstacles to cross-border trade on the basis of measures of negative integration. Market integration, on the other hand, aims at creating a single market and thus involves more non-tariff barriers as well as a certain degree of harmonisation based on measures of positive integration. ⁵² In other words and from the perspective of the private individual, the role and rights of private persons in a legal system must develop in proportion with the obligations the system imposes on them. In turn, the degree of market integration obtained by the WTO will also influence the expectations the public will have vis-à-vis the WTO.

To evaluate the compatibility of DVD-RCS with existing trade rules, it is useful to first take a look at the underlying rationale for the establishment of the international trading system under both the General Agreement on Tariffs and Trade (GATT 1947) as well as the Agreement Establishing the World Trade Organisation (WTO Agreement). This rationale is laid down

On the various stages of economic integration, see e.g. Balassa, B., The Theory of Economic Integration 6-7 (1962).

See generally Scharpf, F.W., Balancing Positive and Negative Integration: The Regulatory Options for Europe, EUI Policy Paper 97/4 (1997) and Jayasuriya, K., Globalisation and the Changing Architecture of the State: the Regulatory State and the Politics of Negative Co-ordination, 8 JOURNAL OF EUROPEAN PUBLIC POLICY 101 (2001).

in the Preamble of the WTO Agreement, which, elaborating further on the one of the GATT'1947⁵³ reads as follows:

The Parties to this Agreement,

Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development,

Being desirous of contributing to these objectives by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international trade relations [...].⁵⁴

The application of the key phrases in this text, i.e. "the raising of standards of living" and the "substantial reduction of tariffs and other barriers to trade," to the region coding system suggests that, *prima facie*, the region coding system is not in line with the spirit of the international trading system. Notwithstanding the restrictive effect, it must be accepted that not all restrictions of trade, as undesirable as they may be from a trade perspective, are automatically illegal or in violation of obligations entered by the Members of the WTO. For instance, even different languages, different currencies, different laws may all constitute 'restrictions' to trade, but they are certainly not 'illegal' under the WTO. As a matter of fact, some restrictions may even be outlawed but still accepted under the various special and general exceptions enshrined in the various WTO agreements.

Last but not least, there may also be measures for which there exist no legal remedies to challenge them but they may violate the spirit and not the letter of the law applicable to them. This appears to be the case with DVD-RCS, especially against growing evidence for the gradual transformation of the international trading system from a tool for international trade

⁵³ General Agreement on Tariffs and Trade, signed at Geneva on October 30, 1947, 55 U.N.T.S. 187.

Marrakesh Agreement Establishing the World Trade Organization (with Annexes, Final Act and Protocol), concluded at Marrakesh on April 15, 1994, 33 ILM 1144 [WTO Agreement].

liberalisation to one of global market integration.⁵⁵ This evidence consists especially in the qualitative leap made from the GATT 1947 system to the establishment of the WTO and characterised in particular by the inclusion of trade in services (General Agreement on Trade in Services (GATS)) and of Trade-Related Aspects of Intellectual Property Rights (TRIPs Agreement) as well as the inauguration of a more rigid and legalistic dispute settlement system (Dispute Settlement Understanding (DSU)).

V. The DVD Regional Coding System and the Special Agreements Administered under the WTO

A. The General Agreement on Tariffs and Trade (GATT)

The first article which attracts our attention is Article IV, GATT, which relates to cinematograph films. The reading of the text of Article IV, GATT, especially the phrase "internal quantitative regulations relating to exposed cinematograph films" (emphasis added) widely excludes the article from its possible application to the regional coding system. Following the debate on television services during the 1960s, the present problem related to the DVD-RCS, however, proves once more the validity of the theory, which sees the principal function of Article IV, GATT in the role of a 'sleeping beauty' or powerful reminder of the complex entwinement of cultural, technological and economic aspects in the category of cultural goods and services and in a political mandate "to ponder on the relation between trade and non-trade issues as they find their reflection in the institutional organisation of the international order as a whole, but specifically in light of the need for greater coherence."56 Ultimately, it points to the fact that something was missing in the GATT'47 system which continues to be missing under the present WTO system.

