

POLICY ROUNDTABLES

Competition in Telecommunications

1995

Introduction

The OECD Competition Committee debated competition in telecommunications in November 1995. This document includes written submissions from Australia, Canada, the Czech Republic, the European Commission, Finland, Germany, Italy, New Zealand, the Slovak Republic, the United Kingdom, the United States and BIAC, as well as an aide-memoire of the discussion.

Overview

In 1996, at the time of the roundtable, an unprecedented wave of deregulation and liberalisation had started in the telecommunications sector. Participants discussed institutional aspects of antitrust and regulation in the sector. One issue was whether competition authorities should be responsible for injecting competition or whether telecommunications regulators should take the lead.

They also discussed how to address structural constraints due to natural monopoly in some parts of the market and how to ensure performance of universal service obligations by newly privatized former monopolists.

Related Topics

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General Distribution **OCDE/GD(96)114**

COMPETITION IN TELECOMMUNICATIONS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris 1996

40908

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FOREWORD

This document comprises proceedings in the original languages of a roundtable on Competition in Telecommunications which was held by Working Party No. 2 of the Committee on Competition Law and Policy in November 1995. It is published as a general distribution document under the responsibility of the Secretary General of the OECD to bring information on this topic to the attention of a wider audience.

This is the sixth compilation published in a new OECD series named "Roundtables on Competition Policy".

PRÉFACE

Ce document rassemble la documentation dans la langue d'origine dans laquelle elle a été soumise, relative à une table ronde sur la concurrence dans le domaine des télécommunications qui s'est tenue en novembre 1995 dans le cadre du Groupe de travail n˚2 du Comité du droit et de la politique de la concurrence. Il est mis en diffusion générale sous la responsabilité du Secrétaire général afin de porter à la connaissance d'un large public les éléments d'information qui ont été réunis à cette occasion.

Cette compilation est la sixième diffusée dans la nouvelle série de l'OCDE intitulée "les tables rondes sur la politique de la concurrence".

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AUSTRALIA

1. Background on Australian telecommunications reforms

The telecommunications sector in Australia has been a key focus of micro-economic reform involving a progressive transition from the previous public monopoly environment to open competition which will apply from July 1997. There has been an accompanying rapid development of the market with a range of new telecommunications services emerging in addition to standard telephony services offering substantial increases in functionality and real reductions in prices.

The reform process began in 1988 with a range of accountability and management reforms designed to provide the publicly owned monopoly telecommunications operator (Telecom) with greater commercial focus, management independence and accountability. An industry specific economic and technical regulator, the Australian Telecommunications Authority (Austel), was established to facilitate the introduction of competition and protect consumers rights.

A second round of reform commenced in 1990, with the announcement of the merger of Telecom and the publicly owned international telecommunications carrier OTC into a single carrier, (Telstra Corporation) to encompass local, long distance and international telephony. The progressive introduction of competition was begun with the establishment of a carrier duopoly through the sale of a second general and mobile carrier licence to a private sector competitor (Optus Communications) in 1991, together with the publicly owned satellite system AUSSAT. A third mobile licence was issued to Arena GSM (now known as Vodafone) in 1992.

In 1992 certain reforms were made to the structure of regulatory institutions, including establishment of the Spectrum Management Agency to take over planning and the management of the radiocommunications spectrum. However, at this stage regulatory institutional arrangements were structured according to technologically distinct modes of telecommunications (telephony, broadcasting etc).

On 1 August 1995, after a systematic review of telecommunications policy, the Government announced the features of the regulatory arrangements which are to apply to telecommunications from July 1997. Broadly speaking, there will be no numerical limits on entry into the market. Regulatory functions will be separated as between competition issues, technical carriage issues and content issues. Moreover regulation will be technology neutral in recognition of the unpredictable and rapid technological change in the sector including the convergence phenomenon. Access or interconnection arrangements will be largely self-regulatory although with legislative underpinnings which mandate interconnection. General competition laws will apply to the sector, with a special conduct test to provide for the timely remedy of abuses of market power, and be administered by the general competition regulator (the Australian Competition and Consumer Commission - ACCC).

This paper is set out as follows. The next section briefly sets out the current regulatory arrangements. This is followed firstly by a discussion of competition within that framework and secondly by a discussion of the impact of technological change on this market. The broad features of the announced post July 1997 regulatory arrangements are then spelt out prior to a conclusion being drawn.

Current regulatory arrangements

Industry regulation is governed by the *Telecommunications Act 1991 (TA)*. The regulatory arrangements applying until 30 June 1997 provide for a carrier duopoly (and triopoly in mobiles) with full resale by service providers (service providers generally do not own or operate basic carriage hardware but purchase capacity in these facilities from carriers). Austel-supervised ballots were held to allow customers to pre-select their long distance carrier of choice with an over-ride option for individual calls. Austel has wide pro-competitive regulatory powers aimed at ensuring the successful introduction of competition to the market, i.e., the regulatory arrangements designed to constrain the dominant market power of the incumbent, Telstra, and facilitate the entry of new carriers. A range of "competitive safeguards" are provided in the *TA* to augment the operation of the economy-wide competition provisions of the *Trade Practices Act 1974 (TPA)*. The competitive safeguards include a general *per se* proscription of price discrimination and service withholding behaviour by a "dominant" carrier (as determined by Austel), accounting separation arrangements and price capping of Telstra services. Telstra is not considered dominant in the markets for mobiles and broadband cable pay television but remains dominant in the local calls, long distance and international calls markets.

The *TA* provides interconnection rights for the carriers to interconnect their infrastructure facilities, with arbitration and mediation powers provided to Austel against the possible failure of commercial negotiations on terms and conditions. More limited interconnection rights are available to service providers and, in particular, there is no arbitral role for Austel in access negotiations between service providers and carriers.

The *TA* allows the Minister for Communications and the Arts to set charging principles to apply to carrier interconnection. Pursuant to this power, a Ministerial Determination was issued in 1991 which governed the initial interconnection charges for the entry of Optus and Vodafone into the market. The *Telecommunications (Interconnection and Related Charging Principles) Determination No 1 of 1991*, established charges to apply for customer access network, intra-area and international carriage and switching. The Determination provided that regulated interconnection charges include a set component relating to each call attempt and a set rate per connect minute. The Determination was based on the principle that all interconnection charges cover the costs necessarily incurred by the carrier in providing interconnection including the costs of the required resources and assets and to provide for a commercial return on the relevant assets.

The application of the Determination was to lapse *inter alia*, when in relation to the customer access network, preselection was available in an area, and for intra-area carriage and switching, when both the new carriers attained predetermined threshold market shares. Interconnection charges have now been commercially negotiated by the carriers including for interconnection where direct access to the customer is provided by Optus through installation of its own customer access network (CAN). The details of these arrangements are not publicly available but it has been disclosed that charging for interconnection where the new carrier, Optus, has direct customer access is to be on an untimed basis.

The *TA* also requires that the carriers provide customers with the option of untimed local calls. Telstra provides local calls at a standard rate of 25 cents within the relatively large Australian local call zones. Under the anti-price discrimination provisions of the *TA*, Telstra is unable to offer discriminatory pricing of local calls while it remains dominant in the local call market which Austel has determined to be a single nationwide market.

