COMPETITION POLICY AND THE EXERCISE OF INTELLECTUAL PROPERTY RIGHTS

Revised report by the UNCTAD secretariat
CONTENTS

Executive summary ........................................................................................................... 3

Introduction ..................................................................................................................... 4

Chapter I - European Union competition/IPR rules ........................................................ 5
   A. Overview ................................................................................................... 5
   B. Licensing arrangements or sales of protected products .......................... 5
   C. Abuses of dominance ................................................................................ 7
   D. Merger control ........................................................................................... 9

Chapter II - The antitrust/IPR interface in the United States .......................................... 10
   A. Overview ................................................................................................... 10
   B. Treatment of practices in licensing arrangements under the Guidelines ................................................................. 10
   C. Case law relating to monopolization and other questions ...................... 12

Chapter III - Competition policy and IPRs in other countries ........................................ 15
   A. Japanese rules and experiences ................................................................. 15
   B. Some other countries’ or regions’ rules ................................................... 16

Chapter IV - The international dimension ........................................................................ 18
   A. Relevant provisions in multilateral instruments ...................................... 18
   B. Conclusions and implications for international cooperation ............... 20

Annex

Extracts from document TD/B/COM.2/CLP/10 ............................................................... 31
EXECUTIVE SUMMARY

1. Competition policies in major developed countries or regions generally take a favourable attitude to intellectual property rights (IPRs). But intervention may be undertaken where a pragmatic case-by-case analysis indicates IPR-based market power is unreasonably restraining competition in relevant markets. There is concern about cartel-like restraints, exclusionary conduct and monopoly leveraging by dominant firms, refusals to license IPRs or to sell IPR-protected products, practices or mergers which may chill technological innovation (including those relevant to proprietary de facto standards, interoperability, access to essential facilities and network effects) and the effects of over-broad grants of IPRs. Despite the general consensus in developed countries or regions about the appropriate treatment of the competition policy/intellectual property interface, there remain important differences with regard to specific issues. Other countries or regions, despite sometimes touching upon IPR questions in their competition legislation, have limited experience in this area. Taking into account the competition policy issues likely to arise as the TRIPS Agreement is implemented, the growing international nature of innovative activity, global network effects in information industries, the possibly international reach or effects of competition remedies, and the risks of inconsistency between competition and IPR authorities, and among countries, there is likely to be a greater need for, and recourse to, consultations, technical assistance and international cooperation in this area, including *consultations in pursuance of* the TRIPS Agreement. Efforts would therefore be required to build up mutual understanding and trust in this area. Accordingly, in order to fulfil the mandate provided in this area by the Fourth Review Conference, the Group of Experts may wish to hold consultations on:

(a) Typical IPR-based practices, and their motivations and effects (with priority to territorial exclusivity and parallel imports, exclusive dealing, tying requirements and exclusive grant-backs);

(b) The conceptual basis, criteria and methodology used in different jurisdictions, or which would be appropriate, for undertaking economic analysis and applying remedies in this area, both in general and in relation to specific practices, abuses of dominance or mergers involving IPRs, or to industries involving high technology or network effects, illustrated by reference to hypothetical or real cases;

(c) Whether and how competition authorities might use their competition advocacy powers to participate in on-going debates on the appropriate scope and application of IPRs, and to consult with IPR authorities;

(d) The extent to which competition policy treatment of IPRs should be influenced by national particularities; and

(e) The conditions and mechanisms for strengthening international cooperation in this area.
2. The Group of Experts may also wish to request the UNCTAD secretariat to undertake, taking into account such consultations and information provided by member States, a comparative review of the competition law and policy treatment of IPR-based practices in the Commentaries to the Model Law and technical cooperation efforts to build up expertise in this area in developing and transition countries.
INTRODUCTION

1. A first UNCTAD secretariat report (TD/B/CONF.5/6) with the same title as the present report was submitted to the Fourth UN Conference to Review All Aspects of the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices (25-29 September 2000). At the request of the Review Conference, a revised version of the report (TD/B/CONF.2/CLP/22) was presented to the Intergovernmental Group of Experts on Competition Law and Policy at its third session (2-5 July 2001), which requested its further revision for submission to the current session of the Intergovernmental Group of Experts (IGE). The present revised report takes into account further verbal and written commentary and information received from member States and also updates the information provided in the previous report. Additions to the text have been indicated in bold script, and deletions have been indicated with an asterisk. The report uses as a basis and starting-point the UNCTAD document “A preliminary report on how competition policy addresses the exercise of intellectual property rights” (TD/B/COM.2/CLP/10), which was submitted to the Intergovernmental Group of Experts on Competition Law and Policy at its second session (7-9 June 1999). The preliminary report describes the economics and effects upon competition of intellectual property rights (IPRs), general principles guiding competition policy treatment of IPRs, the economic motives and effects of certain licensing practices, and relevant provisions of the Uruguay Round Agreement on Trade-related Aspects of Intellectual Property Rights (the TRIPS Agreement). It states that “...IPRs... play an important role in fostering innovation and sustaining economic growth... [they] may also confer on their holders the ability to exercise market power, at least when similar technologies and products representing viable constraints are not present. Such exercise of market power can lead to allocative inefficiencies... competition policy has a role in limiting monopolistic abuses related to the exercise of IPRs.”

2. In line with the mandate (which refers to how competition policy addresses the exercise of IPRs), the present report does not go into the economic effects of IPR protection, but mainly focuses on providing a comparative analysis of the competition policy principles and rules relating to IPRs contained in the legislation, case law or enforcement guidelines applicable in some jurisdictions, mainly those in some advanced countries or regions which have the most detailed rules and extensive enforcement practice in this area (other developed countries apply broadly similar rules). However, the economic reasoning behind such principles and rules is briefly explained, and that part of document TD/B/COM.2/CLP/10 dealing with individual practices is reproduced so as to facilitate discussion by the IGE of the economic effects of such practices. A description of the applicable rules contained in some international agreements or guidelines is also provided. The IPRs referred to in this report include patents, copyright, trademarks, design rights, plant variety rights, layout designs of integrated circuits and rights over undisclosed information, as undisclosed information is explicitly included as a subject of IPR protection under the TRIPS Agreement. The principles applied to the competition policy treatment of these IPRs in these jurisdictions would apply mutatis mutandis to other IPRs. Chapter I of the report analyses the interface between competition policy and IPRs in the European Union (EU). Chapter II looks at the situation in...
the United States. Chapter III describes the treatment of IPRs under Japanese competition law, and then outlines the relevant rules in some other countries, including developing countries. Chapter IV describes the treatment of the competition policy/IPR nexus in international instruments, and then highlights some conclusions and implications arising from the study. The Annex reproduces paragraphs 15-26 of document TD/B/COM.2/CLP/10, relating to the practices of territorial exclusivity and parallel imports, exclusive dealing, tying requirements and exclusive grant-backs.
Chapter I

EUROPEAN UNION COMPETITION/IPR RULES

A. Overview

3. The EU competition rules relating to IPRs are contained mainly in: (a) article 81 of the Treaty of Rome relating to anti-competitive agreements, decisions and practices - an exemption is provided from the application of this article for minor agreements involving less than market shares of 5 per cent (for horizontal arrangements) or 10 per cent (for vertical arrangements); (b) article 82 (formerly article 86) relating to abuses of dominant position; (c) articles 28 and 30 prohibiting quantitative restrictions on trade between member States unless justified to protect industrial and commercial property; (d) the Technology Transfer regulation providing a block exemption for patent, know-how and mixed licences, as well as for ancillary agreements on copyright or trademarks; (e) Regulation 2790/1999 (block exemptions for vertical restraints), which covers assignments or licences of IPRs which are ancillary to vertical agreements, subject to the specific rules set out in the Technology Transfer regulation; (f) other block exemptions relating to R & D cooperation and franchise agreements (which will not be dealt with here), as well as the Merger Regulation; * and (g) substantial case law. These competition rules have been influenced by the EU competition policy’s basic objective of market integration, as well as by two fundamental doctrines: (a) competition rules apply not to the existence but to the exercise of IPRs; (b) restraints upon competition are justified when they are reasonably necessary to safeguard the “specific subject matter” of an IPR. In practice, however, the European Court of Justice (ECJ) has not consistently based its reasoning upon the existence/exercise and specific subject-matter doctrines, relying instead upon a standard economic analysis of the type used in non-IPR cases. The review below is broadly in line with the structure of EU law in this area. Section B looks at restraints in IPR licensing arrangements or linked to sales of IPR-protected products, which would probably be dealt with under article 81 and the Technology Transfer Regulation; the question of exhaustion of rights/parallel imports, which partially overlaps with licensing and sale issues, is dealt with in this context. Section C deals with IPR-based abuses of dominance falling under article 82; it should be noted, however, that abuses can arise in the context of licensing arrangements or sales. Section D looks at IPR issues arising in merger control.

B. Licensing arrangements or sales of protected products

4. In line with the liberalization of competition policy treatment of vertical restraints in general, the treatment of restraints in IPR licensing arrangements has been substantially liberalized in recent years, although the extent of liberalization has not been quite as much as in respect of non-IPR-related vertical restraints. Applying economic analysis, the ECJ has established that not every restraint of conduct in a licensing arrangement should be considered to be a restraint of competition falling within the prohibition of article 81 (1). The
presence of exclusivity clauses in licensing arrangements has not fallen within this prohibition where such clauses are “open” (not affecting the position of third parties such as parallel importers and licensees for other territories), are necessary to provide fair rewards to licensors or to enable them to penetrate a new market, encourage inter-brand competition, relate to new technology, or are justified by other general characteristics of the industry and the technology, and have a duration which is not too lengthy. Thus, open exclusive territorial licences of a plant variety right (enabling the dissemination of new technology) or of the right to play films in cinemas (required because of the usages and necessities of the film industry) were found not to be in themselves incompatible with article 81 (1) unless they created barriers which were artificial and unjustifiable.9

5. In cases relating to article 81, the existence/exercise distinction has been relied upon by the ECJ to allow restraints that constitute the exclusivity of the IPR as such, such as confidentiality clauses or bans on post-licence exploitation of the IPR; thus, a ban on the use of basic seed from a protected plant variety for purposes other than first-time seed multiplication was allowed.10 However, the specific subject-matter doctrine has been used by the ECJ not so much to provide IPRs with immunity from competition controls, but to legitimize EU action potentially affecting the use of property rights granted by member States,11 thus, for example, the doctrine has been used to justify the application of EU competition law to licensing arrangements relating to non-protected products or non-protected parts of protected products, or to no-challenge clauses preserving the illegitimate existence of IPRs.12 But it has often been questionable whether a neat division could be made between what was within the scope of the grant of IPRs and what was outside. And in cases which have clearly involved the specific subject-matter of IPRs, the ECJ has preferred to undertake a broad evaluation of the economic and legal context of the arrangement; thus, for example, it has held that the assignment of IPRs13 or the acquisition of parallel rights of protection by different entities with the intention of blocking imports14 are not automatically immune from the prohibition in article 81 (1).

