DISCUSSION PAPER

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Abstract

In most countries, competition in the telecommunications industry is subject to both sector-specific regulation and more general antitrust policies. At the same time, a process of international market liberalisation is under way in telecommunications which can only be truly effective - and further advance - if appropriate competitive safeguards are in place. Trading partners should agree on certain minimum standards to be observed in this area in order to better combat anticompetitive conduct and avoid international conflicts. The Reference Paper to the WTO Agreement on Basic Telecommunications is an important step in this direction and may also serve as a model for other network industries. It is a framework of rules which has to be filled with concrete decisions in the fields of antitrust and regulation. More importantly, it must be complemented by multilateral competition rules of a more general nature.

Zusammenfassung

Der Wettbewerb im Telekommunikationssektor unterliegt in den meisten Ländern sowohl sektorspezifischer Regulierung als auch der allgemeinen Wettbewerbspolitik. Gleichzeitig findet eine internationale Liberalisierung der Telekommunikationsmärkte statt, deren Effektivität - und Fortgang - wesentlich von der Existenz wettbewerblicher Schutzklauseln abhängt. Die Handelspartner sollten sich in diesem Bereich auf bestimmte Mindeststandards zur besseren Bekämpfung wettbewerbswidriger Praktiken und Vermeidung internationaler Konflikte verständigen. Das Reference Paper zum WTO-Abkommen über Telekommunikationsgrunddienste ist ein bedeutender Schritt in dieser Richtung und auch ein Vorbild für andere Netzsektoren. Es enthält eine Rahmenregelung für konkrete politische Entscheidungen und bedarf insbesondere einer Ergänzung durch multilaterale Wettbewerbsregeln allgemeinerer Art.

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1. INTRODUCTION

Telecommunications is a growth sector in international services provision and in international trade and production as a whole. It is a "network industry" which raises new competition issues and, according to Lloyd and Vautier (1999, p. 12), stands out among the service industries with an international competition dimension. Since telecommunications have been at the forefront of incentive regulation reform and competition has developed faster than in other industries, the experience gained in this sector could also be useful elsewhere (Laffont and Tirole, 2000, p. 1).

International integration of markets ensuing from the removal of trade and investment barriers, declining transaction costs and "intrinsic" growth strategies of firms all enhance competition while at the same time raising the propensity of companies to engage in anticompetitive business practices. Such practices, if unchecked by competition policy, might for their part frustrate open-market policies and - in WTO language - "nullify" or "impair" agreed liberalisation commitments. Effective competitive safeguards would accordingly be essential to complement trade and investment liberalisation measures and would also be critical to the willingness of WTO members to further liberalise markets.

Moreover, it has been recognized, at least at the regional level, that the growing integration of national markets and concomitant internationalisation of competition may require a corresponding internationalisation of competition policy. In the European Community, the need to prevent - by means of a common competition policy - private restraints on competition from substituting for government barriers was stressed as early as in the Commission's First Report on Competition Policy.[1] More recently, in the very case of the European telecommunications industry, it has been observed that the intensity and rapidity of change in this sector necessitated a more active application of competition law and further legislative harmonisation (WTO, 2000, p. 116). The liberalisation of markets may thus call for both an intensification and an internationalisation of competition policy.

In services, even more than in the goods sector, the interface is between competition and trade as well as between competition and investment. Trading across borders ("cross-

[1] Cf. Scherer (2000, Chapter 24, p. 15) on the debate in 1961 over a draft regulation implementing a competition policy in the European Community. Scherer also notes, however, that "as time passed, all Common Market member nations (excepting Luxembourg) and affiliated European Free Trade Association member nations have seen fit to pass their own internal competition laws" (ibidem).

border supply") is only one mode, albeit an important one, of the four modes of supply dealt with in the negotiations on services liberalisation within the framework of the General Agreement on Trade in Services (GATS).[2] Among the three other modes of supplying services internationally - consumption abroad, commercial presence and presence of natural persons -, commercial presence abroad, i.e. essentially the provision of services via foreign affiliates and joint ventures with foreign firms, has gained growing importance and particularly so in the telecommunications sector.

The present paper evolves around the three themes touched upon above: interdependence among the policies of liberalisation and competition; the integration of markets across borders possibly prompting more active and more internationally-oriented competition policy; and the nexus between competition, trade and investment. It discusses the underlying economic relationships and develops a number of policy implications. The telecommunications sector is taken as a case in point and possible model for other (service) industries.

The paper is organised as follows. The next section characterises international competition in the field of telecommunications and points to its economy-wide significance. The subject of Section 3 are the different elements - and their interplay - of competition regimes in telecommunications at the national/regional and international level. Section 4 analyses the approach to competition in the Annex on Telecommunications to the GATS and in the Reference Paper to the WTO Agreement on Basic Telecommunications (ABT) while Section 5 places the sector-specific competition rules in a wider perspective. In Section 6, ways of dealing more effectively with international competition issues in telecommunications and in general are discussed and a few conclusions drawn.

[2] Cf. Article I (Scope and Definition) of the GATS.

2. THE DUAL ROLE OF TELECOMMUNICATIONS IN INTERNATIONAL COMPETITION

The telecommunications industry provides services to final users as well as the infrastructure for the transmission of these services and of services in general. It has evolved into a source of advanced facilities and sophisticated services that are essential to the performance of a wide variety of industries. Availability, price and quality of telecommunication services have thus become key determinants of the international competitiveness of companies, and particularly so in high-growth services areas (Kruse, 1997, p.165). At the same time, the telecommunications sector itself has increasingly become exposed to international competition in various forms and at various levels.

The contribution of telecommunication services to gross domestic product (GDP) in the OECD area has grown from about 2.5% in the mid-1980s to roughly 3% in the mid-1990s. During the same period, their share in the provision of inputs to industry and services has increased overproportionately in most OECD countries, from 2.5% to 3.5%, on average, while it remained broadly constant, at approximately 1.5% and 3%, in consumer expenditures and in goods and services trade, respectively.[3] In view of significant reductions in relative prices, the volume of telecommunication services has expanded more quickly than their value.

The traditional form of providing telecommunication services on international markets are transactions across national borders such as placing a call in the home market and its termination in a foreign market (and vice versa). Their significance in total services trade and in trade with services other than transportation and travel services ("non-traditional" services) varies considerably from country to country as the following table demonstrates. Among the countries listed (the G7 countries), Canada shows the highest shares of communication services on the export side while the United States leads on the import side. Between 1995 and 1999, expansion in international communications trade has been comparatively strong in France, Italy and Japan, whereas in the other G7 countries this trade has more often than not declined relative to total as well as to non-traditional services trade.

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[3] The discrepancy between intermediate and final demand performance is, however, partly a statistical phenomenon reflecting a growing tendency for firms to contract out (Boylaud and Nicoletti 2000, p. 5).

Significance of Communication Services in International Services Trade of G7 Countries, 1995 and 1999[1]

	Exports		Imports	
	1995	**1999**	**1995**	**1999**
Total Services				
France	0.6	1.2	0.6	1.4
Germany	2.7	2.2	2.4	2.4
Italy	0.5	1.0	1.1	2.3
United Kingdom	2.1	2.3	3.5	3.5
Canada	5.0	4.0	3.9	3.7
United States[2]	1.8	1.4	6.0	4.6
Japan	0.8	1.3	0.7	1.2
Non-traditional Services				
France	1.4	3.2	1.4	3.5
Germany	5.4	4.1	6.2	5.3
Italy	1.4	2.5	2.3	4.6
United Kingdom	4.1	3.9	11.7	13.3
Canada	10.4	7.7	8.7	7.5
United States[2]	4.5	3.0	18.8	13.3
Japan	1.3	2,3	1.7	2.7
Communication Services (bn $)				
France	0.5	1.0	0.4	0.9
Germany	2.0	1.8	3.0	3.2
Italy	0.3	0.7	0.6	1.4
United Kingdom	1.6	2.4	2.1	2.8
Canada	1.3	1.4	1.3	1.4
United States[2]	3.5	3.6	7.8	8.2
Japan	0.5	0.8	0.8	1.4

[1] In percent of total (commercial) services trade and non-traditional (i.e. commercial other than transportation and travel) services trade, respectively. [2] Excluding transactions between affiliates.
Source: IMF, WTO

At the same time, technological developments in telecommunications, including widely extended possibilities to communicate large amounts of data via the internet, have significantly increased the transportabilty and thus tradability of services while reducing the need for international factor movements. With a view to the further liberalisation of services trade, Sapir (1999, p. 62) suggests to categorise services according to the ease with which they can be traded via telecommunications networks and the degree of domestic regulation in the respective service industry. This classification produces four categories of services:

- Lightly regulated services easily traded over the telecommunications system.
- Lightly regulated services not easily traded over the telecommunications system.
- Highly regulated services easily traded over the telecommunications system.
- Highly regulated services not easily traded over the telecommunications system.

Telecommunication technologies, including electronic commerce, accordingly facilitate the expansion of international services trade.

While this “disembodiment effect” (Bhagwati, 1997) of technical progress, by avoiding the need of physical proximity between suppliers and consumers, is a shot in the arm to trade as against alternative modes of international services supply, other developments - especially the liberalisation of services markets - involve a growing reliance on foreign direct investment in the services sector (Chang et al., 1999, p. 109). In telecommunications, commercial presence abroad has clearly become more important in recent years, as public telecommunication operators in many countries have been partially or wholly privatised and foreign-ownership restrictions have been liberalised unilaterally or through multilateral agreements such as the WTO Agreement on Basic Telecommunications.[4] These developments also tend to boost competition - as a mode of international supply *sui generis* - in the telecommunications sector.

Two levels of competition are commonly distinguished in the telecommunications industry:

- Network competition, including competition at the level of the infrastructure, where new entrants to the market are encouraged to build their own basic facilities.[5]
- Services competition, beyond the infrastructural level, which is coupled with the “unbundling” of access by third parties to basic network elements and services.[6]

The corresponding types of markets in telecommunications are that of a service to be provided to end consumers (end consumer markets) and that of access to those facilities necessary to provide that service to end users (input or carrier markets). For the efficient

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4 More than four-fifths of the country schedules originally attached to the Fourth Protocol (i.e. the Agreement on Basic Telecommunications) to the GATS contain a commitment to permit foreign ownership or control of telecommunications services and facilities, with the respective countries accounting for more than 95% of the revenue from basic telecommunications services in WTO member countries (Information obtained from the USTR (United States Trade Representative) website). There is also a tendency for the number of foreign operators - often members of alliances and/or joint ventures with domestic operators - to be positively associated with the size of domestic telecommunications markets (Boylaud and Nicoletti, 2000, p. 10).

5 Patterns of entry into local telephone markets, for instance, include (1) facilities-based entry by mobile operators or by fixed-link operators, (2) resale entry, through the resale of the incumbent local exchange companies’ services by entrants, and (3) mixed entry, through “unbundling network elements”, whereby entrants lease some facilities and provide others. For details, taking the US Telecommunications Act of 1996 as a case in point, cf. Laffont and Tirole (2000, pp. 21-25).