⁵⁵ See also the quote of former UN Secretary-General Kofi Annan ("Our post-war institutions were built for an inter-national world, but we now live in a global world") in Jackson, J.H., Sovereignty, THE WTO, AND CHANGING FUNDAMENTALS OF INTERNATIONAL LAW 18 (2006).

See Neuwirth, R.J., The Cultural Industries and the Role of Article IV GATT: Reflections on Policy Options for Canada and the EU in the new WTO Round, (2002) available at http://www.carleton.ca//papers/november02/Neuwirth.pdf (last visited December 7, 2007).

The next relevant article in line is Article VI, GATT, which in connection with the Antidumping Agreement (AD Agreement) addresses the issue of dumping, a special form of price discrimination. Article 2 of the AD Agreement defines dumping as follows:

"For the purpose of this Agreement, a product is to be considered as being dumped, i.e., introduced into the commerce of another country at less than its normal value, if the export price of the product exported from one country to another is less than the comparable price, in the ordinary course of trade, for the like product when destined for consumption in the exporting country."

As was mentioned that the DVD-RCS allows for price discrimination in different segments of the global market and to sell the same DVD at different prices in different regions as well as countries, this practice could - where the sale in the other country occurs at a price lower than the one of the country of origin and injury occurs to domestic like DVD producers - be met with the levy of antidumping duties. However, this remains highly hypothetical given the industry's unique pricing methods and, in particular, the problem of determining with accuracy relevant concepts such as the "normal value", the "comparable price, in the ordinary course of trade, for the like product", "injury" and "domestic industry."57 For example, it remains an especially difficult task of how to establish the "likeness" of an imported movie with a domestic one. It is already not easy to establish "likeness" between two movies belonging to the same let alone two different genres. Equally, it would be interesting to know whether two DVDs of the same movie but with different region coding were to be considered 'like products' or not? What if one of the versions contains extra content, such as interviews with the actors/actresses? As a matter of fact, it happens that DVDs are produced in one region and sold in the same region coding format in another region. For instance, the latest movie by Eliseo Subiela Heartlift is encoded in Region 2 and costs about £19.99 (approx. USD 39.70) on www.amazon.co.uk and only USD 29.90 on www.amazon.com. In this example the price difference of the same film in the domestic and in the foreign market is almost USD 10. Does that mean

On the problem of the special characteristics of cultural products relating to dumping and subsidies, see Neuwirth, R.J., The Cultural Industries in International Trade Law: Insights from the NAFTA, the WTO, and the EU 138-145 (2006).

that the film is being dumped on the US market? Although one single film is certainly not highly representative but it certainly calls into question the so-called 'convergence of prices' between Region 1 and 2 as stated by the European Commission services. Certainly, the most problematic issue in the context of dumping as applied to the DVD-RCS is that it generally requires a "material injury to a domestic industry, threat of material injury to a domestic industry or material retardation of the establishment of such an industry." The injuries deriving from region coding, however, primarily hurt the private consumer who is not mentioned in the AD Agreement and who has no access to the WTO dispute settlement system.

Hence, although the complexity of the DVD-RCS does not allow for a direct application of Article VI, GATT and the AD Agreement, it nonetheless points at the direct relevance of competition law related issues for the realm of international trade, which is why the founding fathers drafted Article VI, GATT, in the first place and their successors negotiated the AD Agreement or created a so-called 'Working Group on the Interaction between Trade and Competition Policy.'59

A more promising provision for that matter appears to be Article XI, GATT, which – as an expression of the spirit enshrined in the Preamble – calls for a general elimination of quantitative restrictions both in the case of the importation in or exportation from the territory of a WTO Member destined for the territory of any other Member of the WTO. It practically authorises as the sole form of prohibitions or restrictions to trade, the use of "duties, taxes or other charges" and further prohibits quotas, import and export licenses as well as "other measures." The wider scope of the prohibition on quantitative restrictions was highlighted by the Panel in the *Japan – Semi*-

⁵⁸ See Footnote 9 to Article 3 of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade (AD Agreement).