6. The use of IPRs to segment Community markets has been curtailed through the competition policy principle of exhaustion of IPRs in intra-Community trade. This has involved the application of the existence/exercise doctrine to prevent suits for infringement of IPRs protecting goods imported from another member State (and consequent restriction of imports or further sale), once the goods have been previously marketed in any member State by, or with the consent of, the IPR holder.15 Exhaustion takes place whether or not the products in question are protected by parallel IPRs in the exporting member State and indeed even if IPR protection for that product was not available in that State. The Community-wide exhaustion principle has now been extended to cover all countries within the European Economic Area (EEA). But EU Member States are not free to apply a principle of international exhaustion in respect of products first marketed outside the EEA, particularly where this has been expressly prohibited under EU rules (EU directives relating to the harmonization of national protection of trademarks, design rights, utility models, computer programme protection and data base protection, as well as the Community Patent Convention, all prohibit international exhaustion). Thus, in one case, parallel imports into Austria of Silhouette spectacle frames, and their subsequent offer for sale, were held to
infringe the Silhouette trademark, even though the frames had been sold outside the EEA by the trademark holder (on the condition that they should only be resold in Bulgaria and the CIS countries). Parallel imports of branded goods from a non-EEA country are banned even where the trademark holder has not imposed an export ban on its licensee in that country, as long as it has not “unequivocally” consented to the parallel importing (express consent would normally be necessary, although it might possibly be inferred from the circumstances).

7. The Technology Transfer regulation aims at both alleviating the administrative workload upon the Commission and strengthening the competitiveness of EU industry through increased technological innovation and dissemination. Article 1 exempts from the application of article 81 various types of territorial restrictions that may be included in licensing arrangements, subject to limitations regarding the duration of protection from competition that is provided. Articles 2, 3 and 4 respectively provide for: a “white list” of other types of practices that normally will be deemed not to infringe article 81, and are thus granted a “block exemption”; a short “black list” of conditions in a licence that would prevent the exemption being applied to the whole agreement, and an “opposition procedure” for agreements containing restraints not coming within either white or black lists, providing for the exemption for agreements notified to the Commission and not opposed within four months. Article 7 provides that the benefits of the block exemption may be withdrawn in certain circumstances, such as lack of effective competition, particularly where the licensee’s market share exceeds 40 per cent (the initial draft of the regulation would have excluded ab initio from the ambit of the block exemption arrangements among enterprises holding market shares of over 40 per cent). It is noteworthy that the Regulation extends the block exemption not only to bilateral patent pools and cross-licensing arrangements between competitors (provided they do not involve territorial restrictions), but also to licences between competing enterprises and their joint ventures (provided certain market shares are not exceeded). In general, the regulation appears to treat most licensing transactions as if they were of a vertical nature - even though it is arguable that they are of a mixed horizontal-vertical nature, since the licensee is a potential competitor at the same level of the value-added chain as the licensor (at least following the grant of the licence). But the limitations imposed upon territorial exclusivity by article 1 do show a recognition of the potential for licensors and licensees to become competitors at least at the level of distribution. The Regulation does not apply to resales, joint ventures, or patent pools. The EU Commission is currently considering putting forward policy proposals to amend the regulation so as to introduce a simpler and possibly wider block exemption for technology licensing agreements.

C. Abuses of dominance

8. ECJ case law establishes that “so far as a dominant position is concerned … mere ownership of an intellectual property right cannot confer such a position”. A corollary of this is that EU competition law is concerned with the abuse of a dominant position, whatever the source of such dominance, rather than with any abuse of the IPR itself. While the
relatively few cases in this area refer to the existence/exercise and specific subject-matter principles, the ECJ has also in practice applied the standard rules contained in articles 82 to IPR-based abuses of dominance. Thus, in two cases involving design rights in spare parts for cars, the ECJ held that refusals to license these rights could not constitute abuses *per se* as any market-dominating enterprise was entitled to act in the same way as any enterprise would on competitive markets, as the exercises of exclusivity were legitimate, and as the refusals to license were part of the autonomy granted to the IPR-holder. However, the court also ruled that article 82 would be applicable when specifically abusive conduct was involved, such as the arbitrary refusal to supply spare parts to independent repairers, setting prices at an unfair level or no longer producing spare parts for a particular model. The ECJ went even further in the *Magill* case, involving the issue of whether the owner of copyright-protected TV programme listings could exclude competitors from the derivative market for weekly TV guides. It held that the refusal to license constituted abuse in exceptional circumstances, because of the lack of actual or potential substitutes and the prevention of product innovation (contravening article 82), the abusive leveraging in a secondary market, and the lack of legitimate justification; a defence based upon the exercise of an IPR was expressly rejected, and the IPR holder was denied the right to refuse the licence. Thus, the court focused on whether the conduct was anti-competitive or not, rather than on whether it was within or outside the scope of the grant of the IPR. However, in a similar case decided by the lower-level Court of First Instance (CFI), a refusal to grant copyright licences of live TV transmissions of horse-racing was held to be valid as the licences were not indispensable for the plaintiff’s business of betting upon horses; the mere fact that it was prepared to pay a reasonable royalty did not mean that the refusal to license was arbitrary or amount to sufficient evidence of abuse (by contrast, in the *Hilti* case, a demand by a patent-owner for an “excessive” royalty was found to be an abuse since the sole object was to block or, at least, unreasonably delay, a licence of right which was available under the United Kingdom patent). It is arguable that the *Magill* and *Ladbroke* cases illustrate the integration of an “essential facilities” doctrine into the interpretation of article 82. The “essential facilities” doctrine may be further extended by a European Commission decision relating to a refusal by a dominant firm to license its copyright on the *de facto* industry standard for collection and analysis of regional data on sales of pharmaceuticals in Germany (which would have allowed competitors to compete in the same market as that covered by the copyright); this was held to be abusive and a compulsory licence was ordered, but the case is now on appeal. A possible further illustration of an essential facilities doctrine in the area of information technology is provided by the EU’s Software Protection directive, which permits reverse engineering and decompilation of software, so as to allow determination of the ideas and principles underlying any element of a software programme, or the obtention of information necessary to achieve interoperability of independently created computer programmes. But even if reverse engineering does not reveal an interface code, compulsory access may still be granted; in the IBM case, a dominant firm was obliged to disclose secret know-how relating to its interface codes, which constituted the proprietary *de facto* standard in this area, so as to allow potential competitors to produce compatible hardware products (this contrasts with the outcome of antitrust cases brought in the United States against IBM, discussed in the following chapter).
9. In another article 82 case involving licensing of software, a dominant firm in this market, Microsoft, was enjoined from requiring tie-ins of software licences, especially “per-processor licences” requiring royalties on the basis of each computer sold regardless of whether the software was actually installed on it; these removed the incentive for hardware manufacturers to buy competing software\textsuperscript{34} (as discussed in the following chapter, an identical undertaking was made by Microsoft to the United States federal enforcement authorities, which had cooperated with the EU Commission on this case). In the Santa Cruz/Microsoft case, Microsoft was prevented from imposing conditions in a licensing arrangement hampering the development of operating systems based on UNIX software. In still another case involving Microsoft, the CFI accepted that Microsoft had the right to prevent parallel imports of French language software into France from Canada, as the Software Directive provided only for exhaustion within the EU.\textsuperscript{35} However, the court ruled that the Commission had improperly exercised its enforcement discretion with regard to article 82 in failing to examine whether the differential pricing between Canada and France (the price being higher in the latter country) amounted to an abuse; the court considered that, while as a rule, the enforcement of copyright did not amount to an abuse it might do so in exceptional circumstances. During the recent Microsoft-Browser case in the United States, the Commission abstained from instigating its own proceedings until the proceedings in the United States were resolved. Two cases against Microsoft are now pending in respect of alleged use of the Windows 2000 program for accessing the server software market, discriminatory licensing, \textit{illegal tying} and withholding information. In another case brought by the Commission, Microsoft has had to undertake not to try and influence cable operators in which it has minority shareholdings to buy its products.\textsuperscript{36}

D. Merger control

10. Under EU law, where the acquisition by an enterprise of another enterprise, or the establishment of a “concentrative” joint venture (having effects similar to a merger, and thus subject to merger control), involves the grant of IPR licences, such licences will be considered to be ancillary to the main transaction when they are non-exclusive and are not limited as to territories (field of use restrictions are considered acceptable).\textsuperscript{37} Accordingly the acceptability of the licence will depend upon the acceptability of the merger or joint venture in question. But an acquisition of IPRs by an enterprise may be considered to constitute an acquisition of assets giving rise to direct or indirect control of another undertaking, thus constituting a concentration subject to merger control. Under certain circumstances, the acquisition of a trademark may also constitute a concentration.\textsuperscript{38} The most important aspect of the merger control/IPR interface is the role which the possession of IPRs plays in determining whether the substantive criterion for competition policy intervention (the creation or strengthening of a dominant position on a relevant market) has been met - the Merger Control regulation provides that “any legal or other barriers to entry” have to be taken into account in determining whether there is dominance. This may sometimes be linked to the question of the definition of the relevant market. The obligation to license out IPRs may constitute one of the remedies for anticompetitive aspects of a merger.
11. Merger cases involving IPRs brought by the EU Commission have shown concern about R & D competition and future product markets, particularly in the pharmaceuticals industry. In the Boeing/McDonnell Douglas case, the merger was cleared only on condition that other aeroplane manufacturers obtained non-exclusive licences to patents and underlying know-how held by Boeing. In the Ciba-Geigy/Sandoz merger case, the EU Commission’s concerns relating to the parties’ dominant position in the market for methoprene (an ingredient in animal flea control products) were satisfied by an undertaking to grant non-exclusive licences on “fair and reasonable terms” for its production; similar concerns relating to the market for gene therapy were also resolved by a 10-year obligation to provide non-exclusive patent licences to requesting third parties on commercially competitive terms (in the United States, concerns by the FTC relating to effects of the merger upon “innovation markets” were resolved through a divestiture of Sandoz’s United States and Canadian flea control business and a technology transfer agreement enabling the purchaser of the business to produce its own methoprene, as well as the obligation to grant non-exclusive licences on certain gene therapy patent rights and other technology, and to refrain from acquiring exclusive rights over other genes). While the Commission accepted the grant of non-exclusive licences in the Ciba-Geigy case, in two other cases of mergers of pharmaceutical or chemical companies (Glaxo/Wellcome and Dupont/ICI), it required the grant of exclusive licences preventing use of the IPRs in question by their holders or by other parties.
Chapter II
THE ANTITRUST/IPR INTERFACE IN THE UNITED STATES