2. Competition in the local loop and long distance markets

The new licensed general and mobile carrier Optus Communications began operations in June 1992. Optus has since installed a substantial fibre optic inter-city trunk network supported by its satellite services, which is linked by major new Optus exchanges in the large population centres. The Optus network is connected with the Telstra network through points of interconnect at individual regional and local exchanges. Optus has also installed its own international gateway switching facilities.

Optus' services are now available to nearly 80 per cent of the population and its share of the long distance markets it contests is now around 14 per cent and over 30 per cent of the mobiles market. Optus' revenues for 1994-95 exceeded $1.4 billion and operating profits are expected for the first time in 1995-96. Around 45 per cent of Optus' revenues derive from long distance services with approximately half of this representing interconnections charges to be paid to Telstra. Telstra's overall revenues for the 1994-95 financial year were $14.1 billion. Competition from telecommunications resellers and service providers is increasing rapidly with revenues in this sector now exceeding $1 billion per annum.

Since the entry of Optus, prices have fallen significantly in real terms in the long distance and international call markets. In 1993-94 Telstra's prices fell by 5.5 per cent and 8.7 per cent for long distance and international calls respectively, following reductions of 4 per cent and 11.6 per cent in 1992-93.

Optus does not currently provide a general local call service, although its licence would allow it to do so. Its activity in the local calls market has been limited to the fibre optic "rings" it has installed around the central business districts in several Australian capital cities. This has allowed it to directly connect larger customers through "spoke" connections to individual buildings linked with the Optus long distance network. Optus offers local calls to these customers through the bypass of elements of the Telstra CAN and other network elements.

Optus decided on commercial grounds that it would initially focus its operations on the high yielding long distance, international and mobiles markets rather than installing its own CAN or extensive inter-exchange networks. This decision recognised the substantial investment involved in installing a telephony customer access network of its own. Given the current regulatory arrangements, including the Ministerial Charging Determination, Optus also decided not to initially provide a local calls service through reselling Telstra capacity. Optus therefore relies on the Telstra local loop for originating and terminating access for its calls and the incumbent carrier Telstra retains close to full market share of the CAN and of inter-exchange carriage. Optus previously foreshadowed later entry to the local calls market through linking into the networks through handsets and base-stations using radiofrequency broadcasting spectrum. Optus' business plans have now been revised with the recent development of technology which allows the carriage of telephony on co-axial cable along with pay television and other broadband services. This is discussed further below.

While there has been limited direct competition in the local calls market, Telstra has responded to the introduction of a competing carrier with sustained reductions in underlying costs and real reductions in prices. Telstra recently announced plans to further reduce its product unit costs by 30 per cent to achieve worlds best practice benchmarks. This response by the incumbent carrier also recognises the Government's decision to set a sunset date on the duopoly leading to open competition in 1997.

3. Broadband cable and mobiles competition

Broadband cable networks

In late 1994 both carriers announced plans to install new broadband cable networks to provide pay television and other broadband services. Optus proposes to enter the local calls market through provision of telephony services on its broadband cable. Telstra has indicated that it is also evaluating a migration of telephony services to its new broadband network.

Optus' broadband joint venture company Optus Vision proposes to roll cable past a total of three million homes including 2.3 million by the end of 1996. Telstra plans to roll-out cable past 85 per cent of homes in targeted areas by 1999. This equates to approximately 65 per cent of all Australian homes. Optus has announced that it will commence offering telephony services early in 1996.

The economic rationale of the venture for Optus is accessing local telephony revenues and using direct customer connection to extend its penetration of the markets it currently participates in. These revenue streams greatly exceed the short term value of the broadband and pay television markets. Telstra's objectives could be seen as protection of its telephony revenues while sharing Optus' desire to capture revenues from the emerging broadband services and pay television markets. However, the ultimate viability of the new networks depends substantially on the level of demand for new broadband and pay television services. Their viability has also been influenced by technological developments, particularly digitisation, which increase the carrying capacity of the cable networks and allows them to also carry telephony services. While at this stage these factors remain uncertain, the substantial levels of investment proposed by the carriers (approximately A$7 billion) indicates their confidence in the viability of the ventures. There have been some concerns expressed about network overbuild particularly where effective access arrangements would indicate that this was unnecessary.

Although the degree of overbuild between the two new networks is uncertain at this stage, the proposed roll-out schedule promises the early introduction of vigorous competition in local telephony services to up to half of Australia's housing units. The wiring of homes directly to two competitors, particularly in conjunction with the availability of other broadband services, offers the potential for innovative pricing and packaging and hence a general stimulus to competition in the full range of telephony and other services. Optus has indicated that it may offer local calls at prices well below the 25 cent price offered by Telstra. Although pricing has not yet been released and direct comparisons are made difficult by the combined nature of the services to be offered, the prices charged for connection, line rental and servicing fees may also be below those of Telstra's current telephony network.

In response to the announced plans of the carriers, the Minister for Communications and the Arts announced on 24 November 1994, that there was to be no prohibition of participation in the telephony, pay television and broadband markets for the carriers. In a direction to Austel on 31 July 1995, the Minister has required that carrier associate joint ventures be subject to appropriate access and anti-price discrimination provisions similar to those applying to carriers under the *TA*. However, in order to stimulate the roll-out of the networks, given the benefits that consumers would ultimately derive from this, there is a limited exemption for pay television services from access arrangements until 1997 and, subject to a review of the level of competition, this could be extended until 1999.

Mobile telephony

As with other countries, Australia has experienced very rapid growth in mobile telephone services. This growth shows signs of continuing for the foreseeable future. More than 2.3 million mobile telephone handsets are now in use, with around one million new handsets having been added in the last year compared with a total of around eight million fixed telephone lines. This represents a mobile telephone penetration rate of some 13 per cent of the population and which is exceeded only by Sweden.

Mobile telephone calls therefore account for a significant and rapidly growing share of total calls including local calls. While the mobile services provide new products and convenience features compared with fixed line telephony, they also undoubtedly provide a degree of substitution for and hence competition with the fixed line service.

Mobile services are provided in a competitive market by the licensed carriers and a range of service providers. There are now around two million mobiles customers connected to the Telstra analogue network with Optus, which operates as a reseller of airtime on the network, holding around one third of these. The level of competition in the market is set to increase as the Telstra analogue network is progressively closed down by the year 2000 and customers transfer to the separate digital networks installed by each of the three mobile carriers. In this segment, it has been estimated that each of the three carriers holds around one third of the current total of 300 000 digital mobile phone customers.

Competition for customers transferring to the digital networks is already vigorous with heavy discounting of handsets and customer tariffs. The regulatory authorities have also been required to address the practices of market participants including in relation to the "churning" of customers from one carrier or service provider to another. In addition, the increasing total number of mobile users and continued rapid technological improvement promises reduced unit costs which, in the face of competitive pressure, is likely to lead to significantly lower market prices.

4. Open competition after 1997

Following a major review of the current telecommunications regulatory arrangements, the Minister for Communications announced on 1 August 1995 new arrangements to apply from 1 July 1997 when open competition is to begin. The main competition policy features of the new arrangements are set out below.

-- The ACCC will be responsible for access and specific competition policy regulation of telecommunications from 1 July 1997. The consumer protection and technical regulatory functions of Austel are to be merged with the Spectrum Management Agency from 1 July 1997. The Australian Broadcasting Authority will remain responsible for broadcasting content regulation.

-- There will be no numerical restriction on the number of carrier licences after 1 July 1997, with licences issued for an administrative fee recovering only the administrative costs of regulation under the *TA*. Licence conditions will include technical requirements but network roll-out requirements for new carriers will not be specified.