On the links between trade and competition policy, see generally Morgan, C., Competition Policy and Anti-dumping – Is it Time for a Reality Check?, 30 JOURNAL OF WORLD TRADE 61 (1996); on the Working Group on Trade and Competition, see Working Group on the Interaction between Trade and Competition Policy, Report (1997) to the General Council, WTO Doc. WT/WGTCP/1 (November 28, 1997). Please note that in July 2004 the General Council of the WTO decided that the interaction between trade and competition policy no longer formed part of the Work Programme set out in the Doha Ministerial Declaration.

Conductors case, where it was noted that "Article XI:1 GATT, unlike other provisions of the General Agreement, did not refer to laws or regulations but more broadly to measures," meaning that this "wording indicated clearly that any measure instituted or maintained by a contracting party which restricted the exportation or sale for export of products was covered by this provision, irrespective of the legal status of the measure." This was also qualified as meaning that "any measure maintained by a WTO Member that effectively restricts exports is prohibited under Article XI:1, regardless of the legally binding status of the measure."

As was shown, the DVD-RCS has clearly a trade restrictive effect on the circulation of movies by restricting both the importation and exportation to various contracting parties and is based on a technical measure and not a duty, tax or other charge. Hence, if only a link between the private origins of the regional coding system with one or more Member states from which the DVDs are exported could be established, it could amount to a clear violation of the general prohibition of quantitative restrictions.

Having established a principal incompatibility of the DVD-RCS with the spirit and purpose of the GATT rules, we must also see whether this practice might not be covered by one or more exceptions. Having excluded Article IV, GATT, the only potentially relevant clause left is Article XX, GATT, which – provided that certain requirements listed in the chapeau are met – authorises Members to deviate from some of the obligations enshrined in the agreement. The two scenarios which appear relevant are the adoption or enforcement of measures "necessary to protect public morals" (lit. a) or "necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to [...] the protection of patents, trade marks and copyrights, and the prevention of deceptive practices" (lit. d). The relevance of these measures stems from the alleged possibilities of the regional coding system to censor sensitive content in accordance with dominant regional cultural differences, to prevent the sale of pirated copies, and to protect consumers against confusion caused

⁶⁰ Refer to para. 106, Japan - Trade in Semi-conductors, supra note 44.

⁶¹ See Bhala, R. & Kennedy, K., World Trade Law: The GATT-WTO System, Regional Arrangements, and U.S. Law 106 (1998).

by parallel imports. In practical terms, however, since in most cases the origin of the measures lies not only within the realm of a private entity but also originates not in the country of importation but in the country of exportation, Article XX, GATT, will prove of little direct relevance.⁶² In merely substantive terms, probably greater relevance of the protection of public morals than the one of the protection of intellectual property rights or the prevention of deceptive practices for the DVD-RCS can be said to exist.

B. The Agreement on Technical Barriers to Trade (TBT Agreement)

Equally closely related to trade in goods is the TBT Agreement which applies to all products including industrial and agricultural goods. The TBT Agreement tries to "ensure that technical regulations and standards, including packaging, marking and labelling requirements, and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade." "Unnecessary obstacle to international trade" in the sense of the agreement means, in particular, that a regulation "shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create" (Art. 2.2 TBT Agreement). The list of examples of legitimate objectives mentioned in Article 2.2, TBT Agreement, is not exhaustive but mentions especially "national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment."

Hence, in order to determine whether the regional coding system would qualify as such an "unnecessary obstacle to international trade," it would first be necessary to know precisely what objectives the DVD-RCS pursues, for instance, the control of the global release of movies, the prevention of piracy, the possibility of price discrimination or a combination of anticompetitive

⁶² It would hardly make sense, for instance, if India complained against the US (provided that a liability of the government for the company could be established) for the sale of a different version of the movie Eyes Wide Shut respecting Indian religious feelings and on what basis could the US invoke the general exception for public morals?