A. Overview

12. United States antitrust law applicable to IPR-based anticompetitive practices is mainly based upon: sections 1 and 2 of the Sherman Act, respectively prohibiting “every contract, combination … or conspiracy, in restraint of trade or commerce …” and monopolization, attempted monopolization, and conspiracies to monopolize;\(^42\) sections 3 and 7 of the Clayton Act, respectively dealing with tying arrangements and with mergers and acquisitions (the review below will not deal at any length with IPR issues in merger control); section 5 of the Federal Trade Commission Act, giving the FTC broad latitude to attack “unfair methods of competition” and “unfair or deceptive acts of practices”; IPR and trade legislation; and a very large corpus of case law. The antitrust treatment of IPRs has gone through several cycles of relative severity and liberalization over the last century, influenced by doctrines or economic schools such as: the “inherency” doctrine, under which, since it is the very purpose of an IPR to authorize the holder to exclude others from using the subject-matter protected, it should be free to impose such restraints on a licensee as are inherent in the IPR; the “reasonable reward” doctrine, under which, since it is the purpose of the patent law to secure a reward for the efforts made by the patent-holder, the application of competition law should not frustrate the reward it obtains from legitimate restraints;\(^43\) the Harvard School’s emphasis on free individual competition, which influenced an enforcement policy directed against the “Nine No-No’s”, restraints deemed to be virtually always beyond IPRs’ scope or reasonable reward;\(^44\) the Chicago School emphasis upon economic efficiency and critique of strong antitrust enforcement against vertical restraints, monopolization and mergers; and post-Chicago work on entry barriers, transaction costs, information asymmetries, the operation of dynamic markets and strategic business behaviour. It is now generally accepted that “the aims and objectives of patent and antitrust laws … are … complementary, as both are aimed at encouraging innovation, industry and competition”.\(^45\) But in recent years, such a favourable view of IPRs and their various forms of use has not excluded energetic action against their abuse to restrain competition, as the competition enforcement authorities and the courts focus on the complex economic and legal issues raised by industry structures and practices in high-technology sectors. However, except for some licensing practices of an obviously questionable nature, current antitrust control of IPR use is still mostly limited to some exceptional cases of monopolistic conduct and concentrated markets. This is perhaps because of the general context of a dynamic, large and technologically advanced economy perceived as having limited vulnerability to innovation-related market power. Section B reviews the enforcement policy of the federal antitrust agencies in respect of practices in licensing arrangements, as set out in the Guidelines.\(^46\) Section C then looks at some case law on IPR-based monopolization (which may occur inter alia in connection with licensing arrangements), as well as on such other questions as anti-competitive acquisition or enforcement of IPRs, patent misuse, and exhaustion of rights. The review below does not look at the treatment of mergers where the firms involved hold IPRs; divestments of
IPRs have been ordered in some cases, particularly in mergers between pharmaceutical companies. 47

B. Treatment of practices in licensing arrangements under the Guidelines

13. The Guidelines state the antitrust enforcement policy of the Department of Justice (DOJ) and the FTC with respect to the licensing of patents, copyright, trade secrets and know-how. They do not cover the antitrust treatment of trademarks, although they note that the same general antitrust principles applicable to other IPRs would be applicable to trademark licences. The Guidelines express a favourable view of IP protection in general, noting that it provides incentives for innovation and its dissemination and commercialization by establishing enforceable property rights for creators of new and useful products, more efficient processes and original works of expression, and by preventing rapid imitation from reducing the commercial value of innovation and eroding incentives to invest, ultimately to the detriment of consumers. The Guidelines eschew formalistic approaches to the treatment of licensing practices, and provide for a case-by-case examination of their actual effects in the context of licensing arrangements, in the light of all relevant economic and legal factors. They embody three general principles: (1) for antitrust purposes, IPRs are essentially comparable to other forms of property; (2) IPRs as such do not necessarily confer market power in the antitrust context; 48 and (3) as a rule, IPR licensing has pro-competitive effects because it allows firms to combine complementary factors of production and is generally procompetitive. It is deduced from these principles that the same antitrust treatment should be applied to conduct involving IPRs as to conduct involving other forms of property; the unique characteristics of IPRs (such as ease of misappropriation) can be taken into account in standard antitrust analysis, as can differences among different forms of IPRs. Antitrust scrutiny of licensing arrangements would mainly arise when they harm competition among entities that would have been actual or likely potential competitors in a relevant market in the absence of the licence. Thus, the Guidelines have been influenced by the Chicago School emphasis on preventing restraints between competitors, rather than by the Harvard School concern with safeguarding individual freedom of choice in vertical relationships. The Guidelines’ focus on issues of market structure, coordination and foreclosure indicate a strong orientation towards the encouragement of innovation and its dissemination. Moreover, in determining the relevant markets for the exploitation of IPRs, the Guidelines distinguish among: “product markets” for intermediate or final products resulting from the licensed or protected technology; “technology markets” where the IPRs are exploited independently from the products they cover; and “innovation markets” in R & D for new technologies not currently in existence. The three markets are vertically related, and innovation or technology markets are considered only when product market analysis is not yet feasible or will not fully take into account all the implications of a transaction for competition. As evidenced by the distinctions made among these markets, the Guidelines appear to assume (as mostly does the EU Regulation) that licensors and licensees are *often in a vertical relationship. But the Guidelines explicitly state that a relationship between a licensor and its licensees, or between licensees, will be treated as horizontal where they would have been actual or likely potential competitors in the absence of the licence.
14. The evaluation of practices in a licensing arrangement involves a rule of reason balancing of any anti- and pro-competitive effects. The evaluation of practices in a licensing arrangement involves a rule of reason balancing of any anti- and pro-competitive effects. The general approach is to enquire whether the restraint is likely to have anti-competitive effects and, if so, whether the restraint is reasonably necessary to achieve procompetitive benefits that outweigh those anticompetitive effects (Guidelines 3.4). The rule-of-reason inquiry is simplified where the arrangement has no apparent anti-competitive effect; it will be presumed to be reasonable, and no further inquiry will be undertaken unless required by specific circumstances. In the reverse situation, the rule-of-reason inquiry into an arrangement is also truncated where it is anti-competitive on face value; then it will be challenged unless special circumstances are shown regarding efficiency-enhancing effects outweighing the harm to competition - falling within this category are RBPs similar to those subject to per se prohibitions under general antitrust law (horizontal and vertical price-fixing, and horizontal output restraints, market division and certain group boycotts). Most other practices, such as tie-ins, package licensing, exclusive dealing, cross-licensing and patent pooling, or grant-backs, which are neither pro-competitive nor anti-competitive on their face, are subject to a normal rule-of-reason analysis. Most vertical restraints are generally considered to represent a danger for competition only to the extent that they may involve actual restraints between horizontal competitors at the level of the licensee, the licensor, or in another relevant market. But horizontal restraints are not necessarily viewed unfavourably. Thus, licensing arrangements made to bring complementary assets together (such as through cross-licensing), or to resolve legal or factual blocking situations, would be considered to be mostly pro-competitive; and a formally restrictive agreement involving, for example, field-of-use or territorial restrictions, may also be acceptable provided that it does not raise obstacles to competing technologies. The Guidelines provide for a “safety zone” within which licensing arrangements are unlikely to be challenged because there is sufficient competition to pre-empt the possibility of market power being exploited - arrangements having no apparent anti-competitive effect (provided the parties’ combined market share of each relevant market affected does not exceed 20 per cent) would fall within this zone. But the zone does not provide exemptions from merger control (which applies to both outright transfers and exclusive licences of IPRs).

15. As appears from the above, the Guidelines provide less legal security than does the EU Technology Transfer Regulation, both because they state enforcement policy rather than the law, and because of their flexible rule-of-reason approach (which may have particular advantages in rapidly evolving high-technology markets). But the differences in this respect between the Guidelines and the EU Regulation would be reduced by the fact that the Regulation allows for the application of flexible economic analysis, while the Guidelines provide detailed guidance on enforcement policy (which is largely based upon existing case law and trends) and on the analytical principles and techniques applied, illustrated by reference to hypothetical cases. There are resemblances between the analytic structure set out in the Guidelines, and the EU Regulations’s division of practices into “white”, “black” and “opposition procedure” lists, exemption for agreements of minor importance and greater willingness to scrutinize horizontal practices, as well as practices restraining technological innovation (although the concepts of technology markets and innovation markets are not
utilized in the EU). In general, the Guidelines have adopted a broadly similar approach to the Regulation relating to the basic dilemma of how to safeguard the licensor’s willingness to license while enabling the licensee to compete. However, *US competition policy tends to place fewer limits upon the exploitation of IPR rights than does EU competition law, particularly in respect of agreements between non-competitors – although the adoption of the current proposals to reform the EU Technology Transfer regulation would reduce this divergence.

C. Case law relating to monopolization and other questions

16. There is some similarity in the application in practice of the United States rules relating to IPR-based monopolization and the EU rules relating to IPR-based abuses of dominance. As in the EU, it appears that, in certain circumstances, dominant firms may lose a key right attached to IPRs, namely the right not to disseminate innovation or its fruits. There is considerable case law concluding on the basis of the “inherency” doctrine that a patentee is free to choose whether or not to license its patent. *Three appellate courts in the United States have approached the issue of refusals to license differently. 49 *No court of last resort has so far accepted a claim for access to the subject matter of IPRs on the basis of the essential facilities doctrine. Treating IPRs and other forms of property equally would imply that the essential facilities doctrine is applicable to IPRs in principle; but its actual application in an individual case would depend upon the scope of the doctrine in general, which is not clear.