-- Carriers will be required by licence conditions to interconnect with other carriers and service providers. The legislative framework will require mandatory access undertakings by carriers to achieve any-to-any connectivity and provide open access for content providers. These undertakings will specify the arbitration process to follow in case of an unresolved dispute over terms and conditions. The legislative framework will be based on the economy-wide access arrangements in Part IIIA of the *Trade Practices Act 1974* which commenced operation on 6 November 1995. The diagram at Attachment A provides an outline of the proposed access arrangements. The diagram at Attachment B provides an overview of the new regulatory arrangements, showing the key relationships between legislation, Ministers, regulatory bodies, regulatory instruments and industry participants.

-- The basis for carrier access undertakings will be industry determined and identified in a code of practice produced by an industry access forum made up of carriers. It is anticipated that service providers, the regulators and other interested parties will be able to participate in the deliberations of the forum, but not necessarily in its decision making processes.

-- The legislative access framework will be augmented by a process which provides for approval of the access code by the ACCC as a basis for access undertakings by carriers. In approving the code and accepting access undertakings, the ACCC must take account of the interests of users, including service providers.

-- The ACCC, in consultation with Austel on technical and operational matters, will have the power to implement an access standard in place of an industry based code if the self-regulatory process fails.

-- A carrier or service provider must make use of customer equipment or subscriber management systems (e.g. set top boxes, customer billing or encryption systems) accessible to other carriers and service providers at a fair price.

-- All carriers and service providers will be fully subject to the market conduct provisions of the *Trade Practices Act 1974*.

-- In addition the ACCC will have the power to direct a carrier to cease or not engage in conduct that the ACCC has concluded is in breach of a new conduct provision based on abuse of market power. The ACCC will have the power to sanction conduct (ie. remove the threat of direction) on the grounds that it does not fall within the new conduct test or that the public benefit associated with the conduct outweighs any anti-competitive detriment that it may cause. The ACCC will also have the power to disallow a tariff presented for filing where it reasonably concludes that the tariff does, or would, effect a substantial lessening or inhibiting of competition.

    - These provisions essentially provide a procedural shortcut against what would otherwise be a Court based process in cases of abuse of market power. As well, the ACCC would be able to exercise its power of direction on the basis of its own reasoned conclusions, without necessarily needing to meet the evidentiary requirements of a Court. Appeal processes will be available in respect of such directions or sanctions.

    - The ACCC will also have the power to require carriers with a substantial degree of market power in a market to file tariffs truthfully expressing the terms and conditions including price of a service offered. This would make it an offence for carriers to charge otherwise than in accordance with their filed tariffs but carriers would be able to vary tariffs. A tariff filing direction would be non-appealable, since it is only an information-disclosure measure.

    - The legislative provisions will facilitate a smooth transition to an eventual full reliance on general competition law by aligning the special conduct provisions with concepts embodied in the *Trade Practices Act 1974*.

-- A price cap based on consumer price index minus 7.5 per cent will apply to a revenue weighted basket of Telstra's main services until 31 December 1998. Individual sub-caps of CPI - 1 per cent will be imposed on Telstra's individual stand alone charges for residential services. The standard local call charge of 25 cents and public payphone charges will not be permitted to increase in nominal terms until 31 December 1998.

-- Foreign control concerns with new carriers and service providers will be dealt with under the *Foreign Acquisitions and Takeovers Act 1975*. This provides for the examination of substantial acquisitions and takeovers on a case by case basis against broad national interest considerations. The establishment of new businesses are also examinable on the same basis but under non-legislative provisions of the Government's foreign investment policy.

5. Conclusion

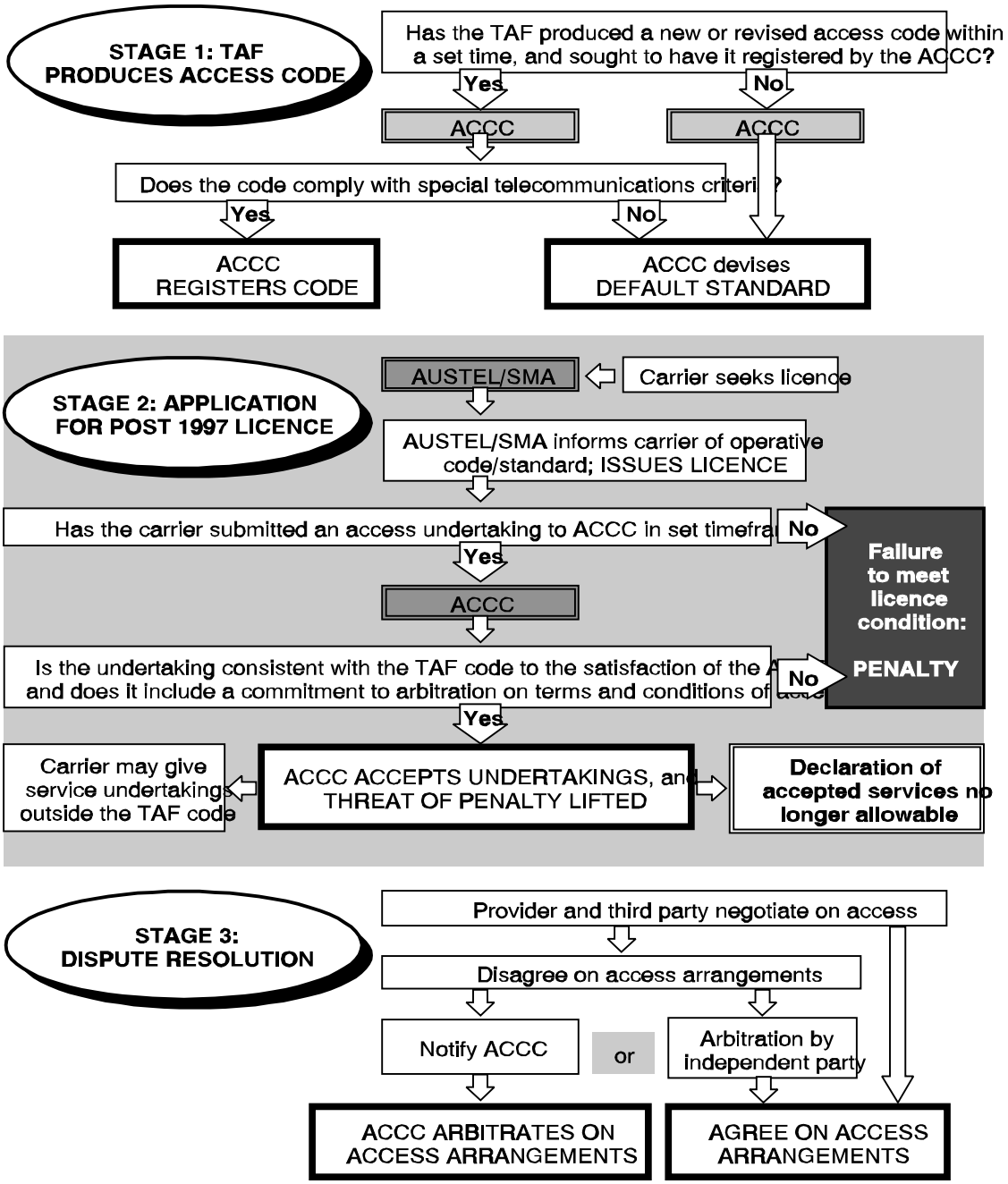
The level of competition in local calls and inter-exchange carriage has been limited up to the present under the duopoly arrangements. There have nevertheless been real reductions in local call charges under the price capping arrangements and in response to the threat of direct competition. Recent developments in broadband network roll-out, the mobiles market and rapid development in technology suggest that significant direct competition will soon be present.