⁶³ Indent 5 of the Preamble to the *Agreement on Technical Barriers to Trade* (TBT Agreement), available at http://www.wto.org//docs_e/legal_e/17-tbt.pdf (last visited December 7, 2007).

practices to maximise profits. Even if we assume that it is for the control of the global release dates of movies, the system still appears to be not the least trade restrictive because one wonders why, for instance, movies that are sold and that are older than one year are still vested with the regional coding system. The coding system could for example be limited only to those films which are newly and globally released on DVDs and not simply cover almost all films irrespective of whether they are old or new or whether they are distributed locally or globally. Even for the alleged prevention of privacy, the opposite effect, namely a punishment of the consumer who wants to purchase a legal and not a pirated copy was found to be the result. Equally, the DVD-RCS was even described as deceptive to consumers, which is why it can hardly fall into the category of the legitimate objectives mentioned in Article 2.2, TBT Agreement. Finally, price discrimination is a practice which the GATT by virtue of its ArticleVI:1, provided that certain conditions are met, condemns.

These and other reasons, yielded by the present analysis of the regional coding system, produce evidence which would allow for the qualification of the DVD-RCS as such an "unnecessary obstacle to international trade," because it is certainly not the least-trade restrictive measure available and its efficiency remains doubtful as much as its true objectives remain obscure or do not fall within the category of legitimate objectives referred to by the TBT Agreement. Notwithstanding this qualification, there are some principal complications involved, which deserve to be mentioned.

First and foremost, the TBT Agreement aims at staying abreast to changes in the international trading environment and particularly to the said shift of trade-related measures from national borders to non-tariff domestic regulations. This shift – it is argued – unduly limits the scope of domestic regulatory autonomy of WTO Members. ⁶⁴ In my view, however, the agreement does not take into due account the parallel trend of shifting the origin of domestic regulations from various public or state authorities to (domestic, regional, or global) private (voluntary) standards or private

⁶⁴ See Du, M.M., Domestic Regulatory Autonomy under the TBT Agreement: From Non-Discrimination to Harmonization, 6 Chinese Journal of International Law 269 (2007).

standard setting bodies. ⁶⁵ Still, the agreement's central focus is on technical barriers adopted by states and not by private industries. Notwithstanding this default, it nevertheless indicates a first shift from measures of merely negative integration to those of positive integration, which also marks a transition from trade liberalisation to market integration (as mentioned before). This emerges, for instance, in Article 2.4, TBT Agreement, which encourages the use of international, that is to say uniform standards, when they exist. Thus, as its main goal, the TBT Agreement wants to assure that technical regulations or international standards do not unnecessarily create obstacles to international trade by further fragmenting the global market which is already segmented in line with the boundaries of national jurisdictions. From the perspective of an emerging global market, this means that any fragmentation, especially one such as that caused by the DVD-RCS, is more likely to violate the letter and spirit of the rules governing not only the TBT Agreement but also those of the entire WTO system.

In greater detail, the TBT Agreement distinguishes technical regulations from standards, the sole difference being that the former are mandatory whereas the latter merely optional or voluntary. From the available information on the origin of the DVD-RCS, it appears that the system – albeit its dominant position – is optional, which would support the characterisation of the regional coding system as an (international) 'standard,' which Annex 1.2 defines as follows:

"Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method."

⁶⁵ It is believed that the problem of so-called "private voluntary standards" will resume greater significance, as can be already observed in the agro-food sector and respective discussion in the Committee on Sanitary and Phytosanitary Measures; see WTO Committee on Sanitary and Phytosanitary Measures, "Summary of the Meeting Held on 29-30 June 2005", WTO Doc. G/SPS/R/37/Rev.1 (August 18, 2005).

⁶⁶ See also WTO Committee on Technical Barriers to Trade, Negotiating History of the Coverage of the Agreement on Technical Barriers to Trade with regard to Labelling Requirements, Voluntary Standards, Processes and Production Methods Unrelated to Product Characteristics, WTO Doc. G/TBT/W/11, 7 et seq. (August 29, 1995).