6 Network (facilities-based) competition and services (services-based) competition are also referred to as inter-systems and intra-systems competition, respectively (Koenig and Kühling, 2000, p. 599).

functioning of both market categories, it is necessary to remove barriers to competition and at the same time apply effective competitive safeguards. It is also important to recognise the linkages between the two levels of competition which in particular arise from the coexistence of "single-stage" service suppliers alongside vertically-integrated network operators.

In network industries, of which telecommunications is a prominent example, competitive and non-competitive segments typically co-exist (OECD, 2000, p. 151). Large parts of the telecommunications industry still remain dominated by incumbent public telecommunications operators (PTOs), in which the state often maintains controlling shares and which are in several ways advantaged, if only because their networks are already in place and they have a strong customer base. Critical bottlenecks exist to which other service providers must have access in order to compete with the PTOs in "downstream" markets.[7] The market power of incumbents is particularly strong in local fixed telephony where access to the corresponding network operation or "local loop" is at stake.[8] Monopoly ownership of local telephone networks may be used, for instance, to deter or delay the entry of competitors in the field of information and communication services which rely on access to and use of the local network for the provision of their own products (Choi, 2000, p. 158). Related access charges are often half of the entrants' costs while representing a substantial source of income for the incumbent (Laffont and Tirole, 2000, p. 6).[9]

The incentives for telecommunication companies to engage in anticompetitive behaviour more generally may ultimately derive from the presence of network effects or network externalities.[10] With network effects, the value of a product supplied by a firm depends to a large degree on the number of other consumers that purchase the firm's

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7 The issue here is one of "one-way access", in which one company needs access to the other, but the reverse does not hold. With growing network competiton, the issue is increasingly one of "two-way access" where networks need to provide termination transmission to each other, i.e. provide access to their mutual bottlenecks, which is the final access to the consumer.

8 "Local loop" essentially means the connection between handsets and the local exchange or the link from the user to the local exchange. New legislation, e.g. in the European Union, to open the "last mile" of telephone lines by "unbundling" the local loop, has met with heavy lobbying by former monopoly operators eager to keep newer rivals out (Financial Times, 26.10.2000: "EU opens telecom access").

9 In this context, the German government (in April 2000) was charged by the European Commission with allowing Deutsche Telekom to levy anticompetitive interconnection charges since competitors had to pay more for the "last mile" than ordinary customers. Deutsche Telekom thereupon decided to raise prices to its own customers rather than cutting charges to competitors (Financial Times 15.11.2000: "Former monopoly loses significant market share").

10 The terms "network effects" and "network externalities" can be used synonymously.

product or complementary products. An additional consumer thus generates a positive utility for the other members of the network.[11] In telecommunications, these effects arise because a subscriber can reach more subscribers in a larger network. Economies-of-scale - as a source of strategic advantage - in this case emanate from the demand side of the market rather than from the supply side which has been the traditional basis for the exercise of market power (Gilbert and Williamson, 1998).[12] Markets with strong network effects have been charcterised as “tippy” because they can tip in favor of one firm or another (Annual Report, 2000, p. 120). The winning firm in such a market then becomes the dominant network and may be in a position, for instance, to establish a *de facto* standard for the industry and prevent other companies from gaining the critical mass of users that would enable them to challenge the standard and undermine the market power of the winner. Consumers’ switching costs may be high enough for the dominant firm to earn above-average profits. In the telecommunications industry, the relevant switching costs are number non-portability and unequal access.[13]

In the presence of trade and investment liberalisation, however, competition problems in telecommunications may increasingly arise in a more common way from supply factors rather than originating in network-related patterns of demand. In widening markets, competitors from abroad may successfully establish new networks by building up a sufficiently large consumer base (“installed base”) on their own or jointly with other companies. At the same time, liberalisation tends to reinforce ongoing concentration movements among telecommunication companies aiming to exploit economies of scale in the provision of long-distance and mobile telephony as well as other vertically and horizontally related services. Through mergers, acquisitions and alliances, telecommunications operators also seek to offer customers integrated packages of services that enable businesses and residential users to purchase all kinds of services from a single supplier (“one-stop shopping”). From an evolutionary viewpoint, a phase of new market entry in the telecommunications industry is typically followed by a phase of concentration, in order to combine resources for further expansion or to prevent market exit (Monopolkommission, 2000, p. 45).

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[11] By contrast, in industries not subject to network effects, the total value of a product is simply the sum of its value to each user. Adding more users then increases the total value only by the product’s value to the new users.

[12] Klodt et al. (1995, pp. 40-49) distinguish direct network externalities, i.e. the demand-side reciprocity effect, from indirect ones, i.e. the existence of supply-side economies of scale.

[13] Number portability allows a customer to keep a telephone number when switching to another local provider, while equal access demands an unbiased system in which consumers have to dial the same number of digits for each long-distance service (Coenen, 2000, p. 7).

Mergers and aquisitions (M&As) have been more frequent in telecommunications than in any other industry. Among the Deals of the Year from 1990 to 2000, for instance, “mega mergers” among telecommunication firms led the field in seven of the eleven years covered (Kleinert, 2000, p. 173). Of the top 50 cross-border M&A deals completed during 1987-1999, six involved telecommunications, in most cases both as the industry of the acquiring and of the acquired company, while the share of these M&As (all of which - except the smallest one - occurred in 1999) in the total transaction value of the 50 M&As was more than one-fifth - and more than two-fifths if only M&As completed in 1999 are considered (UNCTAD, 2000, pp. 110-111). The telecommunications industry also has an overproportionate share of the competition cases examined by the European Commission, with a strong tendency towards majority shareholdings and joint ventures (European Commission, 2000).

The high number of mergers involving fixed and mobile operators in telecommunications, along with a growing tendency towards global strategic alliances between big national telecommunication companies, e.g. product development partnerships and marketing alliances, is a potential threat to the workability of infrastructural competition in the industry and ultimately to the competition between the suppliers of end-user telecommunication services as well. As the number of independent players on the respective markets declines, the probability of explicit and implicit collusion among them leading to “oligogopoly peace” increases.[14] This raises the issue of the appropriate competition policy response, especially with regard to access and interconnection,[15] in an environment of global market consolidation in the telecommunications sector.

[14] Empirical evidence on the competitive impact of mergers, acquisitions and alliances in the telecommunications industry is scarce. A tentative evaluation of three telecommunications “mega mergers” in the United States (AT&T-TCI, Bell Atlantic-GTE, and SBC-Ameritech), using stock price reactions as analytical tool, lends support to the efficiency view, i.e. efficiency gains through creating and distributing products to customers exceed allocative losses through higher prices due to greater market power/concentration in the cases examined (Hazlett, 2000, p. 43).

[15] Interconnection refers to the set of legal, technical and economic arrangements between network operators that enable customers connected to one network to communicate with customers of other networks or allow users of one supplier to access services provided by another supplier. The critical link is with incumbent suppliers of public telecommunications networks and services. In contrast to customer access, interconnection is granted between telecommunication service providers. It occurs not at network termination points, but rather at more central points of the network, such as a local switch. The technical and operational issues of interconnection are a potential source of anticompetitive behaviour, since they may be used by the incumbent operator to discriminate against the entrant or simply as a means to delay interconnection negotiations.

3. LIBERALISATION, (DE-) REGULATION, AND ANTITRUST: THE DIFFERENT FACES OF COMPETITION POLICY IN TELECOMMUNICATIONS

Competition policy can broadly be defined to encompass all government policies aimed directly at promoting competition among producers, whereas a narrow definition of competition policy would only cover competition law or antitrust legislation (Lloyd and Vautier, 1999, p. 10).[16] The broad concept includes trade liberalisation, measures to facilitate domestic entry into industry and services, the de-monopolisation of sectors and the imposition of hard budget constraints on public enterprises as well as well-managed privatisation programmes and the encouragement of foreign direct investment (Hoekman and Holmes, 1999, p. 883). An ideal global market for telecommunication services would accordingly show the following properties (Knorr, 1999, p. 278):

- Free market entry and exit available to all suppliers irrespective of nationality.
- Clear separation of economic activities from regulatory tasks which would also have to be shielded from political interference.
- Equal treatment of public and private suppliers, in particular with respect to market access, subsidies and taxation.
- Prosecution of anticompetitive business practices through a politically independent cartel authority.

In most countries or country groups, competition policy in the telecommunications sector comprises two policy regimes - antitrust and regulation - both of which in turn interact with international negotiations aimed at the liberalisation of markets in this field.

a. Coexistence of Antitrust and Regulatory Regimes in the Telecommunications Sector

Similar to other network industries, such as the postal, energy, and rail transport services sectors, the telecommunications industry has always been and still is a heavily regulated industry. It is also presumed to be the most dynamic among the network industries and thus to give rise to particular interest from the viewpoint of competition policy and regulatory economics (Knieps, 1999, p. 9). The typical policy configuration

[16] It has also been proposed to distinguish between competition law - concerning the behaviour of private entities - and competition policy, covering both private and government actions (Hoekman and Holmes, 1999, p. 877).

in telecommunications at the national/regional level is a dual regime consisting of sector-specific regulation, on the one hand, and enforcement of antitrust rules, which apply to other sectors as well, on the other hand. Between the two sets of rules, the regulatory rules tend to be narrower than the antitrust rules (with a focus on relatively broad categories of business conduct) while at the same time leaving less discretion to the enforcing authorities. The objectives pursued by regulation in the telecommunications sector include (1) to remove legal barriers to entry into the respective markets and to define the entry processes to be imposed upon operators; (2) to set out procedures for number allocation, number portability, dial parity, and radio-electric spectrum allocation; (3) to determine interconnection conditions and prices; and (4) to determine price and quality standards for universal services as well as for other services provided in insufficiently competitive markets. Antitrust in telecommunications, meanwhile, is designed (1) to prevent the conclusion of anticompetitive agreements between operators; (2) to prevent firms which enjoy substantial market power from abusing their dominant position with respect to end-users or competitors; and (3) to prohibit mergers and acquisitions which have a strong negative impact on competition. The corresponding enforcing authorities are telecommunications regulatory agencies, typically overseeing a small number of enterprises on a quasi-permanent basis, and economy-wide antitrust authorities acting on a case by case basis when needed (Kerf and Geradin, 2000, p. 28).