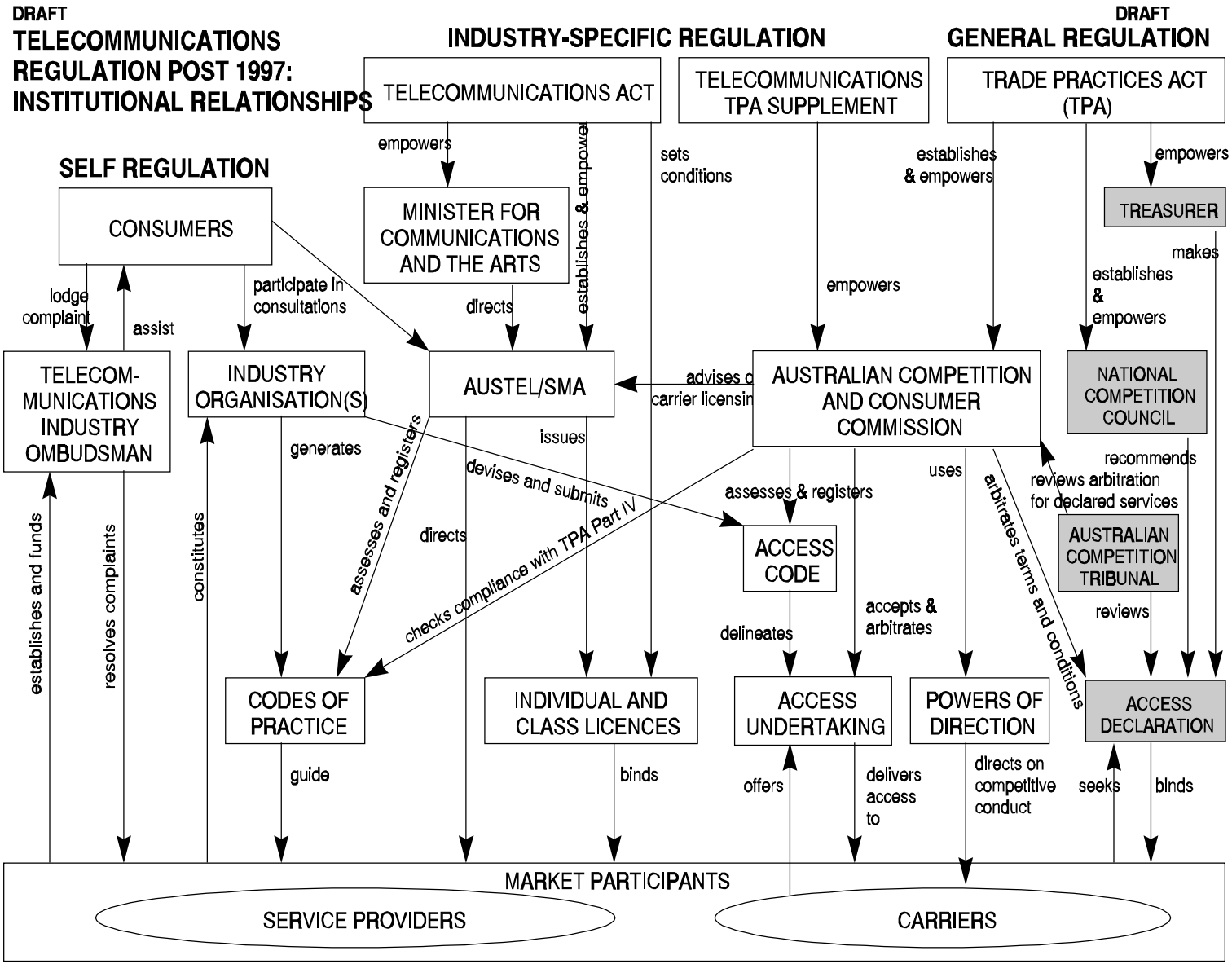
The introduction of open competition in 1997 is anticipated to bring new market entrants and further enhance competitive pressures in the market. The arrangements to apply from July 1997 will provide a technology neutral regulatory framework for the telecommunications sector. Substantial reliance will be placed on industry self-regulation underpinned by general competition law augmented with special provisions which recognise the particular requirements of the industry.

The reaction of the industry and public to the proposed new arrangements has been favourable with wide acceptance that they provide a balanced approach to the introduction of open competition. The Government is aiming to make an exposure draft of the legislation available for public comment late in 1995 prior to introduction of legislation into Parliament.

TELECOMMUNICATIONS ACCESS REGIME POST 1997 (DRAFT)

Post 1997 licence conditions will require every carrier to be a member of the Telecommunications Access Forum (TAF), and to provide an access undertaking to the Australian Competition and Consumer Commission (ACCC) that conforms with an access code produced by the TAF and approved by the ACCC.




DRAFT
TELECOMMUNICATIONS REGULATION POST 1997: INSTITUTIONAL RELATIONSHIPS
INDUSTRY-SPECIFIC REGULATION
DRAFT
GENERAL REGULATION
TELECOMMUNICATIONS ACT
TELECOMMUNICATIONS TPA SUPPLEMENT
TRADE PRACTICES ACT (TPA)
empowers
establishes & empowers
sets conditions
establishes & empowers
empowers
SELF REGULATION
CONSUMERS
MINISTER FOR COMMUNICATIONS AND THE ARTS
TREASURER
makes
establishes & empowers
lodge complaint
assist
participate in consultations
directs
empowers
TELECOM-MUNICATIONS INDUSTRY OMBUDSMAN
INDUSTRY ORGANISATION(S)
AUSTEL/SMA
advises on carrier licensing
AUSTRALIAN COMPETITION AND CONSUMER COMMISSION
NATIONAL COMPETITION COUNCIL
generates
issues
recommends
reviews arbitration for declared services
assesses and registers
devises and submits
assesses & registers
uses
arbitrates terms and conditions
AUSTRALIAN COMPETITION TRIBUNAL
establishes and funds
resolves complaints
constitutes
directs
checks compliance with TPA Part IV
ACCESS CODE
reviews
accepts & arbitrates
delineates
CODES OF PRACTICE
INDIVIDUAL AND CLASS LICENCES
ACCESS UNDERTAKING
POWERS OF DIRECTION
ACCESS DECLARATION
guide
binds
offers
delivers access to
directs on competitive conduct
seeks
binds
MARKET PARTICIPANTS
SERVICE PROVIDERS
CARRIERS

CANADA

1. Introduction

Before addressing the questions which have been identified as the focus for the mini-round table discussion on competition in telecommunications, some brief introductory comments on the situation in Canada are offered. At the outset, it should be noted that it is Canadian Government policy, as enunciated in the *Telecommunications Act* 1993 "to foster increased reliance on market forces for the provision of telecommunications services." Indeed, the Government is acutely aware of the economic and strategic importance of modern and efficient telecommunications to Canada's global competitiveness and prosperity in an increasingly information based economy.