Such qualification, however, as such a recognised body would require more detailed information about the DVD CCA and then also be subject to a critical evaluation by a WTO Panel and/or the Appellate Body in line with the existing case law.⁶⁷

For the public/private divide, it is interesting to note that the Agreement establishes binding norms for the preparation, adoption and application of standards by central and local Government, as well as, non-governmental bodies (Art. 4.1). In particular it stipulates the following:

They [Members] shall take such reasonable measures as may be available to them to ensure that local government and non-governmental standardising bodies within their territories, as well as regional standardizing bodies of which they or one or more bodies within their territories are members, accept and comply with this Code of Good Practice. In addition, Members shall not take measures which have the effect of, directly or indirectly, requiring or encouraging such standardizing bodies to act in a manner inconsistent with the Code of Good Practice. The obligations of Members with respect to compliance of standardizing bodies with the provisions of the Code of Good Practice shall apply irrespective of whether or not a standardizing body has accepted the Code of Good Practice.

In this context it is not clear what the term "reasonable measures" entails and especially what would be considered an "unreasonable measure." Furthermore, the Code of Good Practice, enshrined in Annex 3, is in principal binding only on those standardising bodies which have accepted its substantive provisions. The language of the last sentence of Art. 4.1, TBT Agreement ("shall apply irrespective..."), which is binding on all WTO Members, is equivocal in a sense that it could be read as to mean that all WTO Members have both the legal obligation to ensure that such standardising bodies comply with the said Code of Good Practice and the legal obligation to prevent them from acting inconsistent with the Code of Good Practice, regardless of whether these standardizing bodies have accepted it or not. Among the substantive provisions of the Code of Good Practice, lit. E contains the following obligation:

European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, WT/DS/135/AB/R (March 12, 2001); European Communities – Trade Description of Sardines, WT/DS231/AB/R (September 26, 2002) and European Communities - Measures Affecting the Approval and Marketing of Biotech Products, WT/DS291, WT/DS292, and WT/DS293 (September 29, 2006).

The standardising body shall ensure that standards are not prepared, adopted or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade.

In sum, the precise meaning of Article 4.1, TBT Agreement, is the crucial question because it could establish a stronger point supporting the state liability of a WTO Member for private action in violation of international trade obligations. At this point, however, this question and whether, a WTO Member could be held liable for the practice of the regional coding system as established by an initiative of various private companies, must await a Panel's and possibly the Appellate Body's comments. It would certainly be interesting to see whether the DSB would qualify the DVD-RCS as a 'standard' or 'technical regulation' and the DVD CCA, if no sufficient degree of governmental connection or endorsement of the measure in question can be established, as a non-governmental standardising body in the sense of the TBT Agreement. Eventually, it would then be highly informative to know whether the DVD-RCS constitutes such an "unnecessary obstacle to international trade." Unfortunately, it must be recalled here that such a case is very unlikely to arise at the present time, given the wide absence of private parties' direct access to the WTO DSB system.

C. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs)

Article 7 of the TRIPS Agreement sets forth the principal objectives of the agreement as follows:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

The TRIPS Agreement basically sets minimum standards for the protection of copyrights, trademarks and patents, which may all show some relevance for DVDs. However, the most obvious connecting factor is the issue of parallel imports or 'grey marketing,' which is sought to be prevented by adopting the DVD-RCS. Whoever might hope that a prohibition of parallel imports might — as a measure restricting international trade — mean a violation

of international trade rules will be disappointed. As was said already, the TRIPs Agreement only establishes minimum standards and fails in certain areas to establish uniform rules. This is also the case of parallel imports and the so-called "first sale doctrine" or "exhaustion of intellectual property rights," which means that once a product is licensed by the owner of an intellectual property right in one jurisdiction on, no one may be able to enforce the same rights in another jurisdiction. In this question Article 6,TRIPS Agreement stipulates:

For the purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4 nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights.