The interplay (or "division-of-labour") between general competition law and the specific regulatory framework in the telecommunications sector is most relevant where access to "essential facilities" is concerned. The respective "essential facilities doctrine" in antitrust law typically limits the right of a monopolist, or a group of jointly-controlling firms possessing collective market power, to deny access to infrastructural facilities such as a local exchange network, which are essential to effective competition at other levels and cannot easily be substituted for or replicated at reasonable costs, and thus extend its monopoly power from one market to another.[17] More generally, antitrust policy is to provide a "pro-competitive overlay on existing regulation" (Lang, 2000, p. 808). In a temporal perspective, the prevailing view is that competition policy will take

[17] The telecommunications sector is seen to be particularly well suited for essential facilities treatment (Valentine, 1999, p. 5). Access problems could, for instance, arise from a telecommunications operator's refusal to supply (or to supply on reasonable terms) a leased line needed by the applicant to provide services to its customers.

over when competition (through regulation) has developed (Laffont et al., 1998, p. 38).[18]

The economic rationale behind regulation in the telecommunications sector thus essentially derives from structural deficiencies of competition at the infrastructural or network level where elements of natural monopolies still exist, i.e. resistant monopolistic bottlenecks that combine cost subadditivity and a high degree of investment irreversibility with limited availability of substitutes (Kruse, 1999, p. 111).[19] In theory, regulation would take place in cases of (substantial) market power or market dominance, the existence of which would have to be established by the respective cartel office. A finding of market power could, for instance, be the basis for imposing price controls (such as price caps) by the sectoral regulator.[20] Competition in telecommunications has accordingly been characterised as "regulation-supported competition" (Monopolkommission, 2000, p. 17). The main challenge for competition policy here is to define the trade-off between promoting competition to increase social welfare once the infrastructure is in place and encouraging the incumbent firm to invest and maintain the infrastructure.[21] Put differently, individual competitors should not be allowed (under the cover of the essential facilities doctrine referred to above) to free ride on others' achievements.[22]

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18 Laffont and Tirole (2000, pp. 8-9), however, refute the view that regulation should end once local competition has developed and that regulation should be replaced by standard competition policy (as, for instance, happened in New Zealand, see below) as "not supported by any economic analysis." According to these authors, the analogy with other industries ignores the fact that interconnection requires an agreement among competitors which raises two concerns: first, strong players may refuse to enter interconnection agreements with smaller ones, and, second, strong players may be able to use the interconnection agreements among themselves as an instrument of tacit collusion in the retail markets.

19 In the area of telecommunications, the fixed costs of establishing a fixed line local network are such that a single enterprise will generally be able to provide services to all users in a given area at lower costs than would two or more enterprises, each with its own network.

20 Mexico provides an example in this context. A finding by the country's antitrust agency (Comisión Federal de la Competencia) regarding the substantial market power enjoyed by the incumbent telecommunications operator (Telmex) in four relevant areas (local telephony, interconnection services, national long distance, and resale of long distance) was the basis for the sectoral regulator (Cofetel) to reregulate tariffs and services of dominant firms in order to facilitate entry and enhance competition. Telmex's vertical integration and its ability to independently set prices, together with the existence of important entry barriers, were critical factors taken into account in determining its dominant position (OECD, 1999b, p. 61 and pp. 84-85).

21 "Regulators must encourage entry without expropriating incumbents" (Laffont and Tirole, 2000, p. 7).

22 "Any definition of essential facilities should be narrow and must be structured in such a manner as to meet and overcome any ancillary disincentives and inefficiencies which it may entail otherwise there is a great possibility that the cure which the doctrine seeks to administer could be worse than the disease" (Sheehan, 1999, p. 88).

It has been proposed in this context, apart from distinguishing between network industries and other industries, to make a distinction between those parts of network industries where workable (actual and potential) competition is guaranteed, and those where this is not the case as monopolistic bottlenecks impede competition, and correspondingly to follow a "disaggregated" approach to regulation/competition which would use regulatory instruments only in bottleneck areas and would at the same time be "symmetric" in that it creates neither advantages nor disadvantages for the former network monopolists (Knieps, 2000). In contrast, the "asymmetric" approach to regulation/competition in telecommunications markets, distinguishing between companies with dominant market positions and other companies, or between incumbents and new entrants, has been criticised for having a strong tendency towards overregulation (Knieps, 1997) and a bias towards some firms and technologies (Shankerman, 1996). It is held to cause high administrative costs while distorting incentives and the competitive process more generally (Knieps 2000a, pp. 426-428).

An exception to the dual-regime rule in the telecommunications industry is *New Zealand* where sector-specific regulatory agencies have been abolished in favour of common antitrust authorities which are now solely responsible for securing effective competition in telecommunications. The relevant legal provisions are section 36 ("Use of Dominant Position in a Market") and Section 27 ("Contracts, Arrangements, or Understandings Substantially Lessening Competition") of the Commerce Act of 1986. A major argument put forward in New Zealand against possible reregulation is that regulators, while potentially sophisticated, are much more likely to be captured than courts. According to Laffont and Tirole (2000, p. 34), the New Zealand experience demonstrates the difficulty of ensuring competition in the absence of regulation while highlighting the reluctance of courts to get involved in technical, yet crucial, issues concerning the determination of access charges. In most other countries, a combination of strict antitrust policies, aimed at preventing anticompetitive market conduct and structures, and efficiency-promoting regulatory regimes, in conjunction with "competition policy advocacy" by antitrust authorities concerning the effects that existing and new or proposed laws, regulations, agreements and administrative acts may have on competition,[23] is deemed to improve the performance of the telecommunications industry and to promote its future development.

[23] The sectoral and country reviews in the OECD regulatory reform work point to a significant role for competition policy advocacy in the design and implementation of pro-competitive regulatory reform in general (OECD, 1999a, p. 55). With regard to telecommunications, competition policy advocacy has led to the Federal Telecommunications Law in Mexico, for instance, incorporating competition

In the *European Union*, specific competition rules for telecommunications were developed in accordance with the liberalisation directives under Article 86 EC Treaty and the harmonisation directives under Article 95 ECT, including in particular the rules on Open Network Provision (ONP), aiming at an orderly transition from a public monopoly to a competitive market structure, while general competition rules derive from the application of Articles 81 and 82 ECT, together with the Merger Regulation, to telecommunication operators.[24] In the *Telia-Telenor* case, the European Commission defined the relation between the two sets of rules to the effect that merger control procedures yielding evidence for the creation or strengthening of a dominant market position (stemming in particular from control of facilities) cannot be overruled by regulatory or abuse control.[25] At the same time, the European Commission required the two companies (Telia AB from Sweden and Telenor AS from Norway) to "unbundle" the "local loop" (i.e. to provide effective access to its local telephone exchanges under transparent, fair and non-discriminatory conditions) and thus used the merger control instrument also to impose conduct control (as opposed to structural changes) on the parties concerned.[26] As far as the status of "essential facilities" is concerned, another case - *Bronner-MediaPrint* - is viewed as a turning-point in antitrust policy since it introduces the notion of objectivity.[27] According to the European Commission, this is not meant to discourage application of Article 82 ECT (on the abuse of a dominant market position), but to protect the ability of an incumbent firm to use its own investment for its own benefit (WTO, 2000, p. 124).[28]

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provisions that emphasise market access opportunities for both domestic and foreign service providers (OECD, 1999b, pp. 75 and 233).

24 In the language of the European Commission, competition rules and sector-specific regulation (at the Community level and at the level of the individual member states) "form a coherent set of measures to ensure a liberalised and competitive market environment for telecommunications markets in the Community" (cf. Official Journal of the European Communities, C 265, 22.8.1998, p. 23).

25 The intended merger between Telia AB from Sweden and Telenor AS from Norway was ultimately not realised although it was permitted. It was the first case to be considered under the EU's Merger Regulation involving the merger of two incumbent national telecommunication operators in Europe. For details on the Decision (October 13, 1999) of the EC Commission regarding *Telia-Telenor*, cf. Wirtschaft und Wettbewerb, No. 6, 2000, pp. 649-657.

26 Bartosch (2000, p. 394) compares the *Telia-Telenor* case in this respect to requirements concerning contract design in the *Boeing-McDonnell Douglas* case.

27 For details on the *Bronner-MediaPrint* case, which was decided on November 26, 1998 by the European Court of Justice, cf. Sheehan (1999).

28 For details concerning the position of the European Commission in this context, cf. the Commission's "Access Notice" ("Notice on the application of the competition rules to access agreements in the telecommunications sector", in: Official Journal of the European Communities, C 265, 22.8.1998, pp. 2-28) which "addresses the issue of how competition rules and procedures apply to access agreements in the context of harmonised EC and national regulation in the telecommunications sector" (p. 2). In Article 82 ECT, which provides that "any abuse by one or more undertakings of a dominant position within the common market or a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States", refusal to deal or deny

In *Germany*, where liberalisation of the telecommunication markets began in the late 1980s - largely driven by intensified integration within the European Community - and the corresponding regulatory framework was completed in 1996 with the Law on Telecommunications (Koopmann et al., 1997, pp.105-107), the Federal Cartel Office is responsible for safeguarding competition in these markets, whereas (technical and economic) regulation of the telecommunications sector lies with the Regulatory Authority for Telecommunications and Posts.[29] However, the Telecommunications Law, in Section 81(3), provides for the "phasing out" of sector-specific (especially price) regulation in line with the development and realisation of "workable competition".[30] Moreover, as part of the sixth amendment of the (general) Law against Restraints of Competition (LRC), in force since January 1, 1999, denial of access to proprietary networks of incumbent operators is now explicitly listed in the LRC (Section 19 (4) lit. 4) as a special case of market power abuse.

In the *United States*, the authorities charged with securing effective competition in the telecommunications markets are the Federal Trade Commission and the Antitrust Division of the Department of Justice (both in the field of antitrust) and the Federal Communications Commission (in the field of regulation). For instance, the DoJ and the FCC are both responsible for mergers and acquisitions in the telecommunications industry. The latter's competence is explained by its unique knowledge, expertise and judgement in reviewing proposed mergers and acquisitions under the Communications Act's "public interest" standard (Kennard, 1999, p. 345). This same standard is, however, subject to criticism as being vague and thus liable to non-competition considerations.[31] With regard to monopolistic bottlenecks, it is held, under the essential

access to an essential facility is not explicitely listed among the practices which may constitute such an abuse. The doctrines of refusal to deal and essential facilities are therefore essentially "creatures" of the case law of the European Commission and the European Court of Justice/Court of First Instance (Sheehan, 1999, p. 67).

29 On the allocation - and definition - of the three competencies, i.e. safeguarding competition, economic and technical regulation, among the general and sector-specific competition authorities, cf. Duijm (2000, p. 5).

30 According to the Telecommunications Law, "workable competition" is "structurally-based" competition that continues to exist even after regulation has expired. At present, some critical preconditions for markets to be contestable, such as absence of market entry and exit barriers and a delayed reaction by incumbents to market entries by competitors, are apparently not yet fulfilled. Price regulation by the regulatory authority is also regarded as being superior to the control of price abuse by the cartel office (Monopolkommission 2000a, p. 54). On the issue of whether it is time to deregulate the telecommunications industry in Germany – a view which is rejected by the Monopolies Commission –, also cf. Koenig and Kühling (2000) who question the arguments put forward by the Monopolies Commission and the methodology applied.