The Competition Bureau has been a principal advocate of opening telecommunications markets to competition and reducing or eliminating regulation wherever possible. The Bureau has represented the benefits of competition within Government policy circles and in numerous interventions before the industry regulator, the Canadian Radio-television and Telecommunications Commission (CRTC) in respect to terminal attachment, private line, resale, facilities based long distance and local telecommunications.

Substantial progress has been made toward privatization, deregulation and expanding the role of competition in the Canadian telecommunications industry. Only four short years ago, the CRTC held its long distance proceeding in which the threshold issue was whether facilities based competition in long distance telephone service was in the public interest. In mid-1992 the Commission released its decision to allow for interconnection on an open entry basis. Since that time, the competitive landscape of the Canadian telecommunications industry has changed dramatically.

New entrants into long distance service have secured significant market shares from the incumbent telephone companies since equal access was introduced in July, 1994. This has been accompanied by substantial reductions in rates for long distance service. The CRTC is moving forward with a detailed regulatory agenda to open local telephone markets to competition. The Commission is also in the midst of undertaking substantial regulatory reform, replacing rate base rate of return regulation with price cap regulation and exercising its powers under the *Telecommunications Act* to forbear from regulation in sectors in which competition has become sufficient to protect the interests of subscribers. In addition to this, the Government is moving forward with a policy for developing Canada's information highway in which competition and market forces are to be the driving factor. The Competition Bureau is continuing to play an active role in terms of policy development, regulatory reform and enforcement initiatives in telecommunications.

2. Local Competition

Cable Television (CATV)

a) Are Telecom services provided by CATV close substitutes for those provided by a telecom local loop?

Canadian experience with CATV provision of telecommunications is still in its very early stages. However, there is evidence that cable companies do have the capacity to offer local telecommunications services in competition with the telcos. Cable companies are acting as

competitive access providers for alternative long distance carriers and private line customers in some major Canadian cities. However, their share of the access market is estimated at only 1 per cent.

One large cable operator has been offering local network services in major cities since the late 1980's. The company has successfully utilized its local fibre network to offer local private line services to large business customers such as banks and major retailers. The company also offers a range of data communication services, specializing in the provision of local area networks and metropolitan networks. These services create private telecommunications networks which bypass the public switched telephone network.

b) Are CATV suppliers potential entrants into local telecoms supply? Are local telecoms suppliers potential entrants into CATV? In regions without CATV service, would restrictions on telecom providers' entry into CATV promote or hinder competition?

Cable television and telephone companies are potential entrants into each other's markets. The timing and extent to which such entry occurs is subject to a host of technical, economic and regulatory considerations. There are approximately 350 CATV companies in Canada operating over 2 000 cable systems. However, the largest five firms account for 77 per cent of cable subscribers. The industry is in the midst of a period of consolidation and rationalization and it is anticipated that CATV companies will further develop interconnection arrangements to allow them to offer an expanded range of services across broader geographic markets. Cable franchises have been awarded on a monopoly basis at the local level. Licenses for Direct to Home satellite services have recently been awarded and the industry regulator has signalled that it is prepared to license competiting distribution technologies.

CATV companies have already made a substantial part of the investment necessary to give them direct and widespread access to subscribers premises (cable systems pass 95 per cent of Canadian homes of which 85 per cent subscribe to the service). With additional investment, cable connections can be modified to provide for telephone messages to be carried over cable wires. In regard to the telephone companies, the limited ability of their existing copper networks for video transmission will either have to be overcome, or they will have to increase their investment in broadband networks in order to enter cable services. While many view cable as having a technical advantage over the telephone companies, the costs of network upgrades for either industry will be substantial. The costs of these upgrades must be weighed against anticipated demand by consumers for new services which cannot already be provided by the existing networks and the prices which consumers may be willing to pay for those services.

In the Canadian context, only rural and remote areas are currently not served by cable television. These areas are prime markets for Direct to Home broadcast satellite services or other wireless cable offerings. Given the maturity of the Canadian cable television industry, including the high penetration levels which it has achieved, restrictions on telco entry into broadcast distribution would likely hinder competition. Indeed, Canada is embarking on regulatory reforms necessary to enable telephone companies to offer cable television services.

c) What policies should be followed with respect to mergers between local telecoms suppliers and CATV suppliers?

Potential exists for mergers and acquisitions of cable and telephone companies to prevent or lessen competition in the provision of broadband services. The concern, which is heightened when one of the parties is a regulated monopoly, is whether the merger, acquisition or other

arrangement has the effect of substantially preventing or lessening competition. In determining whether a merger or acquisition should be prevented, the essential question is whether the merged entity will have "market power"; that is, will the firm have the ability to raise or maintain prices significantly above competitive levels (i.e., above incremental cost) for a significant period of time?

The merger review procedures under the *Competition Act* were crafted to facilitate, rather than inhibit, pro-competitive or neutral structural adjustment in the marketplace. This involves a dynamic assessment of the likely future effects of mergers and acquisitions on competition. In rapidly changing industries such as communications, it is necessary to look forward, and consider if the transaction would likely "prevent" future competition that might otherwise come about as the result of technological innovation. The effects of innovation and technological change are important factors affecting competition in the communications sector. The significance of barriers to entry and the nature and extent of innovation in a relevant market are key factors in merger analysis.

Blanket line-of-business and cross-ownership restrictions may impose costs on the economy in terms of the lost opportunities for economies of scale and scope and the loss of additional sources of capital and expertise. The case-by-case approach available under competition law provides the flexibility necessary to consider the trade off between anti-competitive impacts and efficiency gains.

d) How should alliances and mergers among local telecoms providers and or CATV suppliers in geographically separate markets be analyzed? Is there greater potential for tacit collusion to not enter a different geographic market?

Mergers involving firms in distinct serving areas may be less likely to raise competition policy issues than those involving cable and telephone companies within the same serving region. The acquisition of cable companies by telephone companies may facilitate the transfer of technical expertise and financial resources. However, such mergers could also prevent competition if the firms involved are potential entrants into each other's markets.

Monopoly cable licensing policies and interconnection arrangements among Canadian telephone companies currently mitigate against expansion by firms in either industry outside of their serving areas. It is also not clear the extent to which network efficiencies or other economies would provide incentives for cable or telephone companies to expand geographically. In addition, the regulatory framework of the industry is undergoing substantive reform which may affect the future business strategy of industry participants.

Competition from other technologies and enterprises

a) Are services provided by non-wire technologies (fixed or mobile) substitutes for services provided by the fixed local loop or, instead, do the wire technologies provide services that are a separate product for customers who have particular telecoms requirements?

To date, cellular telephone and other wireless technologies have experienced rapid growth. However, they have generally served as a complement to traditional wireline services. As cellular rates have fallen, there has been some limited substitution of wireline service in favour of cellular. This has occurred to a very limited extent in businesses such as the construction industry where mobility in important feature for the subscriber. The prospect for such substitution is likely to increase with the licensing of Personal Communications Services. This will depend in part on the price at which PCS is offered and the nature and extent of rate rebalancing over the next two or three years.

b) Are there other potential competitors, e.g. electric power providers, water providers?

Electric power utilities have control and access to support structures and the necessary rights of way. This access could be utilized for the provision of telecommunications services. To a limited extent, mostly in urban areas, the electricity companies have installed fiber optic cable capacity. This capacity has generally been used by the utilities to connect their own operations and they have not offered services in competition with the telephone companies. However, Hydro Quebec, which manages the largest private telecommunications network in the province, has recently announced plans to invest $1.5 billion in telecommunications over the next five years.