In other words, this article leaves the territorial application of national regulations, either prohibiting or allowing parallel imports, untouched. In fact, WTO Members follow different approaches to the issue of parallel imports. This means that, in this respect, the territorial fragmentation of the global market, which already is subject to a heated debate, especially in the context of patents and public health, prevails. Against the background of the national territorial fragmentation of the global market, the DVD-RCS cannot be used as a good example for the prevention of parallel imports, since it does not even prevent parallel imports from countries within the same geographical region but only between the regions established by the DVD-RCS itself.

Most of all, it is in the light of the underlying rational of intellectual property right protection, namely to grant authors' and creators an exclusive right over the use of their creations for a limited time period and to allow the public to make use of these creations while still providing incentives for the development of novel inventions subject to intellectual property rights in the future. As mentioned in the Preamble, the increase of social and economic welfare is one of the central objectives of IPR protection. Like in the case of the prevention of parallel imports, an increase in social and economic welfare is theoretically possible but not very likely and is certainly not guaranteed

⁶⁸ See e.g. Stack, A.J., TRIPs, Patent Exhaustion and Parallel Imports, 1 The Journal of Intellectual Property 657 (1998).

by use of the DVD-RCS. Equally, the other related goals of the TRIPs agreement, namely the "mutual advantage of producers and users of technological knowledge" as well as a "balance of rights and obligations" seem far away from being supported by the DVD-RCS.

Finally, the TRIPs Agreement points out another interesting aspect related to both trade and intellectual property rights, namely their nexus with considerations of competition policy as set out in Article 40. This Article authorises Members to adopt legislation which prevents licensing practices which restrain competition, have adverse affects on trade and impede the transfer and dissemination of technology and, particularly, that constitute an abuse of intellectual property protection. Given that the origin of the DVD-RCS appears to be a licensing agreement administered by the DVD CCA, it appears that all three conditions are met.

This Article is thus of great relevance to the issue of the DVD-RCS because it originates from a licensing agreement. Given that the list of examples in Article 40.2, TRIPs, is non-exhaustive, it is possible that the licensing agreement used for the DVD-RCS fulfils the conditions laid down in Article 40, TRIPs. In this context, it is also interesting to point out the connection with Article 6, TRIPs, and the fact that Article 40, TRIPs, remains silent with regard to anticompetitive contract terms designed to prevent gray market or parallel imports. In the end and despite several open questions, it is important to note that Article 40, TRIPs, effectively allows a WTO Member to adopt legislation which would ban the DVD-RCS. Most of all, it points to the awareness of the drafters of the agreement of possible anticompetitive effects of licenses and the broader nexus between trade, intellectual property rights and competition policy. Competition rules are unfortunately not available at the global level, although Article 40 together with other antitrust provisions in the TRIPs Agreement has been characterised as an "indication that the introduction of a systematic world antitrust law into the WTO framework is long overdue."69

⁶⁹ See Heinemann, A., Antitrust Law of Intellectual Property in the TRIPs Agreement of the World Trade Organization, in From GATT to TRIPS – The Agreement on Trade-Related Aspects of INTELLECTUAL PROPERTY RIGHTS 239, 247 (Beier, F.K. & Schricker, G., Eds., 1996).

At last, it is in the absence of such global competition rules that the DVD-RCS also cannot be analysed further from an antitrust perspective. However, given the potentially private origin of the DVD-RCS and the present limitations on access of private parties to the WTO dispute settlement system, the absence of such global competition rules and perhaps a global competition authority must be deplored because it would allow for some of the private consumers' interests to be taken into account.

VI. Conclusion

Unequivocally, the present discussion has tried to cast light on different aspects of the DVD-RCS which were relevant for a legal analysis in light of the WTO rules. In sum, it can be said that *prima facie* – despite it's openly trade restrictive and market distorting effect – no direct incompatibility of the DVD-RCS with the rules of the various special agreements administered by the WTO could be established. Notwithstanding this finding, the DVD-RCS still appears to contradict in several ways the purpose and the spirit of the laws governing the international trading system under the WTO. In sum, the various aspects of the DVD-RCS invite its qualification as an "unnecessary obstacle to international trade," to use the language of the TBT Agreement. Such general qualification is also supported by an economic analysis of the DVD-RCS and becomes even more persuasive when considered in the context of broader considerations related to the protection and promotion of cultural diversity.