17. Both the monopoly leveraging and essential facilities doctrines may be relevant where a de facto standard is the subject of an IPR, the first where the standard is used to dominate a related market, and the latter where information on the standard is indispensable to enter an upstream or downstream market. Until recently, antitrust control over de facto standards has been applied very cautiously. A famous case of monopolization brought by the DOJ against IBM relating inter alia to compatibility between its peripheral equipment and computers made by other firms ultimately resulted in the withdrawal of the 13-year old case. 50 A private action requesting IBM to pre-disclose technical modifications of interfaces was dismissed on the grounds that IBM was not obliged to support competing manufacturers. 51 Innovation strategies aiming at controlling both the innovation and its related after-markets through exclusionary new product designs are not as such suspect under antitrust laws *; thus, a suit by a manufacturer of film for disclosure of a new camera format created by a manufacturer of cameras was dismissed on the grounds that pre-disclosure would allow a free ride on the investment in innovative cameras, reducing the incentive for R&D. 52 In recent years, the Federal Trade Commission has considered the competitive effects of asserting IP rights after the IP has been incorporated into a standard. In particular, Dell Computer Co., C-3658 (20 May 1996) involved a standard designed for the Video Electronics Standards Association (“VESA”) for a local bus to transfer instructions between a computer’s central processing unit (CPU) and peripherals. Under the standard-setting rules of VESA, a Dell representative allegedly certified in writing that the proposed standard did not infringe on any of Dell’s IP rights. However, once the standard was adopted,
and apparently only after the new bus began to achieve success, Dell informed several members that its patent rights had been infringed by the standard. The Commission alleged that these actions constituted an unfair method of competition in violation of section 5 of the Federal Trade Commission Act. The Commission’s complaint specifically charged that industry acceptance of the new standard was delayed, and that the uncertainty surrounding acceptance of the standard raised the cost of implementing the new design. Other firms avoided using the new bus because they were concerned that the patent dispute would reduce its acceptance as a standard. In addition, the Federal Trade Commission alleged that willingness to participate in industry standard-setting efforts was chilled. Dell entered into a consent decree, which settled the case. Under the terms of the decree, Dell agreed that it would not enforce its patent against computer manufacturers under the new design and would not enforce in the future any patent right it intentionally failed to disclose during the standard-setting process. The FTC’s Intel case also involved disclosure issues, although it was more of a refusal to deal/cross-licensing case. * Intel, a dominant manufacturer of micro-processors used in computers, * had reacted to refusals by three competing manufacturers to license patents for micro-processors by ceasing to pre-disclose product information to them, and urging other firms not to cooperate with them; its defence against the charge of monopolization by preventing other firms from enforcing their patents was that it had the right to refuse to disclose because it was protecting and using its own IPRs. Ultimately, the case was settled on the basis of a pledge by Intel not to use pre-disclosure as a means to extract IPR licences from other firms, while the FTC conceded that Intel might refuse advanced product information for legitimate business reasons, such as when a customer had violated a confidentiality agreement, or when Intel adhered to a general policy of non-disclosure.53 The case is an interesting demonstration of how antitrust can be used not only to limit anticompetitive use of IPRs by a dominant firm, but to protect IPRs of other firms subject to pressure by the dominant firm. By contrast, a federal appellate court rejected Intergraph’s antitrust allegations against Intel, holding that Intel’s customer benefits were not an essential facility, that withdrawing these benefits did not constitute a refusal to deal, and that Intel had not leveraged its power in an upstream market by entering a new market.54

18. As evidenced by the Intel case, a more sceptical view of de facto standards has become prevalent in recent years, given the market power acquired through such standards in the computer industry, and given concerns about monopoly leveraging and “network effects” in the computer, telecommunications and other high-technology industries, which also often require common access to unique facilities.55 But the dilemma in such cases has been how to take action against RBPs without adversely affecting technological innovation and consumer welfare. This has become particularly evident from the different cases brought in the United States against Microsoft, only some of which are reviewed below. As in the EU, a suit by the DOJ in respect of exclusionary and tie-in practices and modalities for calculating royalties, particularly “per processor licences”, led to a court order prohibiting Microsoft from imposing such licensing clauses.56 However, the prohibition relating to the tying of other Microsoft software contained an exception relating to integrated products, thus allowing Microsoft to integrate new elements into its operating systems. New suits were later brought by the DOJ and 20 states’ Attorney-Generals against Microsoft in respect of its imposition of
an obligation upon all buyers of Windows 98 operating systems to have its Internet browser, “Internet Explorer”, installed for end users (involving a network effect because of the convenience for consumers in having identical browsers linked to the dominant global operating system). Several other tying, exclusive dealing or predatory practices were alleged, the overall aim being to maintain Microsoft’s monopoly on the market for operating systems and securing, on the basis of that monopoly, a dominant position on the related market for browsers. On appeal, the United States Court of Appeals affirmed most of the trial court’s conclusions that Microsoft had violated section 2 of the Sherman Act by monopolizing the market for Intel-compatible personal computer operating systems. However, it reversed the trial court’s conclusions that Microsoft had attempted to monopolize a market for Internet browsers and remanded for further consideration the trial court’s conclusion that Microsoft had violated section 1 of the Sherman Act by tying the operating system to the browser. Finally the appellate court reversed the trial court’s order of a structural remedy and asked the trial court for new consideration of an appropriate remedy. The trial court is currently reviewing a settlement proposal between the United States Government and Microsoft.

19. There are important contexts outside licensing arrangements or refusals to deal in which IPRs may be used in violation of section 2 of the Sherman Act. An acquisition of an IPR through government grant can result in antitrust liability where it is: (1) part of a collusive scheme among competitors to acquire market power; (2) part of a plan to monopolize by accumulating and enforcing every important IPR in a given market (particularly when this is coupled with non-use); or (3) acquired by fraud on the Patent and Trademark Office or the Copyright Office, or by inequitable conduct falling short of fraud, and used to exclude competition on a relevant market (there must be market power). The Guidelines specify that the federal enforcement authorities may challenge the enforcement of an IPR in cases falling within (3) above (provided certain additional conditions are met). Where the IPR is purchased from another firm, antitrust liability may arise where the aim is to monopolize, as in (2) above, and the acquisition may also be subject to merger control, as indicated in the previous section. However, the mere acquisition of a “blocking” patent for the purpose of hindering a competitor from using it is legal. Bad faith enforcement or threats of enforcement of IPRs may be illegal; the Guidelines again specify that the federal enforcement authorities may take antitrust action in such cases of objectively baseless litigation. Recently, tactics used by manufacturers of patented pharmaceuticals to hinder competition from generic drugs upon expiry of their patents have come under antitrust scrutiny. The FTC has cleared from liability a pharmaceuticals firm which, just before the expiry of a patent based upon one ingredient of a drug, filed an additional patent for the drug on the basis of another active principle of the drug. However, it has successfully brought a number of cases in respect of payments allegedly offered by manufacturers of patented pharmaceuticals whose patents are expiring to manufacturers of generic drugs for not launching competing generics on the market upon expiry of the patents concerned, and other cases are now being brought as part of a broader inquiry into whether large pharmaceutical companies are illegally stifling competition from low-cost generic drug manufacturers.
20. The behaviour of IPR holders is kept in check not only by antitrust law, but by the judicially created equitable doctrine of patent misuse, which may result in the denial of enforcement of a patent or copyright where the holder has put his right to improper use by excluding competition beyond the scope of his IPR, contrary to public policy. Many misuse cases have involved tying. Traditionally, the misuse doctrine required no proof of market power, leverage or foreclosure; the presence of an impermissible clause in a licence was misuse *per se*. But the Patent Reform Act of 1988 has provided that, in cases of patent misuse based on tying, it must be proved that the patent holder actually possessed market power; it is also specified that a refusal to license cannot be the basis for a patent misuse claim. There is thus a convergence between the misuse doctrine and antitrust law, but it is still unclear whether proof of market power will now be required by the courts in misuse cases not involving tying.

21. Regarding exhaustion of rights, the situation varies with the IPR in question. An IPR holder’s first sale of a protected product within the United States *nearly* exhausts all its rights to further control the disposition of that article. However, it is free to place, within the limits set by antitrust law (as discussed above), various restrictions on the licence and/or sale of the patented product. The “first sale” doctrine does not apply to products marketed overseas with a patentee’s consent, whether or not there is a parallel patent on the product abroad; only if the parties expressly contemplated that the licensee would have full and free rights in both the foreign and the domestic markets would the patentee not be able to prevent parallel imports. As regards branded goods, under trade and trademark legislation, imports into the United States of grey-market goods (parallel imports) marketed overseas under a licence from the holder of the United States trademark are banned without its authorization, unless the foreign and domestic trademark owners are the same, are affiliated companies, or are otherwise under “common control”61 (provided the goods are materially different from those sold in the United States and could cause confusion among consumers). * The unauthorized importation of *legitimately purchased* copyrighted material is *not* considered to be an infringement of the holder’s exclusive right to distribute copies in the United States *. 
Chapter III

COMPETITION POLICY AND IPRS IN OTHER COUNTRIES

A. Japanese rules and experiences

22. The competition laws or enforcement policies of other developed countries relating to IPRs broadly follow the approaches adopted by the European Union and the United States. This is certainly true of the Japanese law and enforcement guidelines. Section 23 of the Japanese Antimonopoly Act (AMA) exempts from its application acts which are “recognisable as the exercise of rights ...” under the Japanese IPR laws. Licensing practices not recognized as such an exercise of IPRs may fall within the scope of section 3 of the Act, which prohibits private monopolization and unreasonable restraint of trade. Also relevant to IPRs are sections 8 and 19 of the Act, respectively prohibiting unreasonable restraints by trade associations and unfair trade practices which tend to impede fair competition. Such unfair trade practices are designated as such by the Japanese Fair Trade Commission (JFTC); practices which have been designated include unjust tie-ins, exclusive dealing and restrictions on dealings with third parties, as well as abuse of dominant bargaining positions. The JFTC has also issued Licensing Guidelines, which relate only to possible violations of section 19 through provisions in licensing arrangements. The Guidelines, which are applicable to both national and international agreements, provide administrative guidance to enterprises as to the enforcement policy of the JFTC. In this respect, there are resemblances to the United States Guidelines, as in the use of examples to explain in which cases licensing arrangements (such as cross-licensing, patent pools, multiple licensing agreements) or refusals to license would raise problems for competition policy. Behaviour considered by the JFTC to constitute an improper exercise of IPRs has included collective refusals by pinball manufacturers to license patents held in a patent pool in order to limit market entry; the conditioning of the grant of licences by a trade association upon the respect of production quotas for radish sprouts, and the tying together of licences of different forms of software by Microsoft.