Canadian National Railway has a private fiber network between a number of major Canadian cities. In May 1995 the railway entered into a limited partnership with a new entrant carrier who will manage and expand CN's fibre network as an interexchange carrier. The carrier will provide its network management expertise and the railway its rights of way under their agreement.

c) What steps by competition authorities are necessary or advisable to permit or promote competition in this market? E.g. what unbundling or oversight is necessary or advisable?

In order to facilitate the development of competition in local telecommunications services the following issues must be addressed and resolved. In Canada, this function resides with the industry regulator. However, the Director has been a major intervenor before the industry regulator on telecommunications issues. The Director's interventions have primarily focused on the public benefit of opening markets to competition, the appropriate regulatory safeguards required to facilitate competition and, to a lesser extent, specific technical issues. This is discussed in Q5.

-- unbundling the components of the local network (transmission, switching, signalling, local loops) and establishing the rates, terms and conditions under which competitors have access to these components.

-- the rates, terms and conditions under which competitors terminate their networks at the central office (co-location).

-- development of comprehensive economically efficient interconnection tariffs in respect to access to support structures, directory assistance, billing, number assignment, data base access and reciprocal access.

-- number portability.

-- rate rebalancing.

d) What would be the competitive effects of a widening definition of "universal service obligations" e.g. if these services now mean "basis voice telephony" and later mean "information infrastructure services"?

Widening the definition of universal service obligations would be counter productive to increasing competition. The attainment of universal service by means of cross subsidization of basic local service may have been an effective, albeit inefficient, means of achieving this social policy objective during the period of regulated monopoly. However, Canadian experience has shown that the maintenance of a contribution scheme in a competitive environment is highly problematic from both an economic and regulatory standpoint. Rate

rebalancing is a necessary measure to alleviate these problems. Further universal service objectives would best be accompanied by targeted measures where market forces fail to adequately meet social policy goals.

e) What is a workable institutional relationship between the regulator(s) of local telecoms and the competition authority?

The Director of Investigation and Research under the *Competition Act* has statutory authority to intervene before the CRTC and make representations in respect to competition. The Director has made extensive use of these powers over a period of several years. The Director's submissions to the Commission are made on an arms length transparent basis.

Jurisprudence under the *Competition Act* known as the "regulated conduct defence" has limited the application of the *Competition Act* to the telecommunications industry, at least in the area of criminal conduct. The courts have not yet had an opportunity to determine if the defence would apply in the same manner to civil matters subject to adjudication by the Competition Tribunal. The gist of this defence is that specific activity carried out pursuant to a valid scheme of regulation is deemed to be in the public interest. The *Telecommunications Act*, however, provides the CRTC with the authority to forbear from regulation where it considers that competition is sufficient to protect the interests of users. Under the scheme of regulatory forbearance under the *Telecommunications Act*, it is generally accepted that where the Commission has forborne from regulation the *Competition Act* has the regulated conduct defence would not be available for the activity in question.

f) What has been the experience where there is competition in local telecoms markets?

Competition in local telecommunications in Canada is at a very early stage. The Government and the industry regulator are clearly in favour local competition and extensive regulatory proceedings to remove barriers to entry and facilitate competition are currently underway. Entry into local service may initially be directed at large commercial users. Penetration of the residential market will be highly dependent on the extent of rate rebalancing which the regulator is prepared to undertake and the ability of alternative service providers to offer value-added services, perhaps in combination with broadband services.

3. National Long Distance (Inter-exchange) Competition

a) Access to the local switch and local loop:

-- What are the objectives of the access regime?
-- On what terms and conditions should access be granted?
-- Should access terms and conditions be the same for all? If not, which enterprises should be favoured, why, how much, for how long, how are the discriminatory terms ended?
-- Are competition authorities sufficiently well placed to ensure that access conditions do not impede competition?

The overriding objective of the access regime should to be to create the opportunity for entry by efficient competitors. Access should be granted on an equal basis, that is, in a manner which does not disadvantage competitors vis a vis the telephone companies. In Canada, equal ease of access is available to all competitors, including facilities based carriers as well as resellers, who can meet established terms and conditions for interconnection established by the CRTC. There may be particular competitors such as resellers who are targeting large business customers who do not require equal ease of access. Where some form of inferior

access is demanded, this can be reflected in the terms of interconnection or level of contribution required to be paid.

In Canada the responsibility for regulation of telecommunications carriers and the attendant technical expertise resides with the CRTC. The highly technical nature of issues relating to access suggests that a specialized body is in a better position than competition authorities or the courts to deal with such matters, particularly where ongoing regulatory oversight is required. The competition authority may, however, play an important role in developing the principles for competitive entry through an interface with the industry and the regulator.

b) Under what circumstances and on what terms should a telecoms network owner be required to lease lines to a competitor? Should leasees be permitted to act as resellers of long distance services, thus spreading the benefits of competition from large to smaller customers? Does the same analysis apply when the reseller is also a facilities operator elsewhere?

Resale competition has been of significant benefit to Canadian long distance telecommunications users. Not only has resale competition benefited consumers by lowering rates, a number of resellers have proven to be highly innovative in providing enhanced customer services. In addition, Canadian experience has shown that firms which enter the industry as resellers are positioned to evolve into effective facilities based carriers. Indeed there are a number of hybrid carriers who offer services through a combination of leased and owned facilities in competition with the telephone companies.

c) Under what circumstances and on what terms should entry by the owner of a non-telecoms network (such as an electric power network) be permitted? Should these depend on whether the non-telecoms network owner is a regulated or unregulated firm?

A potential competition problem could arise if an entrant is a monopolist and particularly if it subject to rate base rate of return regulation. The problem is that of potential anticompetitive cross-subsidization. This does not mean, however, that entry by another utility company into telecommunications should necessarily be prohibited. What is required, is the implementation of appropriate competitive safeguards such as price cap regulation for the monopoly service which will diminish the opportunities and incentives to engage in cross subsidization. In Canada, the industry regulator has adopted a split rate base model prior to imposing price cap regulation for monopoly services by January 1, 1998. The industry regulator has rejected structural safeguards in favour of price caps. The Competition Bureau has supported this approach on the grounds that incremental protection against cross-subsidy afforded by structural separation over price caps is likely to be outweighed by lost economies of scope.

d) Is there a competition concern if access to some long distance carriers requires more digits (e.g. an access code added to the beginning of the destination telephone number) than access to other long distance carriers requires?

Equal ease of access is a critical feature for the development of long distance competition. New entrants must overcome a number of incumbent advantages, including "customer inertia." In the case of large commercial subscribers, the problem of "unequal access" may be partially addressed by the installation of diallers. Unequal access may also be addressed by offering a contribution discount to the competitive service provider, thereby enabling it to reduce its rates. However, neither of these approaches are likely to be sufficient. From a practical standpoint, there is experience that while consumers, particularly residential users, may subscribe to an alternative long distance service provider, they may exhibit a strong tendency to place their calls with the incumbent telephone company to avoid the

confusion and extra complication of dialling extra digits. Given the choice of the form of access, facilities based entrants and most resellers in Canada have opted for trunk side (equal) access.

e) What is a workable institutional relationship between the regulator of national long distance telecoms and the competition authority?

Please see response to Question *e)* above in the section on local competition.

f) What has been the experience where there is competition in long distance telecoms markets?