Why, in spite of such general qualification, the DVD-RCS does still not directly violate the respective laws in force, is a question that remains to be answered. One powerful argument suggests that the answer lies in the structure and orientation of the international trading system itself, which is highly flawed or already obsolete in the light of the present business and trading practices and fast-paced technological innovations.

The major flaw in this system is clearly the predominant perception of the system as an organisation of public international law only and with it the wide neglect of private law issues. A mutual approach between the public and the private sphere in international law, long back announced in the form of concepts such as 'transnational law,' 'lex mercatoria,' or a 'droit mixte,' has still not materialized to a satisfactory extent. Instead, the rapid pace of technological development works as a centrifugal force, causing the two areas to drift further apart. In the context of the DVD-RCS this means that the principal nullo actore, nullus iudex (no complainant, no judge) applies. The group primarily negatively affected by the DVD-RCS are consumers, who in turn have no direct or indirect ways of accessing the WTO's dispute settlement system. To A further reason for it is that the origin of the measure that instigated the DVD-RCS is — unless a respective government's endorsement of the measure can be effectively established—presumably located within the realm of the private sector, which not being adopted by the sovereign specifically, is outside the ambit of the WTO.

A third related problem is that the only substantive rules which are able to efficiently control the practice of the DVD-RCS and, more generally, other problems related to the continuous drastic technological innovations in the information and communication sector, such as competition rules, are widely absent in the WTO system. Or else, in the case of the law on cultural diversity, such rules are vested in the hands of another international organisation, namely UNESCO, to which the WTO has hardly any formal institutional ties. The rules of WTO and UNESCO may in fact, even conflict with each other.

For these reasons, a more holistic approach seeking complementarity and consistency between the public and private international law needs to be adopted. Similarly, it requires the simultaneous consideration of the question of access of private individuals to the law of the WTO, the relevance and legal status of trade-inconsistent measures adopted not by states but by private actors and corresponding amendments to the WTO agreements. The last point can also be achieved or be accompanied by a further expansion of the WTO DSB to the rules of general international law. This will become necessary because the WTO is moving from trade liberalisation towards market integration which seriously affects the domestic regulatory autonomy of its

For an indirect access within the EU to the WTO, see e.g. Council Regulation (EC) No 3286/94 of 22 December 1994 laying down Community procedures in the field of the common commercial policy in order to ensure the exercise of the Community's rights under international trade rules, in particular those established under the auspices of the World Trade Organization, [1994] OJ L 349/71.

Member States. At the same time, the world is becoming increasingly interdependent with the help of technology, and global business is conducted more and more across national borders. These and other factors will have the effect that more and more cases will slip through the web woven solely on the basis of public international law considerations.

Paradoxically, private persons already are and will be more and more directly affected by international trade the future which was not even adopted in their national legislative assembly regulation in. At the same time, private action will also assume greater importance in the creation of "unnecessary obstacles to international trade" as protectionism and anticompetitive behaviour move from the border to the inside and sometimes even to regional levels as can be seen in the present case of the DVD-RCS. This explains why in the immediate future serious thoughts should be given to considerations addressing the question of trade inconsistent measures that originate not exclusively in the realm of WTO Members' governments, but instead solely, or at least partly, within the realm of the private sector. In other words, if all efforts by state and public authorities to remove obstacles to trade are rendered null and void, or become impaired by actions of private parties, then eventually the focus must shift to trade inconsistent measures of private origin and ultimately also greater weight must be given to the interests of private persons and affected citizens.

If this proposal appears unrealistic at the moment, there is still a method to counter the negative effects through a different legal mechanism consisting of the body of competition rules. Competition rules are the only way of mitigating some of the most urgent problems caused by the negative effects of unfettered economic power and anti-competitive behaviour on consumers and the public interest. Such an approach, namely the improvement of the enforcement of competition rules at the global level, is desirable to help the international trading system to live up to its more noble ideals.