23. In the exercise of its powers under the Act, the JFTC has also issued the Guidelines Concerning Joint Research and Development of 1993 (which provide for rule-of-reason treatment of IP/competition policy issues arising in technology or products markets from joint R & D) and the Guidelines Concerning Distribution Systems and Business Practices of 1991 (including unreasonable obstruction of parallel imports), which list different forms of obstruction of parallel imports by sole distributors considered to contravene the Act. Japanese law accepts the principle of international exhaustion of IPRs. Thus, in the BBS case decided by the Supreme Court, a holder of a Japanese patent upon aluminium wheels for cars could not prevent parallel imports of wheels it had sold to a legitimate purchaser in Germany. However, it was held that the prevention of parallel imports would have been possible if the patent holder and the transferee had agreed to exclude Japan from the territory of sale or use of the product; if the parallel imports were by a third party, the agreement to exclude Japan would also have to be explicitly indicated on the products in question.
B. Some other countries’ or regions’ rules

24. Most countries whose substantive competition rules are broadly similar to those contained in Articles 81 and 82 of the Treaty of Rome, particularly some Central and Eastern European, African and Latin American countries, do not deal explicitly with the treatment of IPRs in their competition laws, and also do not have enforcement guidelines. It is therefore not clear how the general substantive provisions of these laws would be applied to IPR-related practices, especially given the lack of enforcement guidelines or experience relating to the competition policy-IPR interface, particularly in developing countries and countries in transition. However, the Polish competition law provides that it does not prejudice IPRs, but that it applies to licensing contracts and other actions concerning their exercise; guidelines have also been published on licensing, broadly following the EU approach. In Venezuela, guidelines issued under the competition law state that the imposition or establishment of limitations on the acquisition or utilization of IPRs, including technical expertise, may be given prior authorization by the competition authority, but there is no indication as to the criteria that would be applied by the authority. Even within the EU itself, although some member States such as Germany or Spain have provisions in their competition laws explicitly providing exemptions relating to IPRs, others such as France do not have any such provisions in their laws, though there is relevant enforcement experience.

25. Competition laws not following the EU model tend to be more explicit on IPR issues, and some of these countries (the more developed ones) are increasingly active in this area. IPRs or their licensing are usually exempted to some extent, but the scope of such exemptions varies. * With regard to licensing of intellectual property, Canadian competition law should be viewed from two broad perspectives. First, the general provisions of the Competition Act set out when it is necessary for the Bureau to intervene in a business arrangement, including an arrangement involving intellectual property. The abuse of dominance provisions contain a subsection which states that an act engaged pursuant only to the exercise of an IPR is not considered to be an anti-competitive act and this is applied across all general provisions of the Act. Second, section 32 is a special remedy provision which gives the Federal Court the power, when asked by the Attorney General, to make remedial orders when it finds that a company has used the exclusive rights and privileges conferred by intellectual property to unduly restrain trade or lessen competition. Such remedies may include an order that the owner of the intellectual property license it to others. The Competition Bureau released in 2000 Intellectual Property Enforcement Guidelines that set out how the Bureau will determine whether conduct involving intellectual property raises an issue under the Competition Act. In Australia, where the competition law exempts certain conditions in licences and assignments that relate to the subject matter of IPRs, consideration is being given to the *narrowing* of the exemption for horizontal agreements and price and quantity restrictions. The conduct of an IPR holder which has attained a substantial degree of market power may also be considered to constitute a misuse of market power, but the criteria for determining this are strict; thus, in a recent case, a dominant firm was held to be entitled to refuse to deal with a potential competitor in order to preserve an exclusive distribution system for street directories, as it had not taken advantage of its
market power to exclude its competitor from the market. The Republic of Korea’s competition law provides for an exemption for the exercise of IPRs in terms similar to the Japanese law; however, unfair international contracts for the introduction of technology-based IPRs are prohibited. A Notification on Types of and Criteria for Unfair Business Practices in International Contracts, which covers IPR licensing, stipulates the circumstances which will be taken into account in evaluating whether a contract is unfair, effectively providing for a rule-of-reason evaluation. Guidelines for Types of Special Unfair Trade Practices regarding Parallel Imports have also been issued. The competition and IPR authorities have established mechanisms for consulting each other.

26. The competition laws of developing countries with a common law tradition are also usually relatively more explicit on IPR issues, but they have little enforcement experience in this area. The Jamaican law grants exemptions to persons or businesses with rights under or existing by virtue of any copyright, patent or trademark and any assignments that the Fair Trade Commission has authorized; it also provides that patented goods sold by dealers cannot be subject to resale price maintenance, but the price of goods produced by a patent licensee or assignee may be laid down by the patent-holder. The Zambian competition law provides a blanket exemption for provisions in IPR licensing agreements and any act done to give effect to such provisions. The Indian Patents Act 1970 provides for controls on tying and related clauses in patent licences, as well as on restrictions after the expiry of the patent - as do the patent laws of several countries.

27. Many IPR laws also incorporate remedies which address abuse of IPRs, without this being subject to competition law tests; this is particularly the case in patent laws, which often provide for the grant of compulsory licences on such grounds as failure to supply the needs of the market to an adequate extent or on reasonable terms, or to allow exploitation of dependent patents. The existence of anti-competitive practices can be considered grounds for the grant of compulsory licences under the patent laws of such countries as Argentina and Canada. Some countries, particularly developing countries, relied in the past upon special technology transfer legislation to prevent abuses in connection with licensing of IPRs. Such legislation differed in a number of important respects from competition laws, and has now been repealed or liberalized. Parallel imports of patented goods are legal under the patent laws of such countries as Argentina or Honduras, as well as in the Andean Pact countries. Parallel imports of branded goods are also legal in the Andean Pact countries, as well as in Australia, Honduras, Mexico, New Zealand and Switzerland. Parallel imports of goods protected by copyright are legal under the laws of such countries as Australia, New Zealand and Switzerland. In Canada, imports of such goods are legal if the copyright is held by the same right-holder in both Canada and the foreign country concerned, but the right-holder may control imports into Canada where the copyright has been assigned to a third party in the exporting country. The MERCOSUR accepts the principle of regional exhaustion of IPRs. However, under the IPR laws of most common law countries, a sale or licence by the right-holder will only free the protected product from the IPR in the absence of any restrictive conditions in the agreement (which may be subject to competition controls). Further sales or licences will be subject to the same conditions even if the subsequent contracts do not
expressly include them since, under the “implied licence” doctrine, a sub-licensee cannot acquire any better right than that already possessed by the licensee. Thus, in one Kenyan case, the court ruled that a local distributor could not import a pharmaceutical product into Kenya due to territorial restrictions imposed by the British patent-holder on the American licensee from which the distributor had bought the product. However, under United States competition law, competition rules may be enforced against such restrictions in licences if they affect export trade. In the Pilkington case, for instance, the DOJ took action against restrictions in licences of flat glass technology granted by a British company or its United States subsidiary to United States licensees, allegedly allocating world markets and limiting both imports of glass into, and exports from, the United States although the underlying patents had expired (the United Kingdom Government protested at this decision). It should also be noted that several developing countries have laws permitting only one national distributor for products under trademark or copyright, thus effectively banning parallel imports.
Chapter IV
THE INTERNATIONAL DIMENSION

A. Relevant provisions in multilateral instruments

28. Competition law matters are hardly touched upon in the IPR conventions administered by the World Intellectual Property Organization. Article 11 bis of the Paris Convention for Protection of Industrial Property provides for efficient protection against unfair competition. Article 17 of the Berne Convention for the Protection of Literary and Artistic Works makes clear that the Convention does not prohibit the application of national administrative control - this formulation would probably apply to competition laws. And the same principle would probably apply to other IPR conventions even if they do not contain provisions similar to article 17, taking into account that article 5A (2) of the Paris Convention allows the grant of compulsory licences to prevent abuses resulting from the exercise of the exclusive rights conferred by patents.

29. The Havana Charter of 1948, which never entered into force, contained competition rules related to IPRs. The Uruguay Round Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) substantive provisions relating to competition policy provisions are mainly of a permissive nature. Article 8 stipulates that appropriate measures consistent with the provisions of the Agreement may be needed to prevent the abuse of IPRs or practices which unreasonably restrain trade or adversely affect the transfer of technology. Article 40 affirms the right of Members to specify in their legislation licensing practices or conditions that may in particular cases constitute an abuse of IPRs having adverse effects on competition in the relevant market and to adopt, consistently with other provisions of the Agreement, appropriate measures to prevent or control such practices which may include, for example, exclusive grant-back conditions, conditions preventing challenges to validity, and coercive package licensing. Article 40 also includes a provision under which a Member seeking competition policy action against a firm under the jurisdiction of another Member can seek consultations with that Member, which is required to cooperate through the supply of relevant publicly available non-confidential information and confidential information (subject to domestic law and to agreements for safeguarding confidentiality). Conversely, a Member whose national or domiciliary is subject to such proceedings brought by another Member has to be granted, upon request, an opportunity for consultations. Article 31 sets out conditions limiting the use of patents without authorization of the right holder, including both use by Governments or by third parties (i.e. through compulsory licences). However, certain exceptions from these conditions are made if the unauthorized use is permitted in order to remedy a practice determined to be anti-competitive after judicial or administrative process. Similar provisions are applicable in respect of layout design of integrated circuits. Article 6 provides that nothing in the Agreement (subject to the provisions on national treatment and most-favoured treatment) shall be used to address the issue of exhaustion of IPRs – this has been re-affirmed by the Doha Ministerial Meeting. The question of the competition policy treatment of IPRs has been considered in some depth by the WTO Working Group on the Interaction between Trade and Competition Policy.
WTO has now adopted work programmes until the next Ministerial Meeting on both TRIPS and the interaction between trade and competition policy.  