New entrants into long distance service have secured significant market shares from the incumbent telephone companies in slightly over a year since equal access was introduced. This has been accompanied by substantial reductions in rates for long distance service. Long distance rates in Canada have fallen close to and in some cases below levels in the United States. New entrants have captured in the order of 20-25 per cent of the long distance market in slightly over two years. However, the new entrants have all faced significant financial hardship due to the decline in rates and the costs associated with securing a subscriber base as they move toward a minimum efficient scale. There has been rationalization of the resale sector, some business failures and reorganizations of the facilities based carriers. The two largest alternative carriers, Sprint Canada and Unitel have entered into alliances with Sprint U.S. and AT&T respectively. Foreign ownership restrictions under the Telecommunications Act limit foreign participation in the Canadian market.

CZECH REPUBLIC

1. Market and regulatory context

The Czech Republic has no experience with competition in long distance or local telecommunications.

There is currently excess demand in the market for telecommunications. The elimination of this excess demand will require large investments. At the same time, there is a threat of "creme skimming", whereby entrants serve only the most profitable markets.

SPT Telecom has been granted, by governmental decree, the exclusive right to provide long distance services. Other carriers may enter the markets for local services in selected areas that total only 10 per cent of the whole country. Thus, there is a certain degree of exclusivity for the local carrier. (This is provided, among other reasons, because of the need for large investments.) The exclusivity is granted until 2000 by a governmental decree and the competition agency cannot withdraw it. Even after the period of exclusivity expires, supervision will be necessary to ensure the quality of mandatory services.

The regulator, the Czech Telecommunications Bureau, defines the mandatory essential services required of telecommunications carriers. These requirements address, for the most part, technology and quality.

The Ministry of Economic Competition is required by law to prohibit monopolistic behaviour. Conduct satisfying the requirements set forth by the regulator may constitute monopolistic behaviour. Therefore, the competition agency should co-author the regulations.

The Ministry of Economic Competition would review mergers in the telecommunications industry. In reviewing mergers, it considers not only efficiency gains accruing to the merging companies but also effects on competition. In its view, alliances and mergers between operators on different geographical markets should not necessarily be prohibited as long as those markets are open to third parties. Otherwise, there is a threat of tacit agreements.

2. Local competition

Cable Television (CATV)

It is technically feasible for cable TV companies to render services that substitute for those of local telephone carriers. The relevant question is whether the system of regulation would allow them to do so.

Generally, it is desirable for cable TV providers to be allowed to enter local telecommunications networks. However, there are still certain administrative limitations in the Czech Republic. Moreover, the market is not saturated and there is a danger that the cable TV operators will supply only the most profitable markets.

Telecommunications operators face no insurmountable barriers to entry into the cable TV market. It is uncertain, however, whether or not a market take-over by a cable TV company will discourage

telecommunications companies from entry; this risk is again present only because the cable TV market is not saturated.

Certain savings can be achieved even when telecommunications and CATV firms operate in the same region. For example, there are joint cable routes (requiring underground and interior construction) where each operator places its own cables. The cable itself is cheaper than preparing its route. The use of a single cable would, nevertheless, create extra costs for the equipment to separate the television and telephone signals to go to their corresponding end devices.

Competition against other technologies and companies

Fixed wireless telephone services are not a substitute for wire technologies because it has dramatically higher costs in comparison to a wire network, as well as a constraint on future large scale operations due to a possible exhaustion of wavelengths. Fixed wireless services are more of a supplement to wire services where wire services would be extremely expensive for technical reasons.

Currently, mobile wireless telephone services are not a substitute for wire services due to their considerably higher prices. Mobile phone services are therefore targeted at customers with special mobility demands. Over time, the difference in prices will diminish and substitutability will increase.

There is no significant reason for electricity and water utilities to be more significant competitors in telecommunications than others. Administrative barriers, such as the exclusive rights mentioned above, are much more important.

Electricity distribution companies own their own communications networks, but the topology of those networks is for single use and would require heavy investments for commercial use. After investments have been made, networks could be operated by companies other than utilities unless there are administrative barriers.

The extension of mandatory universal services towards information services makes sense after the quality of basic telecommunications services has reached acceptable levels and there is no excess demand for such basic services. (That status has not yet been attained in the Czech Republic.) The effects on competition are expected to be more or less positive, since they will reduce the advantage of existing carriers relative to new entrants, who will be penetrating a telecommunications market that does not have excess demand. The extension of mandatory services may also discourage new entry, an effect that may be at least partially eliminated by announcing the extension of mandatory services well in advance.

3. National long distance competition

The problem of access to local networks will become pressing in the Czech Republic from 2000. The goal will be to provide everyone with non-discriminatory treatment. The role that will be played by the competition agency remains uncertain. At any rate, the competition agency will not set access conditions without the regulatory body.

The obligation to lease the telephone network to carriers would certainly benefit competition. The most transparent starting point would be a situation where the owner of the network does not operate it, but leases it to each carrier under identical terms. It is uncertain whether it is possible to achieve this situation. If it were possible, the regulatory body would have to set mandatory conditions of the leases. The initial formulation of these conditions would require detailed economic analysis and, nonetheless, the formulation would be an experiment.

The lessees should be allowed to wholesale long distance to retail carriers even if the lessor acts as a carrier in other places. Nonetheless, in order to give the same opportunity to other interested parties on regular basis, an administrative measure should ascertain that the lease agreements will not be concluded for time periods that are too long and do not contain exclusive clauses.

Generally, there is no reason to exclude certain companies from the opportunity to go into the telecommunications business. However, entry into competitive markets by companies that also operate in markets where entry is limited or profitability or pricing is regulated may be limited in order to reduce the threat of cost-shifting from the competitive to the regulated business.

We assume that the number of digits needed to establish a connection is no longer a major problem. Specific examples may be given of a customer preferring a certain service particularly because of an advantageous phone number. Those customers, however, form only a minor market segment. A larger number of digits to dial might even put the carrier into a technological disadvantage; again, however, we view this as having only a minor impact on the company's ability to compete.

If future experience shows that it is not just a marginal problem -- for example, if the affected carriers and their customers complain -- an administrative measure may be taken to have the regulatory body decide on the phone number rationing plan.

FINLAND

The structure of Finnish telecommunications market differs from that prevailing elsewhere in Europe. A special characteristic of the Finnish system are the local telephone companies, which are not state-owned; these do not really exist in other European countries. Prior to deregulation, the National Board of Post and Telecommunications held a monopoly for long-distance and international telecommunications traffic, and additionally, a regional monopoly for local telecommunications traffic, primarily in the sparsely populated areas of eastern and northern Finland.

Finland is currently divided into 12 telecommunications traffic areas. Inter-area calls are considered long-distance calls, and intra-area calls local calls. Without a few exceptions, the area limits follow the provincial borders. In practice, this means that, geographically, the local call areas are wide. For example, the entire province of Lapland constitutes a local call area, although its size is c. 99 000 km². For comparison: the combined areas of Belgium, Holland and Luxembourg are c. 75 000 km².

The share of local telephone companies (46 by number) of both subscriber lines and local traffic is c. 70 per cent, measured by both turnover and the number of subscriber lines. They operate in the major Finnish cities, but also in the sparsely populated areas of western and southern Finland. The rest of the local lines are situated in the local areas of the state-owned Telecom Finland. The density of connections in the local operational areas is far higher than in the local areas of Telecom Finland. Many of the local telephone companies are small, both in geographical size and number of lines. This may be considered a disadvantage with respect to the development of services and technical know-how. Due to the local nature of regional telecommunications companies, a possibility for so-called one-stop-shopping does not exist for multi-regional customer companies.