31 "By majority vote, the Commission may deny approval without having to prove that the merger will lessen competition, invoking only its view that – for some reason – the merger does not comport with the public interest...The principal effect of the FCC's merger-review policy is to add months – and

facilities doctrine, that a monopolist denying a competitor access to a critical input violates basic US antitrust legislation or, more specifically, Section 2 of the Sherman Act of 1890.[32] The corresponding regulatory legislation - the Telecommunications Act of 1996 - aims at fostering local market competition, through the rise of competitive local exchange carriers, to eliminate the incumbent local exchange carriers' ability to use their bottleneck monopoly to impede competition in complementary segments, while enabling the incumbents (i.e. mainly the Bell operating companies) to enter the long-distance market once there is "sufficient competition" in the local call markets.[33] This is to prevent them from exporting their monopoly power to vertically related markets.

b. Competitive Impact of International Liberalisation in Telecommunications

The antitrust/regulatory regimes for telecommunications at the national/regional level interact in various ways with the international liberalisation process in this field. Overall, substantial economic benefits (in terms of productivity and quality improvements and price reductions) can be expected as a result of international market liberalisation and national/regional regulatory reform in the telecommunications industry. An empirical study investigating the linkages between regulatory regimes, market environments and performance in three services supplied by the telecommunications industry - domestic long-distance fixed telephony, international long-distance fixed telephony and cellular mobile telephony - arrives at the conclusion that "final and intermediate users of telecommunication services are likely to gain a lot from an acceleration of liberalisation initiatives and regulatory practices that make it possible for new foreign and domestic operators to compete effectively" (Boylaud and Nicoletti, 2000, p. 8).[34] The driving force behind this development, therefore, is

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even years - to the process, thereby diluting the prospective gains from mergers in a rapidly changing industry" (Crandall, 1999, p. 345).

32 Section 2 of the Sherman Act provides that "every person who shall monopolize, or attempt to monopolize, or combine with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony." The first case to explicitly invoke and rely on the essential facilities doctrine was the *MCI-AT&T* case, i.e. the antitrust suit brought by MCI against AT&T for the latter's refusal to allow the former to interconnect with local distribution facilities controlled by AT&T, decided in 1983 in favour of MCI. For details, cf. Sheehan (1999, pp. 75-80).

33 The seven local or regional Bell operating companies ("Baby Bells"), created through the breakup of AT&T in 1984, were originally subject to severe lines-of-business restrictions that essentially limited their activities to offering local telephone services where they possessed strong market power.

34 For a review of studies that explicitly incorporate trade in services through commercial presence in this context and thus try to capture the effects of FDI liberalisation, cf. Dihel (2000, pp. 15-17). For a

increasing product market competition and, more particularly, the internationalisation of competition.

However, the impact of international market integration on competition/market performance is ambiguous. On the one hand, trade and investment liberalisation produces positive static and dynamic effects: companies can better exploit economies-of-scale at various levels; barriers to market entry decline as do the degree of domestic market concentration and the probability of individual and collective market dominance; growing competitive pressures lead firms to cut costs and develop new products and production processes. Ideally, then, all forces work in the same (positive) direction, lowering profit margins while reducing prices and improving qualities (Großmann, 1999, p. 88). On the other hand, the integration of markets causes tensions as companies' market positions become more contestable and thus less secure. Consequently, firms could frustrate import liberalisation through horizontal or vertical obstruction strategies, such as limit pricing or exclusionary distribution practices; impair competition through predatory dumping strategies and export cartels; or form international cartels to raise prices, limit quantities and allocate markets worldwide. Moreover, trade liberalisation might induce economically harmful merger activity (Falvey, 1998, p. 1072) while investment liberalisation could give rise to new barriers to market entry (through technological superiority of foreign companies) and higher market concentration (via mergers and aquisitions) with a negative impact on performance. In sum, while liberalisation in general makes it more difficult for companies to *enforce* competitive restraints in the marketplace, at the same time it increases the *incentives* for firms to engage in anticompetitive practices (Koopmann, 2000, p. 15).

In the special case of telecommunications, international distortions of competition caused by corporate business practices seem to be particularly relevant. In contrast to the manufacturing sector where barriers to entry arising from the anticompetitive behaviour of (publicly- and privately-owned) incumbent firms, rather than from direct legislative discrimination by governments in the form of tariffs or quotas on foreign firms, pose a problem that has gained significance relatively recently, for some service industries the problem of anticompetitive behaviour in foreign markets is an issue of longstanding importance. This is particularly true for those services industries that require the cooperation of service suppliers abroad in order to provide international

cross-country comparison (comprising Australia, Canada, France, Japan, New Zealand, Sweden, United Kingdom, United States) concerning welfare implications of regulatory reforms in telecommunications, cf. Schedl (2000, pp. 11-23).

services to their clients. The telecommunications sector is apparently a prominent example here, since telecommunications operators typically require foreign carriers to terminate an international call by passing it along their domestic network to the final destination.[35]

In such situations, the foreign service provider may seek to extract rents using its market power, by increasing the charges for termination services, thereby provoking retaliation measures by equally powerful domestic providers (Warren and Findlay, 1998, p. 446). In order to avoid such strategic behaviour at both ends of the route, which could also be detrimental to both parties involved, countries agreed bilaterally not to exploit their market power by consenting to standardise termination rates on international routes within the framework of the Accounting Rate System (ARS). The ARS, which was developed earlier in the twentieth century, still processes the vast amount of international telecommunications traffic.[36] It has however not resulted in free trade but rather worked to maintain relatively high retail prices for international calls as it did not match the sharp decline in underlying costs of telecommunications services following the introduction of lower-cost technologies and the trend towards more competitive markets.[37]

The Accounting Rate System also tends to create one-sided competitive advantages for specific telecommunications operators when there is a lack of symmetry in market liberalisation between (two) countries. In this case, foreign monopolists could find new opportunities for anticompetitive conduct to the detriment of consumers in liberalised domestic markets. An example would be what Warren and Findlay (1998, p. 451) call “one-way bypass”: a foreign monopolist would either set up a subsidiary or lease a private line in a competitive market and terminate all or a proportion of its own

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[35] On most international routes, a single telecommunications carrier is still unable to provide end-to-end service.

[36] The key feature of the Accounting Rate System and its corresponding contractual agreements between any two parties is that carriers on both ends of a bilateral route charge the same fee for termination (i.e. the same settlement rate) regardless of relative costs.

[37] The international settlement system, by requiring equal rates at both ends of a route and joint agreement before settlement rates can be altered, artificially inflates the costs of an international call and thus places a floor under the extent to which retail rates (i.e. prices to the final consumer) may actually fall (Warren and Findlay, 1998, p. 450). The Accounting Rate System is therefore also seen as a major barrier to trade and source of competitve distortions in international telecommunications (Krancke, 2000, pp. 42-43). However, the emergence of new suppliers and alternative forms of international communication can be expected to undermine the traditional accounting procedure and narrow the scope for overpricing (Langenfurth, 2000, p. 272). Moreover, cross-border interconnection schemes might replace the Accounting Rate System for handling international traffic or at least create pressure to reduce the accounting rates (Bronckers, 1999, pp. 9-11).

incoming traffic whereas carriers in the competitive market were unable to obtain equivalent entry in the foreign monopolist's home market. As a result, the effective cost of an outgoing call in the competitive market would be raised and the scope for price reductions reduced.[38] A system which was initially designed to overcome anticompetitive behaviour, in particular at the receiving end of an international connection, thus appears to have even increased the possibilities for these practices. In order to compensate for this, additional competitive safeguards might be needed, or alternatively, the more liberal countries might deny their less liberal trading partners most-favoured-nation treatment.[39]

With symmetric liberalisation, on the other hand, the Accounting Rate System can be bypassed both ways ("two-way bypass"), or the competing operators could agree economically more efficient accounting rates. However, if the number of competitors is low, and competition in the supply of international telecommunications imperfect, individual companies' market power could lead to accounting rates above actual costs. This problem could occur in particular when the degree of liberalisation differs between countries, i.e. symmetry is incomplete (Krancke, 2000, p. 43).[40]

In the GATS negotiations, no agreement was reached on accounting rates.[41] Further deliberations on the subject were suspended until early 2000, to be resumed in the follow up to the Uruguay Round services negotiations. During these negotiations, an understanding is also to be reviewed, reached in the context of the Agreement on Basic Telecommunications, that the Accounting Rate System by nature implies differential

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[38] As a result of one-way bypass, competitive carriers may receive a significantly reduced number or even a cessation of incoming calls on that particular bilateral route. This, in turn, would alter the balance of incoming and outgoing traffic for the competitive carrier, resulting in a significant traffic imbalance in the foreign monopolist's favour. There would also be an increase in the number of outgoing minutes with termination costs that are no longer offset by the revenue from terminating incoming calls. In consequence, the effective cost of an outgoing call in the competitive market is raised and the scope for price reductions is reduced (Warren and Findlay, 1998, p. 451).

[39] The United States, for instance, first introduced an Effective Competitive Opportunities (ECO) test (in 1995), whereby it must be demonstrated that the foreign country in question offers to U.S. providers opportunities similar to those offered by the United States to foreign carriers, and later (in 1997) replaced it (exclusively for other WTO member countries) with an open entry standard which essentially streamlined the procedure for granting applications. For details, cf. WTO (1999, pp. 195-196).

[40] Effective competition is also important for securing efficiency in international cellular communication, through appropriate roaming agreements, in order to avoid subsidising "monopolists" through "competitors" (Krancke, 2000, p. 44).

[41] The United States, in particular, was dissatisfied with the artificially high level of accounting rates in comparison to underlying costs which it claimed led to payment outflows of up to US $ 5 billion, three quarters of which were allegedly a subsidy to foreign telecommunication operators and thus a major barrier to competition (Bronckers and Larouche, 1997, p. 11).

accounting rates (thereby violating the most-favoured-nation principle), and that member countries would refrain from using the WTO dispute settlement mechanism for matters relating to differential accounting rates. At the same time, the WTO solicited recommendations from the International Telecommunication Union (ITU) for restructuring accounting rates in a manner that would promote cost-oriented pricing (Collins, 2000, p. 1086).

Basic policy questions relating to a possibly growing occurrence of anticompetitive practices in telecommunications in connection with the internationalisation of competition in this industry refer to

- whether antitrust or regulatory policies must assume a higher profile in general;
- to what extent these policies ought to go international, and
- how further international liberalisation of markets could proceed.

As to the first question, general theoretical reasoning would suggest that it depends on the anticompetitive practice in hand as to whether antitrust policy would have to play a stronger role. According to Neven and Seabright (1996), merger control policies and trade policies tend to be substitutes rather than complements, whereas policies towards collusive behaviour and predatory pricing, in particular, could gain growing importance in the presence of trade liberalisation. In the case of telecommunications, as noted above, a special additional need for antitrust policy or regulatory measures might arise if the liberalisation of trade (and investment) is asymmetric.

Concerning the second question - is a higher degree of internationalisation or international coordination in competition policy needed? - the general answer tends to be in the affirmative, and the telecommunications sector appears to be no exception to this rule. As internationalisation of competition also implies internationalisation of restraints to competition, i.e. anticompetitive conduct originating in one country affecting ("spilling over" into) markets in other countries, and related policies at the national level - aimed at maximising the total of producer and consumer surplus at home - tend to run against the interests of trading partners (either through extraterritorial application of national law in line with the "effects doctrine" or through discriminating between domestic and foreign markets) and/or may cause high transaction costs, clear mutual benefits can be expected to result from internationalising antitrust/regulatory policies in one way or another.