30. In the preparatory process for the negotiations on the Set, the decision was taken that competition/IPR questions would be dealt with in parallel negotiations on the draft International Code of Conduct on the Transfer of Technology (chapter 4 of which would have dealt with practices in technology transfer transactions) - but the draft Code was never adopted. Accordingly, the sole provision of the Set of Principles and Rules explicitly dealing with IPRs is Article D.4 (e), which provides that an abuse of a dominant position can consist in restrictions on the importation of goods which have been legitimately marketed abroad with a trademark identical with or similar to a trademark protecting identical or similar goods in the importing country, where the trademarks are of the same origin, i.e. belong to the same owner or are used by affiliated enterprises, and where the purpose of such restrictions is to maintain artificially high prices. However, the Third Review Conference on the Set of Principles and Rules resolved that the Group of Experts should, upon request from member States and in collaboration with national and regional competition authorities, map out and further strengthen common ground among States on competition law and policy in RBPs affecting the economic development of countries, including by shedding light and encouraging exchanges of views in areas where the identification of common ground was more difficult, such as where there were differences among economic theories, or among competition laws or policies: one such area identified is “the competition policy treatment of the exercise of intellectual property rights (IPRs) and of licences of IPRs and know-how”.

B. Conclusions and implications for international cooperation

31. The competition policy rules applied to IPRs in developed countries or regions nowadays are broadly similar, despite some variations in the scope of exemptions granted in this area. These rules are based upon the premise that competition policy and the IPR system are generally complementary, because IPRs promote innovation and its dissemination and commercialization, which enhances dynamic efficiency and welfare, outweighing any static allocative efficiency losses adversely affecting prices and quantities of products. IPRs are seen as similar to other property rights, only giving rise to significant market power when substitute technologies or products are not available. IPR licensing is regarded as being generally pro-competitive, providing the possibility of combining complementary production inputs. But competition policy intervention is undertaken where market power deriving from an IPR is used to unreasonably restrain competition in relevant markets. In the assessment of whether and in what manner intervention against IPR-based practices is appropriate, a pragmatic rule of reason or economic analysis approach is adopted, aimed at balancing the respect of IPRs with the preservation of competition on the market and, in licensing cases, safeguarding licensors’ willingness to license while enabling licensees to compete. To minimize any legal insecurity arising from such flexible approaches, efforts have been made to make the competition policy treatment of IPRs as transparent and predictable as possible.
32. There appears to be a move away from doctrines which involve focusing on the scope of the rights granted by an IPR towards an open inquiry into the purpose of conduct engaged in by IP holders, licensors or licensees and their effect upon competition within the overall legal and economic context. A key concern is that IPRs should not be used in a manner which impedes the very purpose for which they have been granted (i.e. the promotion of innovation). Licensing practices considered to be of a vertical character are mostly exonerated, while there is relatively greater scrutiny of cartel-like restraints, exclusionary conduct and monopoly leveraging by dominant firms, and practices and mergers potentially having a chilling effect upon technological innovation.  

There is also a common concern about such issues as proprietary de facto standards, interoperability, access to essential facilities and network effects, particularly in high-technology industries. However, given the rapidity of change in, and the complexity of, technology and related enterprise strategies, there has inevitably been uncertainty about the appropriate treatment of such issues - an uncertainty which would add to the uncertainties and controversies about what are, or should be, the conditions for the grant or the scope of IPR protection in such sectors as pharmaceuticals, software and biotechnology. Despite the general consensus in developed countries or regions about the treatment of the competition policy/IP interface, there remain important differences within or among them with regard to the appropriate treatment of specific issues (for example, market definition, refusals to license IPRs or to sell IPR-protected products, the scope of the essential facilities doctrine in relation to IPRs, certain conditions in licensing, certain behaviour by dominant firms, or parallel imports).  

These differences are linked no doubt to differences in competition and IP laws, enforcement policies, economic theories, trade patterns, technological capabilities, and industry and market structures.

33. Other countries or regions, despite sometimes touching upon IPR questions in their competition policy legislation, have limited experience in this area. As the TRIPS Agreement ensures that IP protection is available and enforceable in similar terms throughout global markets, it enhances the case for countries wishing to protect themselves against abuse of IPRs to provide themselves with effective competition laws and policies and functioning competition authorities. In most countries, especially developing ones, most IPRs are granted to foreign firms and the bulk of IPR-based transactions involve these firms. It is therefore likely that there will be more and more competition cases in these countries involving the IPRs of foreign firms, and a correspondingly greater need for access to information in the home countries of these firms, or in other countries where they have been granted IPRs, as well as for international assistance with enforcement. Conversely, the markets of these countries may be affected by remedies mandated by the competition authorities of other countries, such as disclosure of information, open access to proprietary standards or, in the case of mergers, divestiture by one or both of the merging firms to specified competitors of IPRs relating to products or processes protected in foreign countries. Thus, there is likely to be increasing need for, and recourse to, technical assistance, international consultations and cooperation in respect of such issues, including consultations in pursuance of the relevant provisions of the TRIPS Agreement. Such cooperation would work best if implemented between competition authorities linked by a commonality of approach, mutual confidence and a shared perception of mutual benefit. In this regard, the mutuality of the
benefits from cooperation may be enhanced by the growing international nature of innovative activity\textsuperscript{84} and by the fact that, in information industries with network effects arising from widespread international use, enforcement action against RBPs affecting only one territorial market, however large, may not be able to prevent monopolization unless parallel enforcement against similar RBPs is undertaken within other jurisdictions.\textsuperscript{85}

34. There is therefore a need for efforts to promote mutual understanding and confidence-building in this area. In this respect, it has been suggested that the deliberations of the WTO Working Group on this subject provide an analytical basis for further work on fostering common approaches to competition enforcement policies in this area among WTO member countries and that, taking into account these deliberations as well as related economic literature and national enforcement policies, future work in this area might cover the following issues: comparative approaches to the treatment of licensing arrangements; the role of IP in network industries; the emergence of new strategies for the exercise of market power through the acquisition of IPRs and the use of patent infringement suits to deter the entry of competitors; the concept of "innovation markets"; and the implications of the territorial divisibility of IPRs and the case for applying the doctrine of exhaustion of IPRs in international trade.\textsuperscript{86} The same author has suggested that competition authorities might use their competition advocacy powers to participate in ongoing debates on the appropriate scope and application of IPRs as an important contribution to fostering competition and dynamic efficiency in the new knowledge-based international economy.\textsuperscript{87} Participants at an OECD round table have also specifically recommended that competition authorities use their advocacy powers to alert patent offices regarding the anti-competitive effects of over-broad patents. While also recommending that competition authorities should not take action to reduce the anti-competitive effects of such patents (as this would tend to reduce innovation by introducing greater uncertainty about possible returns), they noted that there is already some automatic fine-tuning practised because patent breadth may be linked to dominance.\textsuperscript{88} A discussion paper by the United Kingdom competition authorities suggests that the emergence of electronic commerce is likely to increase the number of competition cases alleging excessive returns to IPRs, and that there may be cause for some revision of IP laws.\textsuperscript{89} Furthermore, one technologically advanced country has suggested that, given the impact upon worldwide economic activities of electronic commerce and the protection of its IPRs, it would be important to examine the effects of the grant of patents for business methods and to take necessary measures from a standpoint of international competition policy.\textsuperscript{90} (However, the United States Patent and Trademark Office has now indicated that it will overhaul its procedures for granting business method patents.) In the EU, where an EU-wide law relating to software patents is under preparation, competition officials of the Commission have urged that the law’s scope be limited, including by denying patents to business methods.\textsuperscript{91} The former Chairman of the United States Federal Trade Commission has stated that "the issue is not so much whether incentives to innovate should be protected – all agree on that – but how much protection is justified ",\textsuperscript{92} and that "many, including myself, are concerned about the number and scope of patents that are being issued".\textsuperscript{93} He has highlighted among the challenges faced by antitrust enforcers in the "high-tech" economy the tension between IP and traditional antitrust principles, the potential incompatibility between the fast-changing market place and the slow pace of antitrust review,
and the high degree of technical knowledge required by competition enforcement personnel, although he has emphasized that antitrust enforcement in the United States has made significant progress in responding to these challenges.

35. It appears from the above that there is some risk of inconsistency in this area between competition and IPR authorities, and among countries, and that there is a need to promote consultations, cooperation and technical assistance. To reduce risks of inconsistencies at the national level, one approach that may be relevant for developing countries is that adopted by Colombia and Peru, where a single institution is responsible for both competition policy and IPR matters, even though internal procedures remain separate; this has greatly facilitated consultations and sharing of views.  

It has been suggested that, as regards follow-up work, a case approach be adopted, whereby a number of countries undertake a round-table discussion on a few cases handled by their respective national competition authorities, and that common themes be drawn, including approaches that might be used as a "model" for IP enforcement guidelines. In the light of this suggestion and of the findings the present report, it is recommended that any discussions held by the IGE on the subject of the competition policy treatment of IPRs include the following issues:

(a) Identification of typical IPR-based practices, and discussion of the motivations for, and the economic effects of, such practices, with priority to territorial exclusivity and parallel imports, exclusive dealing, tying requirements and exclusive grant-backs, taking into account the discussion of these practices in document TD/B/COM.2/CLP/10 (reproduced in the Annex);

(b) The conceptual basis and criteria which are applied in different jurisdictions to distinguish IPR-based practices with legitimate pro-competitive objects or effects from practices not justified by the rationale for protection - this would include consideration of the extent to which it has been or may be possible in this context to distinguish between horizontal and vertical practices, as well as the basis of competition controls upon know-how licensing (since it is not specifically the subject of IPR protection in most countries);

(c) In competition cases involving IPRs, how relevant markets, market power or potential competition have been or may be appropriately assessed to take into account changes in technology, in the strategies of firms, in competition laws and policies, and in the international framework for IPR protection;

(d) Treatment under different competition laws or enforcement policies of the types of practices commonly found in IPR licensing arrangements, of common forms of abuse of dominance or monopolization, of mergers or joint ventures involving IPRs, of specific issues arising in connection with high-technology industries or network effects, and remedies applied as appropriate in such cases, illustrated by reference to hypothetical or real cases;
(e) Whether and how competition authorities might use their competition advocacy powers to participate in ongoing debates on the appropriate scope and application of IPRs, and to consult with IPR authorities;

(f) The extent to which competition policy treatment of IPRs should be influenced by national variations in the scope of IPRs, in the relative importance attached by competition policies to promotion of static and of dynamic efficiency, in the structure of domestic industries and markets, in the level of technological development and in the acquisition and use of IPRs in business strategies (taking into account that many developing countries’ markets often have a limited number of available substitute products or technologies, higher entry barriers, low purchasing power and/or limited possibilities for competition through fresh innovation);

(g) The conditions and mechanisms for the strengthening of international cooperation in this area.

36. The IGE may also wish to request the UNCTAD secretariat to undertake, taking into account the results of such discussions and information provided by member States, a comparative review in the Commentaries to the Model Law\textsuperscript{96} of the competition law and policy treatment of IPRs, as well as technical cooperation activities aimed at building up expertise in developing and transition countries in this area.
Notes

1 See UNCTAD, Report of the Fourth United Nations Conference to Review All Aspects of the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices (TD/RBP/CONF.5/16), Chapter 1, paragraph 7, of the resolution. *


3 Written communications on this report have been received from the Governments of Canada and the United States.

4 See TD/B/COM.2/CLP/10, Executive summary.

5 See articles 1 and 39 of the Agreement, the latter of which provides that, in the course of ensuring effective protection against unfair competition as provided in article 10 bis of the Paris Convention on Industrial Property, Members shall protect undisclosed information if it is secret and has commercial value because it is secret, and reasonable steps have been taken to maintain secrecy. This would cover the concept of trade secrets, which are granted IPR protection under the laws of many states in the United States. It would also cover the concept of secret know-how (non-patented technical information such as descriptions of manufacturing processes, recipes, formulae, designs or drawings), which is commonly the subject of licensing transactions and which is legally recognized under EU law.

6 Formerly article 85. Article 81 (1) prohibits agreements, decisions and concerted practices which may affect trade between Member States, the object or effect of which is to prevent, restrict or distort competition within the common market. But conduct falling within 81 (1) may be exempted on the basis of article 81 (3) if it contributes to improving the production or distribution of goods or promotes technical or economic progress, while allowing consumers a fair share of the resulting benefits, and does not involve restrictions not indispensable to achieving the benefits sought, or make it possible to eliminate competition in respect of a substantial part of the product market.

7 Regulation No. 240/96 of 31 January 1996 on the application of article 85 (3) of the Treaty to certain categories of technology transfer agreements, OJ 1996 L 31/2. The regulation supersedes two regulations dealing separately with patent and know-how licences, and adopts a significantly more liberal approach to the control of restraints than did these earlier regulations.

8 The core package of rights that make up the IPR itself. Otherwise known as the “scope of the grant” doctrine, and originally derived from the “inherency” doctrine of United States anti-trust law.


11 Article 295 of the Treaty of Rome states that the Treaty “shall in no way prejudice the rules in Member States governing the system of property ownership”.


15 Except where a compulsory licence has been granted. The distribution rights granted by copyright are also not exhausted by the first showing of a film or television broadcast within the EU.


18 See the joined cases of Zino Davidoff/Levi Strauss at www.europa.eu.int.


20 Including most grant-back provisions, minimum quality specifications, field-of-use restrictions and other provisions aiming at maintaining protection and control over the licensed technology, safeguarding the financial and economic balance of the parties’ respective obligations, or producing beneficial effects for the transfer of technology.

21 Including price maintenance clauses, certain general covenants not to compete, export prohibitions resulting from concerted action or for which no objective justification can be shown, customer restraints and absolute or excessively long territorial restraints.

22 The procedure expressly applies to tying arrangements not determined by technical necessity and to no-challenge clauses.


25 ECJ 5.10.1988, CICRA/Renault, 53/87, ECR 1988, 6039; EC, 5.10.1988, Volvo/Veng, 238/87, ECR 198, 6211. There is controversy within the EU over the appropriate scope of design rights for car spare parts, which has led to the exclusion of the issue in the EU Directive harmonizing national protection of design rights, and so far prevented the adoption of a regulation creating an independent Community design right.


27 The article includes in its illustrative list of abuses “limiting production markets or technical development to the prejudice of consumers”.


30 This is a doctrine of United States antitrust law, which considers a facility to be essential when it is indispensable for access to the market, duplication of the facility by the potential entrant is practically impossible and the owner of the facility refuses to grant access without any reasonable business justification; mandatory access will then be granted if it is feasible and if the use by the potential entrant does not substantially affect use by the owner.


33 Unlike a formal standard approved by a standardization body, the position of a de facto standard arises from its success in the market.


42 The concept of monopolization is significantly narrower than abuse of dominance under EU law, but can similarly cover unilateral action. It must be shown that there is monopoly power in the relevant market, and wilful acquisition or maintenance of market power through anti-competitive or predatory conduct; a very high market power (such as 70 per cent) would create a presumption of monopoly power, as well as other factors such as the ability of a firm to raise prices above (or depress them below) the competitive level for a significant period of time.

43 For a critique of these two doctrines, see Ullrich, H, *Technology transfer agreements under EC-competition law: a conservative reform*, Centre d’Etudes Internationales de la Propriété Industrielle, Strasbourg, 1996.

44 The list of the Nine No-No’s, published by the Department of Justice in 1970, included tying of unpatented supplies, mandatory grant-backs, post-sale restrictions on the resale of patented products by purchasers, tie-outs (covenants not to purchase a competitor’s products), licensees’ veto over the grant of further licences, mandatory package licensing, royalties not reasonably related to sale of the patented product, restrictions on sales of unpatented products made by a patented process, and specifying prices of products made using the licensed technology.


48 However, the Guidelines acknowledge that the law is unclear as to whether market power can be presumed from an IPR.

49 *Data General v Grumanns System Support*, 36 F.3d 1147 (1st Cir. 1995) (no liability for refusal to license a copyright); *Image Tech Servs. Inc. v. Eastman Kodak Co.*, 125 F.3d 1195 (9th Cir. 1997) (liability found for refusal to license a patent); CSU, *llc. V. Xerox Corp.*, 203 F.3s 1322 (Fed. Cir 2000) (no liability for refusal to license a patent).

50 See *U.S. v. IBM Corp.*, 687 F.2d 591 (2nd Cir. 1982).

51 *California Computer Prods., Inc. v. IBM*, 613 F.2d 727 (9th Cir. 1979).

52 *Berkey Photo v. Eastman Kodak*, 603 F.2d 263 (2nd Cir. 1979).

54 Intergraph Corp. v. Intel Corp., 95 F.3d 1346 (Fed. Cir. 1999).

55 Such an effect occurs when the value derived from a user of the network increases with the number of other users attached to that network. Thus, the value of a computer programme, for instance, might depend upon the data files written using that programme, as well as the programme’s interoperability with complementary goods or services. Network effects increase both demand by users and market power on the supply side.

56 U.S. v. Microsoft, 1995-1 CCH Trade Cases, para. 70,928.

57 A browser is a specialized software programme allowing personal computer users to access the Internet’s World Wide Web.


63 Antimonopoly Act concerning Prohibition of Private Monopoly and Maintenance of Fair Trade, Act No. 54 of 14 April 1947.


65 See WTO Working Group on the Interaction between Trade and Competition Policy, Communication from Japan - Relationship between the Trade-Related Aspects of Intellectual Property Rights and Competition Policy. WT/WGTCP/W/106. The cases were decided while the 1989 Guidelines were in force.


68 See the Fair Competition Act 1993.

69 The Competition and Fair Trading Act, 1994, section 3.


72 Article 46 (3) of the Charter covered practices preventing by agreement the development or application of patented or unpatented technology or inventions, as well as the extension of the use of IPRs to matters, products or conditions of production, use or sale not within their scope or subject matter.

73 For a review of the agreement, see UNCTAD, The TRIPS Agreement and Developing Countries, New York and Geneva, United Nations sales publication No. 96.II.D.10, New York and Geneva, 1996. For specific reviews of the competition policy-relevant provisions of the Agreement, see UNCTAD, The scope, coverage and enforcement of competition laws and policies and analysis of the provisions of the Uruguay Round Agreements relevant to competition policy, including their implications for developing countries,
TD/B/COM.2/EM/2, and Experiences gained so far on international cooperation on competition policy issues and the mechanisms used, TD/RBP/CONF.5/4, as well as World Trade Organization, Annual Report 1997 - Volume I - Special topic: Trade and competition policy.

74 See WTO, Declaration on the TRIPS agreement and public health, WT/MIN(01)DEC/2, 14 November 2001.


76 See WTO, Ministerial Declaration, WT/MIN(01)/DEC/1, 14 November 2001.

77 See UNCTAD, "Draft International Code of Conduct on the Transfer of Technology as at the close of the sixth session of the Conference on 5 June 1985", TD/CODE TOT/47 and "Negotiations on an international code of conduct on the transfer of technology", TD/CODE TOT/60, 6 September 1995. Chapter 4 of the draft Code identified 14 practices that might be deemed restrictive, including: grant-backs, restrictions on challenges to validity, research, use of personnel or adaptation; exclusive dealing, sales or representation; price-fixing; tying; patent-pools or cross-licences; payments and other obligations after expiration of IPRs; and restrictions after expiration of the arrangement.


79 Optimal introduction of new products and more efficient production processes over time.

80 Among practices potentially chilling innovation, competition authorities in OECD countries have been most ready to intervene against prohibitions on use of licensed technology after expiry of the licence, royalty payments after patent expiry and restrictions upon challenges to patent validity. See OECD, op. cit.

81 Ibid. See also Office of Fair Trading, E-commerce and its implications for competition policy, August 2000, which suggests that in electronic commerce markets there may be a role for more stringent treatment of abuse in essential facilities cases under United Kingdom competition law than is suggested by EU precedent.

82 For an example of requirements for worldwide divestments (involving sale or licensing of patent, trademark or trade secret rights relating to pharmaceuticals to specified pharmaceuticals firms) as a condition for the approval of a merger of two pharmaceuticals firms by the United States Federal Trade Commission, see “Spin-offs resolve anticompetitive concerns triggered by merger of Smithkline and Glaxo”, Antitrust & Trade Regulation Report, Vol. 79, No. 1989, 22 December 2000, p. 587.