The third question - concerning future international liberalisation - appears to be particularly important in the telecommunications industry. The removal of trade and investment barriers can go ahead here only on a reciprocal/symmetric basis (in order to avoid the indirect subsidisation of foreign monopolists by domestic companies operating on competitive markets) while the relationship between liberalisation and antitrust/regulatory policies in telecommunications works both ways as well: effective liberalisation requires complementary safeguards for competition which in turn are necessary for liberalisation to move on in the first place.

4. THE MULTILATERAL APPROACH TO COMPETITION IN TELECOMMUNICATIONS

The linkages between liberalisation and antitrust/regulatory policies in the telecommunications sector have been explicitly recognised in multilateral negotiations: "There was a feeling that traditional trade approaches to market access through national treatment and MFN commitments alone would not be sufficient to ensure successful entry by foreign service suppliers without additional competitive safeguards" (OECD 1999, p. 85). Liberalisation accordingly involves the elimination of discrimination in the treatment of foreign and domestic providers of telecommunications services and the removal of market access barriers - to both cross-border provision and establishment - while antitrust and regulatory policies entail rules which are designed to assure effective competition. The principal legal instruments for the latter are the Annex on Telecommunications to the General Agreement on Trade in Services (GATS) and in particular the Reference Paper to the WTO Agreement on Basic Telecommunications (ABT).

The Annex on Telecommunications imposes disciplines on measures concerning public telecommunications transport networks and services on which providers of other telecommunications services and of services more generally must rely. For instance, it guarantees service suppliers access to and use of leased lines in foreign countries, on "reasonable" and "non-discriminatory" terms and conditions, with the right to interconnect with the public network. The Annex applies in all cases (and only in those cases) in which countries have offered specific liberalisation commitments in services (including telecommunications services) and is to be regarded as a means of making these commitments truly effective.[42] Its sectoral coverage is much broader than that of the Reference Paper (to be discussed subsequently) which only addresses the suppliers of basic telecommunications services. In substance, however, being confined to the (important) issue of network access abroad, it is silent on other aspects of competition - in particular anticompetitive behaviour - concerning market liberalisation. In this respect, the Reference Paper offers more.

The liberalisation commitments in the field of telecommunications, which have been undertaken by trading partners in multilateral negotiations, are by their very nature sectoral commitments as opposed to horizontal commitments cutting across the entire economy (including the telecommunications sector). There are six types of market-access restrictions ("black list") which, according to the GATS (Article XVI) can no longer be imposed once a country has made a specific commitment in a certain sector, namely limitations on

- the number of service suppliers allowed,
- the total value of transactions or assets,
- the total output of services,
- the number of natural persons employed,
- the type of legal entity through which the service is supplied (for instance, a branch, but not a subsidiary), and
- foreign equity participations or investments.

Of these, the first and the last one appear to be most critical for the opening of telecommunications markets since obstacles to entry/access here essentially come from exclusive rights or restrictive licensing policies as well as investment constraints.

The Reference Paper (as indicated above) refers to commitments regarding basic telecommunications services. These were largely excluded from the original GATS negotiations which, in the field of telecommunications, mainly produced a number of commitments concerning value-added or enhanced services.[43] The commitments on

[42] Most of the rules and principles contained in the GATS (as a framework agreement or umbrella for individual liberalisation arrangements or, in GATS language, "specific commitments"). The two important exceptions are the principles of most-favoured-nation treatment (Article II GATS) and transparency (Article III GATS) which are immediately applicable, i.e. irrespective of existing specific commitments.

[43] According to the GATS Services Sectoral Classification List, basic telecommunication services include voice telephone services, packet-switched data transmission services, circuit-switched data transmission services, facsimile services, private leased services and a variety of other services,

basic telecommunications services are contained in the country schedules attached to the Fourth Protocol to the GATS. The corresponding Agreement on Basic Telecommunications was concluded on February 15, 1997 between 69 countries[44] and came into force on February 5, 1998.[45] It initially liberalises a global market for telecommunications services estimated to be worth approximately US$ 600 billion, i.e. more than 90% of total global revenues for telecommunications services.[46] Nearly all the participating countries also agreed to enter into the additional commitments concerning antitrust and regulatory principles contained in the Reference Paper.[47]

The main objective of the Reference Paper is to assure the effectiveness of trade and investment liberalisation measures for basic telecommunications services through the provision of

- complementary competitive safeguards in this area which national governments would have to observe, and of
- procedures, at the international level, to challenge an inadequate implementation/enforcement of these safeguards.

Following Bronckers (1999, pp. 2-13), the rules established by the Reference Paper can be grouped in two categories:

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including mobile communications, providing real-time transmission of customer supplied information. Value-added services include electronic mail, voice mail, on-line information and data retrieval, electronic data interchange, enhanced facsimile services, code and protocol conversion, and on-line information and data processing (WTO Document S/C/W/74, December 1998). More generally, basic services are those where the service provider offers a communication path to the customer, while enhanced services include any services provided via the telecommunications network which constitute more than basic transmission services. The distinction between basic and enhanced telecommunications services goes back to efforts by the US Federal Communications Commission to draw a line between a competitive sector (enhanced services) and one that still required regulation (basic services). It has been criticised for introducing an element of arbitrariness into the GATS framework and for unnecessarily complicating matters (Bronckers and Larouche, 1997, pp. 16-18). Accordingly, the fact that the competitive safeguards contained in the Reference Paper to the Agreement on Basic Telecommunications are limited to basic services would mean, for instance, that a telecommunications operator which controls the public telecommunications infrastructure (and thereby leased lines) would be treated as a “major supplier” for the purposes of the market for data communications but not for the market for on-line and Internet services to the public, although it equally affects the terms of market participation in the second market.

44 Including the 15 EU member countries, which, however, presented a single schedule, so 55 schedules of specific commitments were originally attached to the Fourth Protocol.

45 Since then, further governments have made commitments in basic telecommunications.

46 Information obtained from the WTO website.

47 Exceptions are Ecuador and Tunisia. Eight countries (Bolivia, India, Malaysia, Morocco, Pakistan, the Philippines, Turkey and Venezuela) did not adopt the whole of the Reference Paper, while four countries (Bangladesh, Brazil, Mauritius and Thailand) decided to follow it at a later point in time.

- Rules concerning the regulation of "major suppliers".
- Rules concerning general regulatory issues.

From a competition-policy viewpoint, the core rules are those of the first group while among the rules of the second group particularly those defining the status of the responsible regulatory body are relevant in this respect.

A major supplier, in the language of the Reference Paper, is a company which has the ability, resulting from control over essential facilities or from a dominant market position, to "materially affect the terms of participation" (with regard to prices and the capability to supply at all) in the relevant market for basic telecommunications services. Essential facilities are defined as the "facilities of a public telecommunications transport network or service that (a) are exclusively or predominantly provided by a single or limited number of suppliers; and (b) cannot feasibly be economically or technically substituted in order to provide a service." A domestic telecommunications operator which controls the basic network (i.e. the public switched telephone network) and thus the main source of leased line capacity may then be able to discipline competing foreign suppliers on related markets such as data communications, for instance, by refusing to provide leased lines or by pricing them so high that the business becomes unproftitable for its competitors. Under such circumstances, a simple elimination, in international liberalisation negotiations, of formal restrictions to foreign carriers would obviously be insufficient to realise effective free trade. Because of the network externality, the ability of the foreign carrier to interconnect its network with that of the incumbent domestic carrier would be a requisite for the former to compete successfully.

Rather than opting for structural safeguards, such as vertical separation, in these cases, the Reference Paper instead relies on measures to control conduct. It provides foreign entrants a right to non-discriminatory,[48] timely and sufficiently unbundled[49] interconnection at any technically feasible point in the incumbent's network at cost-oriented rates that are reasonable, transparent and have regard to economic feasibility.[50] In case of disagreement about the terms, conditions and rates for interconnection, a dispute settlement mechanism is provided for which involves a direct right of complaint

48 Concerning terms, conditions, rates and quality of interconnection.

49 Sufficient unbundling means that there is no need for the foreign supplier to "pay for network components or facilities that it does not require for the service to be provided."

50 Interconnection is defined in the Reference Paper as the "linking with suppliers providing public telecommunications transport networks or services in order to allow the users of one supplier to communicate with users of another supplier and to access services provided by another supplier."

for private parties. It nevertheless remains unclear how a dispute could actually be resolved, i.e. whether a regulatory body or an antitrust authority could, for instance, impose an agreement on the parties concerned (Bronckers, 1999, p. 9).

Besides specifically regulating interconnection, the Reference Paper also deals generally with anticompetitive behaviour that might arise in connection with the provision of basic telecommunications services by major suppliers. It contains an obligation for the signatory countries to enforce appropriate measures to prevent anticompetitive practices (undertaken unilaterally or collectively) by these suppliers. In addition, a number of specific examples of anticompetitive practices are given. These are:

- Engaging in anticompetitive cross-subsidisation.
- Using information obtained from competitors with anticompetitive results.
- Withholding technically and commercially relevant information.

Anticompetitive cross-subsidisation involves negative effects on competition resulting from the use of profits (or resources afforded by protection) derived from one area of operations to support operations in another area such as a complementary or vertically related market. Through cross-subsidisation, for instance, a regulated domestic monopolist might extend its market power and thus gain an unfair advantage over domestic or foreign competitors in an unregulated domestic or foreign market. However, the Reference Paper does not spell out in any detail how to identify cross-subsidisation that harms competition and how to enforce the obligation to prevent such conduct. This raises doubts concerning the actual effectiveness of this provision in the Reference Paper.

Misuse of information - as the second case of anticompetitive practices explicitly listed in the Reference Paper - likewise relates to the various levels at which companies operate in the telecommunications sector. In the above example of leased lines supplied to a competing data communications provider, the supplier may obtain information from the competitor concerning business aims or customers, for instance, which could be used by its own data communications division to distort competition. Again, however, the Reference Paper does not specify what “anticompetitive” exactly means in this context and what remedies would be available.

With regard to the third example of anticompetitive practices, i.e. the withholding of information, the Reference Paper is seen to entail far-reaching consequences. A major supplier could accordingly be forced to disclose technical and commercial information to third parties wanting to provide a certain service even if neither the major supplier himself nor any other party is already supplying that service. This is explained by the high degree of market power attached to the major suppliers in the Reference Paper (Bronckers 1999, p. 7).

Other than in the case of interconnection, for the anticompetitive practices considered in the foregoing there is no specific provision on dispute settlement in the Reference Paper. However, failure by subscribing countries to adopt the appropriate counter-measures is subject to the general dispute settlement mechanism of the WTO which was substantially improved in the Uruguay Round, notably by changing the voting rules and imposing stricter time-limits.[51] In view of the particular dynamics of telecommunications markets, the new system may nevertheless be insufficient for an effective resolution of disputes in this field.[52]

The second set of rules laid down in the Reference Paper - concerning general regulatory issues - refers to the provision of basic telecommunications services in poor or remote areas of a country (Universal Service), the granting of licences in basic telecommunications, the respective allocation and use of scarce resources (such as frequencies, numbers and rights of way) and the authorities responsible for regulation in this area. As to the latter, according to the Reference Paper, regulatory bodies must be separate from, and not accountable to, any supplier of basic telecommunications and committed to impartial decisions and procedures. They must, however, not necessarily be separate from government departments that are in charge of exercising ownership

51 Disputes panel decisions can now only be rejected by consensus as can (in case a panel decision is contested) judgements by the Appelate Body. A panel must normally render its decision within nine months while the Appelate Body normally has sixty days to decide an appeal. Should the losing country not comply with the respective requirements, trading partners may apply sanctions, which should basically be imposed in the same sector but can also be extended to other sectors of the same WTO agreement and, as a last resort, to other agreements (“cross-retaliation”).