84 See OECD, op. cit., pp. 420-421.

85 See “Presentation by Mr. Hans Ullrich”, in UNCTAD, The role of competition policy for development in globalizing markets, 1999: 39.


88 See OECD, *op. cit.*

89 See Office of Fair Trading, *op. cit.*


93 See “FTC and DOJ begin new hearings on intellectual property/antitrust interface”, *Antitrust & Trade Regulation Report*, vol. 82, no. 2044, 15 February 2002.


95 Communication from the Canadian Competition Bureau.

96 See UNCTAD, *Draft commentaries to possible elements for articles of a model law or laws*, *(TD/B/RBP/CONF.5/7)*, October 2000.
Territorial exclusivity and parallel imports

15. When it is feasible to divide up markets into separate territories and block or sufficiently limit trade flows to keep prices at the highest level that each market can bear, licensors may choose to assign areas (a region, a city, or an entire country) in exclusivity to single licensees. Two different types of territorial exclusivity exist: an "open" and a "closed" version. Open territorial exclusivity refers to the contractual right to be the exclusive licensee in a given area, without protection from competition by parallel importers getting their products from licensees of other areas. Closed territorial exclusivity refers to the complete exclusive right to any sale within a territory. With closed territorial exclusivity, parallel imports are barred and stop representing a source of competition for the products distributed by the local exclusive licensee.

16. It has been observed that a holder of IPRs who divides up the market among different licensees, each with an exclusive territory, does not create additional monopoly power. He already holds exclusive rights in each area (or country) where local territorial exclusivities are set up. Territorial exclusivities may in fact be created for different reasons, some of them unrelated to anti-competitive behaviour, which can promote efficiency and consumer welfare. A reduction in intra-brand competition (competition among distributors of the same good) may be a necessary condition to enhance inter-brand competition (competition among different brands). Local licensees, for example, may need to incur substantial investments in order to promote new products recently introduced in the market, still unknown to most consumers. They might do so, for example, through advertising campaigns, distribution of free samples of the products, showrooms, etc., or through an improvement of the licensed products, adapting them to local demand. Territorial exclusivity may avoid free-riding opportunities on these investments by other licensees.

17. For a limited number of products, open territorial exclusivities may produce a sufficient return for the investments incurred by local exclusive licensees. Nevertheless, when trade barriers are limited and transportation costs are non-substantial, significant free-riding can occur through sales by parallel importers which undermine the possibility of local licensees to recover local costs. Closed territorial exclusivities might, on the other hand, lead to excessive double mark-ups by licensees, hurting the interests of IPR licensors. Licensees with downstream monopoly power may in fact reduce outputs and charge prices that are excessively high, to the detriment of the whole vertical structure: lower prices deriving from greater vertical coordination would lead to greater profits for both licensors and licensees. With parallel imports, exclusive licensees are constrained in their ability to impose excessive mark-ups. If prices become too high, parallel imports can exert downward pressure on prices.
18. Another important reason for IPR holders to enter into territorial exclusivities is to profit from price discrimination. Particularly when regions or countries have different demand elasticities, charging different prices in different areas would lead to an increase in total profitability. More specifically, total profits are maximized by charging higher prices in areas where demand is more inelastic. With international price discrimination, national objectives of competition policy, i.e. maximizing the welfare of a country's own citizens, might, however, diverge from the achievement of global welfare. From an international welfare perspective, exclusive licences across countries can be employed, as mentioned, to achieve price discrimination and therefore be associated with efficiency-enhancing effects, because of the resulting worldwide expansion in output. However, from the perspective of the country in which higher prices are charged, an elimination of territorial exclusivities (or at least of the ban on parallel imports) may bring about net benefits, particularly when the holders of IPRs are located abroad. In fact, competition will bring down prices, entirely to the benefit of national welfare, while the costs of reduced incentives to innovate will be spread among all countries. This is particularly true for countries which are net importers of technology. Such is the case for most developing countries. It might therefore be a totally rational choice to prohibit territorial and other forms of licensing restrictions.

19. It is important, however, to consider the consequences of attempts to impede international price discrimination: TNCs might opt to block licensing of their technologies altogether. Also, it has been argued \(^{19}\) that international price discrimination and the ban on parallel imports benefit mainly developing countries because enterprises from more industrialized (and wealthier) countries can charge lower prices in poorer markets without being forced to lower their prices in rich markets as well. In this way, TNCs supply markets which would not have been serviced in a content of forced uniform pricing. \(^{20}\)

20. An additional consequence of territorial exclusivities is that they can also facilitate the implementation of disguised cartel arrangements. For example, competing firms holding a significant amount of the total patents specific to a particular class of products could agree to issue exclusive licences to a jointly owned corporation, which would then divide up the market among the associated firms through territorial exclusivities. Such an agreement would clearly lead to a substantial reduction in competition because it would concern firms which otherwise (in the absence of the licensing agreement) would have competed head-to-head with each other and would not involve firms operating at different levels of the vertical production chain.

21. Assigning territorial exclusivities may also be a direct tool to facilitate collusion among competing licensors, by making it easier to monitor downstream violations of cartel agreements. Competing licensors, in fact, may find it difficult to agree on prices for royalties regarding licensed technologies and may find it easier to agree on prices of the final products supplied by their licensees. Territorial exclusivities allow for easier monitoring of licensees’ final prices. The treatment by competition policy-makers of territorial restrictions clearly depends on the prevailing motivation for their use in each specific case and their likely effect.
Particularly when these arrangements do not appear to lead to any sizeable efficiency but rather are part of a scheme to ensure market cartelization, their impact on competition and welfare can be expected to be negative. If, on the other hand, they are used to overcome free-riding, to cope with asymmetries in information between licensors and licensees or to ensure price discrimination, their impact on welfare is more ambiguous and depends largely on market concentration and barriers to entry.

**Exclusive dealing**

22. Exclusive dealing arrangements prevent licensees from manufacturing products which employ technologies supplied by competitors of the licensor. This parallels exclusive dealing arrangements in distribution agreements whereby retailers are not allowed to carry competing brands. The rationale for entering into exclusive dealing restrictions in intellectual property licensing is similar to that applying to product markets: to avoid free-riding opportunities between competing licensors and to promote the development of relationship-specific technologies by both licensors and licensees.

23. Licensors transferring know-how to licensees also manufacturing goods under licence of other firms may risk leakage of information and misappropriation of their patented knowledge. The development of exclusive relationships with licensees can be a way to overcome this potential free-riding situation. Also, exclusive dealing may increase the return on specific investment because the likelihood of licensees interrupting a consolidated relationship with the licensor is reduced. Exclusive dealing arrangements may, however, also result in market-foreclosing effects to the detriment of rival licensors and restrict competition in the market, particularly when the firms entering into such arrangements already hold a large share of the relevant product market. The foreclosing effect depends to a large degree on the availability of alternative manufacturing capacity for existing or new licensors.

**Tying requirements**

24. Tying refers to a contractual obligation whereby a manufacturer agrees to sell a certain good only to buyers which agree to buy other, unrelated products. Tying can be used for purposes which may increase welfare such as to protect the reputation of licensed technology. For example, a manufacturer of a new model of photocopy machines may require that buyers of the new model purchase spare parts and repair services from the manufacturer. This requirement may be used to ensure that the perceived quality of the machine to users is not reduced by low-quality maintenance services or spare parts. Tying may also reduce the risk inherent in the licensing of innovations whose commercial value is still uncertain. This can be achieved by charging less for the innovation and tying it to an additional good whose demand is correlated with the use of the innovation.

25. More generally, tying is used to price discriminate between consumers who use products or technologies with varying intensity. For example, cameras may be leased to
customers on condition that films used be bought from the leaseholder. Price discrimination, as noted earlier, can promote welfare because it may lead to an expansion of output, making products available to users who would not otherwise have been supplied because of monopoly output restrictions associated with uniform pricing. Tying, however, can also result in clearly welfare-reducing effects when it is employed as a tool to foreclose other markets. This can be achieved if the licensor holds considerable market power in the tying product and the foreclosing effects in the tied products are substantial.

**Exclusive grant-backs**

26. This type of restriction refers to the situation whereby licensors ask to receive all the rights on new technologies developed by licensees through improvements on the licensed technology. While it may facilitate the transfer of technologies to licensees, it may also negatively affect licensees' incentive to engage in R & D. Non-exclusive grant-back clauses, whereby licensees are allowed to deal with other buyers of their incremental inventions, are less likely to reduce competition while maintaining adequate incentives to license new technologies.

**Notes**

16/ This is the case, for example, within the European Union, where barring parallel importation of goods and services supplied by foreign manufacturers is prohibited. Allowing open territorial exclusivities but barring closed territorial exclusivities is referred to as the exhaustion principle.

17/ See, for example, Patrick Rey and Ralph A. Winter, "Exclusivity restrictions and intellectual property" in Competition Policy and Intellectual Property Rights in the Knowledge-Based Economy (General Editors: Robert D. Anderson and Nancy T. Gallini), 1998.

18/ Without repression of free-riding behaviour, licensees would not invest in local markets and ultimately consumers would not have access to their goods.


20/ A criticism to the arguments brought forward in the article by Malueg and Schwartz illustrating the benefits for developing countries of international price discrimination can be found in Frederick M. Abbott, "First Report (Final) to the Committee on International Trade Law of the International Law Association on the Subject of Parallel Importation", Journal of International Economic Law (1998). It is stated that "... (Malueg and Schwartz) ... do not consider the impact of an international price discrimination system on developing country producers and consumers acting outside the field of the monopolist's product. Most importantly, they do not consider the broader effects of an international price discrimination system on the international allocation of resources. If developed country producers are not pressured to become more efficient as a consequence of price competition, this will distort the efficient allocation of resources in the developed countries. If developing country producers/licensees are limited in the profitability of their operations, this will limit developing country investments in future production. If the profit-making potential of capital investments in developing countries is limited, this will encourage developing countries to continue to rely on capital intensive developed country exports ...". It is also noted that "... A substantial part of international trade is in goods that are not protected by IPRs, particularly in the commodities and unfinished goods sectors. Developing countries are not unserved with
these products. Developing country buyers may be served with lower-priced IPRs-protected goods through product differentiation.”