52 Bronckers and Larouche (1997, p. 42) give the example of a foreign entrant, being denied the opportunity to introduce a new service in a certain host country and its government bringing the issue before a WTO panel: “The host country can, in relative good faith, present arguments to justify its position and test them before the panel and the Appelate Body. Even if the host country complies speedily with an adverse decision, a year will be likely to have elapsed before the WTO dispute settlement procedure has provided the entrant with a satisfactory remedy. Within that year, the local TO (telecommunications operator) has had ample time to turn around, develop its own competing offering and perhaps even introduce it on the market, so that the competitive situation for the foreign entrant is completely different once it has obtained satisfaction before the WTO.”

and control functions over the telecommunications operator when the latter is still state-owned or –controlled.[53]

Even so, in providing for the independence of regulatory authorities at the national/regional level, the Agreement on Basic Telecommunications (through the Reference Paper) is seen to be unique among existing international agreements (Möschel, 1998, p. 62). Related economic advantages presumably include:

- Creation of positive externalities for trading partners if overlapping/border-crossing restraints of competition are effectively prevented at the source.
- Promoting common interests which are more likely to exist among independent (as opposed to dependent) agencies.
- Reduced risk of regulatory capture by private sector lobbies and of non-applying competition rules in order to gain strategic advantages over other countries.

Moreover, it appears to be easier for governments to transfer competences to an independent authority if other governments agree to do likewise (Duijm, 1999, p. 340).

In sum, the Agreement on Basic Telecommunications is rightly depicted as "in many respects ... the most explicit example of the mutually reinforcing nature of competition and trade policies in the context of a trade agreement." (OECD, 1999, p. 14). It is also described as an exercise (and a pioneering one at the multilateral level) in international regulation based on agreed minimum standards since "the major countries of the world have agreed to open their markets to all comers on condition that everyone accepts certain basic regulatory principles" (Gatsios and Holmes, 1998, p. 274). A number of governments used the agreement as a precommitment device to enhance the credibility of their domestic telecommunications policy and to assure the lock-in of reforms, which Hoekman (2000, p. 33) views as "probably the most constructive use that has been made of the GATS to date by WTO members." At the same time, the Reference Paper - together with the Annex on Telecommunications to the GATS - is primarily a general framework of rules which must be filled with concrete decisions in the fields of antitrust and regulation.

[53] Bronckers (1999, pp. 12-13) points to conflicts that could arise between the regulatory authority, even if it is independent of the telecommunications operator as a business, and the government as owner, for instance when privatisation is taking place.

5. COMPETITION RULES FOR TELECOMMUNICATIONS IN A WIDER CONTEXT

The multilateral trading system has traditionally been more concerned with the distortions of cross-border competition caused directly by governments than with those arising from the anticompetitive conduct of companies. The inclusion of rules against “Restrictive Business Practices” in the Havana Charter (Chapter V) was one reason why the Havana Charter failed to materialise and just a trade agreement (GATT) instead of a more comprehensive International Trade Organization (ITO) came into being in 1948. In the US Congress at that time, multilateral competition rules were suspected to threaten national sovereignty in competition policy. In 1960, it is true, GATT members agreed on a consultation mechanism to prevent that “business practices which restrict competition in international trade may hamper the expansion of world trade and the economic development in individual countries and thereby frustrate the benefits of tariff reduction and removal of quantitative restrictions” (GATT, 1961, p. 28). However, it was not deemed to be feasible, mainly owing to the absence of national competition legislation in most countries, “to undertake any form of control of such practices nor to provide for investigations” (ibidem). It was thus not until the transition from the GATT to the WTO in 1995 that more genuine competition provisions were introduced into the multilateral framework of rules.

The approach to competition, or restraints of competition, in the GATT consists of two different strands, the first one dealing with dumping practices and the second one with other competition strategies of firms (Koopmann, 1998). Dumping is the only type of potentially anticompetitive conduct which is explicitly covered in the GATT. Governments, in theory, are in this case the opponents of companies engaging in anticompetitive conduct. As it turned out, however, the antidumping instrument has frequently been used by governments to reduce adjustment pressures and thus ease competitive problems inflicted on domestic firms through liberalisation and the internationalisation of competition (Großmann, Koopmann et al. 1998, pp. 123-139). From a political-economy viewpoint, powerful incentives indeed exist for antidumping policies to “overshoot” the mark, going beyond the objective of protecting open markets against anticompetitive international price discrimination, or to simply disregard this objective, thereby creating competitive distortions of their own. The Uruguay Round did little to alter the anticompetitive bias in antidumping policies. The new antidumping agreement[54] explicitly requires an examination of the state of competition when it

[54] Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994.

comes to determining any injury suffered by domestic industries, and it disallows the recognition of injury caused by “trade restrictive practices and competition between foreign and domestic producers.” However, the competitive impact of dumping practices proper is not accounted for. Rather, for antidumping measures to go ahead, it suffices that dumping actually occurs and harms domestic industries, irrespective of its consequences for the economy as a whole, consumers, user industries etc.[55]

Anticompetitive behaviour of firms, other than dumping practices that impair welfare, is only accounted for in the GATT when it arises from companies owned or controlled by governments or in conjunction with government policies which effectively provide a cover for it. Article XVII GATT (on state trading enterprises) imposes disciplines on public or quasi-public companies which must not discriminate against or among foreign suppliers. Action against anticompetitive practices of private companies could possibly rely on GATT Articles II:4 (on import monopolies), III (on national treatment), XI (on quantitative restrictions) or XXIII:1(b).[56] The latter provision is commonly referred to as the “non-violation clause” as it provides remedies against measures of trading partners even in cases where these measures do not contravene the GATT. A question of some interest in this context is whether national competition policy measures (or non-measures), in cases where they impede access of foreign competitors to domestic markets and/or discriminate among domestic and foreign suppliers, could be effectively challenged under one or other of the above-mentioned GATT Articles. Case law is still evolving in this field but existing evidence suggests that these are rather cumbersome and unpromising ways to redress private restraints of international competition.[57]

Provisions relating to corporate competition strategies in the goods (as against the services) sector are also contained in a number of complementary agreements to the GATT, negotiated in the Uruguay Round, such as the Agreement on Safeguards or the Agreement on Subsidies.[58] Moreover, the Agreement on Trade-Related Investment Measures (TRIMs), which has so far only dealt with the trade-investment interface - and just with a small part of this relationship (local content, balancing of exports and

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55 For details, cf. Finger (1995, pp. 295-300), Horlick and Shea (1995, pp. 5-31) and Koopmann (1998, pp. 7-11).

56 For details on the applicability of these provisions against private restraints of competition, cf. Koopmann (1998, pp. 11-18) and OECD (1999, pp. 60-70).

57 With regard to the discrimination aspect, Neven and Seabright (1996, p. 397) observe that “it is likely to be very hard to demonstrate in any given case that competition policy has been applied in a discriminatory fashion, because policy necessarily involves a degree of discretion in its implementation.”

58 For details, cf. Petersmann, 1996.

imports and export restrictions concerning foreign investors) - will possibly be extended to cover investment policy more generally and to include competition policy. This points to a growing recognition of the “triad” between trade, investment and competition policies at the multilateral level.

With the addition of two new pillars - the General Agreement on Trade in Services (GATS) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) - to the world trading system, supplementing the GATT and related multilateral agreements on trade in goods, aspects of competition and competitive restraints gained more importance. The TRIPs agreement faces the fundamental trade-off in competition policy between dynamic efficiency gains (in this case resulting from temporary monopoly positions provided by patents that stimulate innovation) and static efficiency losses (as a possible consequence of increased market power). It contains a number of provisions designed to prohibit the abuse of this market power, particularly in conjunction with the granting of licenses, and explicitly names some practices against which trading partners may take “appropriate measures” in their national antitrust legislation.[59] The agreement also embodies the “principle of direct effect”, as its provisions can be invoked by private parties before national courts or equivalent institutions (Hoekman and Mavroidis, 1996, p. 213). On the whole, however, the approach of the TRIPs agreement to competition appears to be not very systematic and is accordingly held to entail the risk of “significant structural imbalances” (Maskus, 1997, p. 693).

In the General Agreement on Trade in Services, too, the treatment of issues of competition law and policy still is rather “embryonic and incomplete” (Basedow, 1998, p. 45). It is far from being a fully-fledged framework of competition rules even though it is more elaborate in this respect than the TRIPs agreement and especially the GATT. In a way, the GATS provisions on competition mirror those contained in the EC Treaty, with Article VIII GATS (on monopolies and exclusive service suppliers) comparable to Article 86 ECT (on public and monopoly-like enterprises) and Article IX GATS (on business practices) to Articles 81 and 82 ECT (on the prohibition of agreements and conduct restraining competition and the abuse of dominant market positions, respectively). The GATS approach to competition is also similar to the European one in that it not only provides for conduct control where monopolies exist, but also aims at changing the market structure, e.g. by easing market access.

[59] These practices are exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing (Article 40:2 TRIPs agreement).

GATS Article VIII "exceeds" its companion GATT Article XVII (on state trading enterprises) in that all new monopoly rights granted in service areas covered by specific liberalisation commitments must be notified and may lead to requests for compensation by trading partners. In these areas, WTO member countries must also prohibit the abuse of monopoly positions, e.g. through cross-subsidisation, when a monopolist competes in the supply of services "outside the scope of its monopoly rights".[60] Article IX GATS more generally refers to "certain business practices" that "may restrain competition and thereby restrict trade in services" and provides for consultations aimed at eliminating these practices. This provision is considered to be, in the field of competition policy, the "main innovation" of the GATS in comparison to the GATT (Sapir, 1999, p. 55) as it potentially covers a broad range of anticompetitive behaviour. However, it remains unclear as to what the restrictive business practices might exactly consist of and how their elimination could be enforced effectively. With regard to regulation in general, GATS Articles III and V (on transparency and domestic regulation, respectively) go beyond the corresponding GATT Article X (on publication and administration of trade regulations) by providing for "transparency" and "reasonable, objective and impartial" administration not only of trade measures but of all measures *affecting* trade including laws, regulations and administrative guidelines. The Reference Paper to the Agreement on Basic Telecommunications elaborates, and applies to the telecommunications industry, the provisions contained in GATS Articles VI, VIII and IX and thus in a way marks the highest stage of development to date of competition rules within the multilateral trading system.

60 The first, and to date apparently only, recourse to Article VIII GATS, in the form of a request for consultations, has been a US complaint concerning Belgacomm, the former telephone monopoly in Belgium, with respect to telephone directory services. It is considered to be "a very nice example of the potential for competition policy to be used for further liberalization in trade in services and to address market access barriers" and a demonstration of "the underutilized potential in GATS to apply competition policy to address anticompetitive practices" (Warner, 2000, p. 377).

6. IMPROVING THE RULES

The observations made in the preceding section suggest that the telecommunications sector is leading the way in the development of multilateral competition rules, while at the same time relatively little can be learnt from other areas in this respect. However, one - negative - lesson at least can be drawn, namely to avoid establishing antidumping rules. As noted in Section 5, antidumping policies tend to produce questionable results from an economic point of view. In this area, the Agreement on Basic Telecommunications - and the General Agreement on Trade in Services as a whole - differs conspicuously from the multilateral agreements concluded in the goods sector, centred around the GATT, as it contains no remedy against dumping practices. The high significance of a commercial presence abroad in many of the specific liberalisation commitments in the services sector has been advanced as a possible explanation for the absence of antidumping rules in the services agreements, since a commercial presence presumably allows the host country to exercise jurisdiction and curb any anticompetitive practices of the foreign supplier pursuant to domestic competition law (Bronckers and Larouche, 1997, pp. 38-39).

In international telecommunications, though, as noted in Section 2, cross-border transactions still are the dominant mode of supply, notwithstanding the growing significance of commercial presence. Moreover, inward foreign direct investment in this sector may create competitive problems of its own. Countries may therefore resist a further opening of their respective markets as long as no effective remedies against unfair competition from abroad are in place. As a consequence, it may be important to develop policies, other than antidumping measures, that can cope effectively with any anticompetitive conduct of foreign suppliers that affects domestic markets. In the telecommunications sector, these policies would complement the policies provided for in the Reference Paper to the ABT which, it will be recalled, are principally concerned with enabling foreign suppliers to gain market access in the presence of powerful domestic incumbents.

In line with this reasoning, and with a view to possible improvements of existing competition rules, or to creating new ones, the following questions arise:

- Which competitive safeguards are needed to ensure effective access of foreign telecommunications suppliers to domestic markets?

- What type of competition policy is required to protect domestic competition against anticompetitive behaviour of foreign telecommunications suppliers?
- Are general competition rules needed to support - or replace - sector-specific provisions in telecommunications?

As far as the first question is concerned, the competitive safeguards contained in the Reference Paper could be important common elements among national policies aimed at prohibiting the abuse of market power by incumbent suppliers in the telecommunications sector and in the network industries more generally. The postal, energy, and rail transport services sectors, in particular, are regarded as being well suited for adopting competitive safeguards similar to those set forth in the Reference Paper with respect to basic telecommunications (Warner, 2000, p. 391).[61] The safeguards reflect the rationale underlying international competition rules that antitrust disciplines are required to enhance WTO market access commitments.[62] A few caveats are nevertheless in order. The rather general provisions in the Reference Paper on the pricing of interconnection, for instance, may be interpreted in substantially different ways by the regulatory bodies of the various countries and thus lead to controversies and to charges that incumbent carriers are being allowed to exclude foreign competitors through the rates charged for interconnection. Moreover, the primary concern of the Reference Paper with market access is distinct from the broader focus of general competition policy on the overall competitive conditons in a market which does not guarantee a right of market access to particular firms. This points to a need for "overarching" multilateral competition rules "enveloping" the sector-specific competitive safeguards and ultimately replacing them when the transition from highly regulated industries with public monopolies to less regulated ones with more entrants and service providers has been completed.

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[61] Another suggestion has been to consider generalising the appropriate parts of the Reference Paper (e.g. those containing concepts such as "affecting the terms of participation" and "essential facilities") to make it a horizontal set of disciplines to be incorporated into the GATS as such, in line with scheduling liberalisation commitments on a horizontal (general) rather than sectoral (specific) basis (Hoekman, 2000, p. 44). In this context, Feketekuty (2000, p. 238) proposes to integrate into Article VI GATS (on domestic regulation) a general restatement of the competitive safeguards built into the Annex on Telecommunications to the GATS and the Reference Paper to the ABT: "Such a provision would help assure that monopoly providers of essential services would not abuse their monopoly position by either charging unreasonable fees or by giving themselves preferential access to essential services in the competitive provision of downstream products. This provision could apply not only to "transport services" provided over electric conduits or pipelines but also to a variety of other monopoly inputs such as water."

[62] The other rationales, according to Hoekman (1997, pp. 383-84), are to constrain the use of anti-dumping, control the market power exercised by global multinationals and prevent governments from using antitrust laws as an instrument to circumvent WTO obligations.

The second question raised above concerns policy safeguards against anticompetitive behaviour that may arise on export or foreign markets. An incumbent foreign regulated monopolist, for instance, might use the resources afforded by its protection at home to gain an unfair advantage in another country. More particularly, the strategy of bypassing the Accounting Rate System by monopolists in non-liberalised markets to the detriment of consumers in liberal markets (referred to in Section 3), has been presented by Warren and Findlay (1998) as a case where a new set of competiton policies designed to minimize (the effects of) such anticompetitive behaviour is called for, at least until the underlying asymmetries of liberalisation have been removed. According to these authors, such policies should be of an *ex post* rather than *ex ante* nature,[63] and they could be applied to other industries as well, such as international air transport or the delivery of postal services; furthermore, they should be coordinated internationally among the liberalised economies. It is not specified, however, how the common principles, if agreed among the liberal countries, could be actually enforced against the conflicting interests of the non-liberal countries whose firms are taking advantage of their monopoly status.

This leads to the last question concerning the rationale, feasibility and applicability to the telecommunications sector of more general multilateral competition rules. The case for international cooperation in antitrust policy basically derives from two types of policy failure:

- National antitrust laws do not normally reach conduct which affects the national economy but which originates in other jurisdictions.
- National antitrust laws do not normally consider injury or costs imposed by the conduct of producers in their jurisdiction on the residents of other jurisdictions.

Various international arrangements at the bilateral and regional levels seek to correct these failures.[64] At the multilateral level, a possible way to improve the rules could be to "bundle" or combine the references in various WTO agreements with a bearing on business practices that have proliferated in particular since the transition from GATT to

63 Whereas *ex ante* competition policy establishes a set of observable preconditions, which, if met, are taken as evidence that anticompetitive activity is being undertaken, in the case of *ex post* competition policy, market entry of a foreign monopolist, for instance, would be allowed and competition policy would only apply in the event of anticompetitive behaviour occuring (Warren and Findlay, 1998, pp. 452-453).

64 For details, cf. Großmann, Koopmann et al. (1998, pp. 167-215) and Koopmann (2000, pp. 23-26).

WTO (cf. Section 5), in order to place them on a common base. Such an approach may appeal for a number of reasons:

- It could help to clarify or better interpret rather vague or elusive concepts contained in these agreements such as, for instance, “anti-competitive cross-subsidisation” or “anti-competitive results” and thus improve their operation.
- It could reduce the bias towards market-access (as against true competition) issues as well as the risk of rent-seeking, regulatory capture and industrial-policy misuse inherent in sector-specific arrangements.
- It could assist in ultimately “phasing out” sector-specific regulation.

It is true that a comprehensive horizontal or general agreement on competition rules and principles faces a feasibility problem given that significant differences exist between national competition laws and their enforcement and that many competition issues are contentious among trading partners. The “essential facilities” doctrine appears to be a case in point here as it arguably goes to the very heart of competition policy and may therefore vary from jurisdiction to jurisdiction, with a variation in the policies and values underpinning the competition system in each jurisdiction, reflecting also the dynamic nature of these systems.[65] However, in order to leave room for the “competition among competition rules” and not to excessively “lock in” national regulatory policies, full harmonisation of competition rules and principles may actually not even be desirable.

It may be worth considering in this context to apply the country-of-origin principle, which is common in the trade policy field, to competition policy as well. In conjunction with an agreement on certain minimum standards in competition policy to be observed by trading partners, it would provide for the prohibition of anticompetitive behaviour “at the source” and in particular allow to remove the bias of national competition policies towards discriminating between domestic and foreign markets. The WTO dispute settlement mechanism could be used to ensure its effective enforcement (Koopmann, 2000, pp. 26-30). This appears to be equally relevant to the telecommunications sector and particularly so in its post transition phase when “workable” or “structurally-based” competition would be in place.

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65 “There can be no seamless definition of the essential facility doctrine that can be applied across the board. The importance and weight given to the doctrine within a jurisdiction at any given time will reflect the competition policies, goals and values pursued in that jurisdiction” (Sheehan, 1999, p. 89).

References

Annual Report (2000)

The Annual Report of the Council of Economic Advisers, in: Economic Report of the President, Washington, D.C.

Bartosch, Andreas (2000)

Europäisches Telekommunikationsrecht im Jahre 1999, in: Europäische Zeitschrift für Wirtschaftsrecht, No. 13, pp. 389-396

Basedow, Jürgen (1998)

Weltkartellrecht. Ausgangslage und Ziele, Methoden und Grenzen der internationalen Vereinheitlichung des Rechts der Wettbewerbsbeschränkungen, Tübingen

Bhagwati, Jagdish (1997)

Splintering and Disembodiment of Services and Developing Nations, in: V. N. Balasubramanyam (ed.), Writings on International Economics, Oxford, pp. 433-446

Boylaud, Olivier; Nicoletti, Giuseppe (2000)

Regulation, Market Structure and Performance in Telecommunications, OECD Economics Department Working Paper No. 237, Paris

Bronckers, Marco C.E.J. (1999)

Trade and Competition Interlinkages: The Case of Telecom (mimeo)

Bronckers, Marco C.E.J.; Larouche, Pierre (1997)

Telecommunications Services and the World Trade Organization, in: Journal of World Trade, Vol. 31, No. 3, June, pp. 5-47

Chang, Philip; Karsenty, Guy; Mattoo, Aaditya; Richtering, Jürgen (1999)

GATS, the Modes of Supply and Statistics on Trade in Services, in: Journal of World Trade, Vol. 33, No. 3, pp. 93-115

Choi, Byung-il (2000)

Comment on Peter Holmes, in: Paolo Guerrieri, Hans-Eckart Scharrer (eds.), Global Governance, Regionalism and the International Economy, Baden-Baden, pp. 153-161

Coenen, Heide (2000)

Network Effects in Telecommunications: When Entrants are Welcome, August (mimeo)

Collins, Katherine (2000)

International Accounting Rate Reform: The Role of International Organizations and Implications for Developing Countries, in: Law and Policy in International Business, Vol. 31, No. 3, pp. 1077-1092

Crandall, Robert W. (1999)

Should the Federal Communications Commission Continue to Have the Authority to Review Telecommunications Mergers? In: CQ Researcher, Vol. 9, No. 15, April 23, p. 345

Dihel, Nora (2000)

Quantification of the Costs to National Welfare of Barriers to Trade in Services: Scoping Paper, OECD, Paris, 4-5 December (mimeo)

Duijm, Bernhard (1999)

Die Unabhängigkeit von Kartellbehörden, in: Ordo, Vol. 50, pp. 323-344

Duijm, Bernhard (2000)

Fachbehörden als Wettbewerbshüter, in: IFO Schnelldienst No. 12, pp. 3-10

European Commission (2000)

Merger Decisions, http://europa.eu.int/comm/competition/index_en.html

Falvey, Rod (1998)

Mergers in Open Economies, in: The World Economy, Vol. 21, No. 8, pp. 1061-1076

Feketekuty, Geza (2000)

Regulatory Reform and Trade Liberalization in Services, in: Pierre Sauvé, Robert M. Stern (eds.), GATS 2000. New Directions in Services Trade Liberalization, Washington, D.C., pp. 225-240

Finger, J. Michael (1995)

Legalized Backsliding: Safeguard Provisions in GATT, in: Will Martin, L. Alan Winters (eds.), The Uruguay Round and the Developing Countries, World Bank Discussion Paper No. 307, Washington, D.C., pp. 285-304

Gatsios, Konstantine; Holmes, Peter (1998)

Regulatory Competition, in: Peter Newman (ed.), The New Palgrave Dictionary of Economics and the Law, Vol. 3, London etc., pp. 271-275

GATT (General Agreement on Tariffs and Trade) 1961

Basic Instruments and Selected Documents, 9^{th} Supplement, Geneva, February

Gilbert, Richard; Williamson, Oliver (1998)

Antitrust Policy, in: Peter Newman (ed.), The New Palgrave Dictionary of Economics and the Law, Vol. 1, London etc., pp. 82-88

Großmann, Harald (1999)

Integration der Märkte und wettbewerbspolitischer Handlungsbedarf, in: Helmut Hesse, Bernd Rebe (eds.), Vision und Verantwortung. Herausforderungen an der Schwelle zum neuen Jahrtausend, Hildesheim etc., pp. 83-96

Großmann, Harald; Koopmann, Georg; Borrmann, Christine; Kinne, Konstanze; Kottmann, Elke (1998)

Handel und Wettbewerb – Auswirkungen von Wettbewerbsbeschränkungen zwischen Unternehmen auf die internationale Arbeitsteilung, Baden-Baden

Hazlett, Thomas W. (2000)

Economic and Political Consequences of the 1996 Telecommunications Act, in: Regulation, Vol. 23, No. 3, pp. 36-45

Hoekman, Bernard M. (1997)

Competition Policy and the Global Trading System, in: The World Economy, Vol. 20, No.1, pp. 383-406

Hoekman, Bernard M. (2000)

The Next Round of Services Negotiations: Identifying Priorities and Options, in: Federal Reserve Bank of St. Louis Review, July/August, pp. 31-47

Hoekman, Bernard; Holmes, Peter (1999)

Competition Policy, Developing Countries and the WTO, in: The World Economy, Vol. 22, No. 6, August, pp. 875-893

Hoekman, Bernard M.; Mavroidis, Petros C. (1996)

Policy Externalities and High-tech Rivalry: Competition and Multilateral Co-operation Beyond the WTO, in: OECD (ed.), Market Access After the Uruguay Round, pp. 187-235

Horlick, Gary N.; Shea, Eleanor C. (1995)

The World Trade Organization Antidumping Agreement, in: Journal of World Trade, Vol. 29, No. 1, February, pp. 5-31

Kennard, William (1999)

Should the Federal Communications Commission Continue to Have the Authority to Review Telecommunications Mergers? In: CQ Researcher, Vol. 9, No. 15, April 23

Kerf, Michel; Geradin, Damien (2000)

Post-Liberalization Challenges in Telecommunications: Balancing Antitrust and Sector-Specific Regulation, in: Journal of World Competition, Vol. 23, No. 2, pp. 27-77

Kleinert, Jörn (2000)

Megafusionen. Welle oder Trend? In: Die Weltwirtschaft, No. 2, pp. 171-186

Klodt, Henning; Laaser, Claus-Friedrich; Lorz, Jens Oliver; Maurer, Rainer (1995)

Wettbewerb und Regulierung in der Telekommunikation, Tübingen

Knieps, Günter (1997)

Phasing Out Sector-Specific Regulation in Competitive Telecommunications, in: Kyklos, Vol. 50, Fasc. 3, pp. 325-339

Knieps, Günter (1999)

Deregulierung und die Dynamik des Wettbewerbs in der Telekommunikation, in: Peter Oberender (ed.), Die Dynamik der Telekommunikationsmärkte als Herausforderung an die Wettbewerbspolitik, Berlin

Knieps, Günter (2000)

Der disaggregierte Regulierungsansatz der Netzökonomie, in: Günter Knieps, Gert Brunekreeft (eds.), Zwischen Regulierung und Wettbewerb. Netzsektoren in Deutschland, Heidelberg, pp. 7-22

Knieps, Günter (2000a)

Wettbewerb in Netzen, in: Bernhard Külp, Viktor Vanberg (eds.), Freiheit und wettbewerbliche Ordnung. Gedenkband zur Erinnerung an Walter Eucken, Freiburg etc., pp. 415-433

Knorr, Andreas (1999)

Vom nationalen zum globalen Markt: Der internationale Handel mit Telekommunikationsleistungen, in: Dietmar Fink, Arno Wilfert (eds.), Handbuch Telekommunikation und Wirtschaft. Volkswirtschaftliche und betriebswirtschaftliche Perspektiven, Munich, pp. 275-291

Koenig, Christian; Kühling, Jürgen (2000)

Funktionsfähiger Wettbewerb und Regulierungsperspektiven auf den Telekommunikationsmärkten. Eine Kritik am Sondergutachten der Monopolkommission, in: Wirtschaft und Wettbewerb, Vol. 50, No. 6, pp. 596-610

Koopmann, Georg (1998)

Wettbewerbspolitische Instrumente der Welthandelsorganisation, HWWA Discussion Paper 64, Hamburg

Koopmann, Georg (2000)

Internationalisierung der Wettbewerbspolitik: Korrelat zur internationalen Handelspolitik? HWWA Discussion Paper 108, Hamburg,

Koopmann, Georg; Kreienbaum, Christoph; Borrmann, Christine (1997)

Industrial and Trade Policy in Germany, Baden-Baden

Krancke, Jan (1999)

Liberalisierung des internationalen Dienstleistungshandels: Analyse des GATS und Perspektiven für die zukünftige Handelsliberalisierung, Kiel Working Paper 954

Krancke, Jan (2000)
Marktordnung und Barrieren im grenzüberschreitenden Handel mit Telekommunikationsleistungen, Kiel Working Paper 1010

Kruse, Jörn (1997)
Telekommunikation und neue Welthandelsordnung, in: Dieter Fritz-Assmus, Egon Tuchtfeldt (eds.), Die Ordnung des Welthandels, Bern etc., pp. 155-179

Kruse, Jörn (1999)
Asymmetrische Regulierung durch vertikale Integration, in: Peter Oberender (ed.), Die Dynamik der Telekommunikationsmärkte als Herausforderung an die Wettbewerbspolitik, Berlin, pp. 107-120

Laffont, Jean-Jacques; Rey, Patrick; Tirole, Jean (1998)
Network Competition: II. Price Discrimination, in: RAND Journal of Economics, Vol. 29, No. 1, Spring, pp. 38-56

Laffont, Jean-Jacques; Tirole, Jean (2000)
Competition in Telecommunications, Cambridge (MA) and London

Lang, Jeffrey M. (2000)
The First Five Years of the WTO General Agreement on Trade in Services, in: Law and Policy in International Business, Vol. 31, No. 3, pp. 801-809

Langenfurth, Markus (2000)
Der globale Telekommunikationsmarkt. Telekommunikationsdienste als international handelbare Dienstleistung, Frankfurt a. M. etc.

Lloyd, Peter J.; Vautier, Kerrin M. (1999)
Promoting Competition in Global Markets. A Multi-National Approach, Cheltenham (UK) and Northhampton (MA)

Maskus, Keith E. (1997)
Implications of Regional and Multilateral Agreements for Intellectual Property Rights, in: The World Economy, Vol. 20, No. 5, August, pp. 681-694

Möschel, Wernhard (1998)
Zwischen Konflikt und Kooperation: Regulierungszuständigkeiten in der Telekommunikation, in: FIW (ed.): Multimedia: Kommunikation ohne Grenzen – Grenzenloser Wettbewerb? Cologne etc., pp. 53-65

Monopolkommission (2000)
Wettbewerbspolitik in Netzstrukturen, Dreizehntes Hauptgutachten 1998/99, Baden-Baden

Monopolkommission (2000a)
Wettbewerb auf Telekommunikations- und Postmärkten? Sondergutachten 29, Baden-Baden

Neven, Damien; Seabright, Paul (1996)
Trade Liberalization and the Coordination of Competition Policy, in: Leonard Waverman, William S. Comanor, Akira Goto (eds.), Competition Policy in the Global Economy. Modalities for Cooperation, London and New York

OECD (1999)
Trade and Competition Policies for Tomorrow, Paris

(1999a)
Trade and Competition Policies. Exploring the Ways Forward, Paris

(1999b)
Regulatory Reform in Mexico, Paris

(2000)
Regulatory Reform in Network Industries: Past Experience and Current Issues, in: OECD Economic Outlook, No. 67, June

Petersmann, Ernst-Ulrich (1996)
International Competition Rules for Governments and for Private Business. The Case for Linking Future WTO Negotiations on Investment, Competition and Environmental Rules to Reforms of Anti-Dumping Rules, in: Journal of World Trade, Vol. 30, No. 3, June, pp. 1-35

Sapir, André (1999)
The General Agreement on Trade in Services. From 1994 to the Year 2000, in: Journal of World Trade, Vol. 33, No. 1, pp. 51-66

Schedl, Hans (2000)
Ökonomische Schlußfolgerungen aus dem Ländervergleich von Regulierungsmodellen in der Telekommunikation, in: IFO Schnelldienst No. 32-33, November, pp. 11-23

Scherer, Frederic M. (2000)
International Trade and Competition Policy, in: Frederic M. Scherer, Competition Policy, Domestic and International, Cheltenham (UK) and Northampton (MA)

Shankerman, M. (1996)
Symmetric Regulation for Competitive Telecommunications, in: Information Economics and Policy, Vol. 8, pp. 8-23

Sheehan, Eileen (1999)
Unilateral Refusals to Deal and the Role of the Essential Facility Doctrine. A US/EC Comparative Analysis, in: World Competition, Vol. 22, No. 4, pp. 67-89

UNCTAD (2000)
World Investment Report 2000 (Cross-border Mergers and Acquisitions and Development), New York and Geneva

Valentine, Debra (1999)

Competition Policy, Essential Facilities and Market Access (mimeo)

Warner, Mark A. A. (2000)

Competition Policy and GATS, in: Pierre Sauvé, Robert M. Stern (eds.), GATS 2000. New Directions in Services Trade Liberalization, Washington, D.C., pp. 364-398

Warren, Tony; Findlay, Christopher (1998)

Competition Policy and International Trade in Air Transport and Telecommunications Services, in: The World Economy, Vol. 21, No. 4, June, pp. 445-456

WTO (1999)

Trade Policy Review: United States. Report by the Secretariat, WTO Document WT/TPR/S/56, Geneva, September

WTO (2000)

Trade Policy Review: The European Union. Report by the Secretariat, WTO Document WT/TPR/S/72, Geneva, June 14