1. Long-distance competition

There are three network operators in Finland offering domestic long-distance calls (Telecom Finland, Kaukoverkko Ysi/Finnet Group ja Telivo). The former monopolistic operator now competes with two rivals: one owned by the local telephone companies, and a subsidiary of a state energy company IVO. Both have offered long-distance services from the beginning of 1994, when their operating licenses became effective. The market share of the operator who is part of the energy corporation was limited to five per cent by terms of the operator license. The background for this was a controlled reform into a state of competitive environment supported by the national regulators. All operators who have applied for a long distance license have been awarded one. In addition to Kaukoverkko Ysi Oy and Telivo Oy, VR Rata Oy (State railway network operator) has a license for long distance telecommunications, but it is not operational. In August 1995, the Council of State altered the Telivo's license in such a manner that market share restrictions were removed, both regarding domestic long-distance telecommunications traffic and international traffic. The Office of Free Competition, in its statement on the license application, found it risky that telecommunications possibly be subsidized by the monopoly income from the electricity transmission business, but supported the application in other respects. It should be remembered that other long-distance operators, too, have dominant market positions of their own, i.e., cross subsidizing is not impossible for them either.

All the above-mentioned long-distance operators have their own trunk network. In Finland, an alternative infrastructure for the network of the monopoly operator has been used, i.e., the trunk network of local telephone companies and a telecommunications network built in connection with electronic cables;

this has been the case for years. These alternative trunk networks were used, prior to the start of long-distance call competition, for data transmission and intra-company voice traffic; also for the transfer of the competing GSM traffic.

Finnish long-distance telecommunications competition is arranged in such a way that the subscribers can 1) choose the long-distance operator per call using carrier access codes; 2) sign a contract with one of the long-distance operators which means that calls are automatically directed to the network agreed or 3) dial without choosing an operator at all. Traffic dialled without choosing an operator, so-called residual traffic, is, according to a decision issued by the Ministry of Transport and Communications, directed to the networks of different operators in relation to operators' market shares of non-residual traffic (see points 1 and 2 above). The price charged equals the highest long-distance tariff of the operators' price lists effective at the time.

A customer using long-distance services pays a local call charge to the local operator and a long-distance charge to the long-distance operator. For the moment, local operators also charge the customer for long-distance calls and further credit them to the long-distance operator. In the future, operators are likely to charge for their own services, and the customer will receive several bills.

Local operators have a responsibility for inter-connection to the other local networks of the same telecommunications area, to all the long-distance networks operating in the local area and to all international networks. The responsibility for inter-connection exists specifically for telephone companies. If the companies cannot agree on the organization of inter-connection, the Telecommunications Administration Centre may, in individual cases, set the terms.

Local telephone companies charge users for the transfer of telecommunications traffic to the long-distance network. According to the decision on inter-connection issued by the Ministry of Transport and Communications, this charge shall not be higher than the corresponding charge of its own network for the same time period. Neither shall the charge be affected by the network used. These rules are obviously directed against discrimination.

The above-mentioned charge also contains a compensation for any traffic coming in from the long-distance network to the local network. The telecommunications companies may also make a different agreement, but the compensations for incoming and outgoing calls shall not jointly exceed the local charge asked of users by the party whose tariffs are most inexpensive.

There exist inter-connection agreements on connecting traffic conducted on economic terms between the operators, whose terms the competition authorities are not aware of, but no complaints of any restricting effects for competition have been reported to them. Finnish telecommunications operators have traditionally turned to the competition authorities or special authorities even in very small matters, so it may be assumed that inter-connection agreements do not contain any major effects which would weaken the competitive position of the different operators. But as stated, any exact information is lacking.

The customer thus has no possibility to choose his or her local operator. Particularly Telecom Finland, which holds c. 30 per cent of the subscriber lines, has demanded an obligatory trading partnership of the local capacity. It has also claimed that the market shares of long-distance services will finally equal the 30-70 relation of local lines. Local telephone companies argue that quick changes in market shares are due to a successful product launch and the commitment of the staff of local phone companies to marketing and sales promotion.

In the proposal for a new Telecommunications Act presented by the Ministry of Transport and Communications, local operators would be obliged to yield local capacity to operators who do not possess the license required to build their own network. This would enable service provider-type companies to enter the market. The public's interpretation of the proposal has extended this obligation also to the network

operators's subsidiaries who do not have such a license. This would open up the market to Telecom Finland, too, which has demanded entry. At the time of preparing this presentation (autumn 1995), parliamentary proceedings of the Act have been delayed due to a disagreement on opening up a local network and the pricing of capacity.

The nature of the local loop as a natural monopoly has partly disintegrated. In the densely populated areas, alternative connections for the bigger companies have, to some extent, been built. In addition, two operators have constructed alternative connections to the fixed local network, based on fixed radio access technology, in several towns.

2. Effects of competition

The market situation in long-distance telecommunications operations has considerably changed since the opening of the market. In 1993, the share of Telecom Finland of domestic long-distance calls was 95 per cent. In 1994, the share was less than half of the market. In the long-distance market, the change in market shares came about quickly, for the competitors had made infrastructural investments before actual competition began.

In international comparison (e.g. OECD), the Finnish price level both for long-distance call services and other telecommunications services has been among the cheapest. The total value of the long-distance call market has decreased from 1.1 milliard marks of 1990 to 500 million marks of 1994. The reduction in the size of the market has, in addition to the reduced price level, also been caused by the expansion of the local call areas.

The price level of long-distance calls decreased before competition even began. The state decided to reduce the long-distance tariffs of its company, likewise the dividend obligation imposed on it. When competition began in the beginning of 1994, the prices decreased for a while. At the moment (autumn 1995), and for several months, the tariffs of the two major operators are exactly the same for the peak time, and even the off-peak tariffs have varied only slightly. The smallest operator (Telivo) continues to be the cheapest operator, measured by the peak time tariffs. The lack of price competition may be due to the oligopolistic nature of the market. Before the removal of Telivo's market share restrictions, the market was an oligopoly without the threat of genuine competition. As a result, the two main operators did not engage in significant price competition. Prior to the start of competition, the Ministry of Transport and Communications had also expressed its concern on the effects of a potential price war on the possibilities of operators to maintain and develop their telecommunications networks. These statements and the announcement by the Ministry of Transport and Communications that it would interfere with pricing, provided a price war accelerated, may have suppressed price competition. Following the removal of Telivo's market share restrictions, it is possible that price competition will again spring up, as the market now contains a third operator whose growth is no longer restricted.

During the past year, operating licenses have also been granted to service provider -type of companies. These offer services to small- and medium-sized companies, too, by benefitting from the volume discounts and thus operate as retailers of the services. This extends the competition benefits to the smaller customers, too, who would not otherwise be able to enjoy the above discounts granted by the operators. There is no exact information available on their market shares, but naturally they still remain low.

3. Division of work between the supervisory authorities

The field of telecommunications is currently supervised by the Ministry of Transport and Communications and the Telecommunications Administration Centre. On the basis of general competition legislation, the Office of Free Competition also supervises the competition related to the field. Competition

legislation thus also applies to telecommunications. Neither does the Telecommunications Services Act contain a mention of the non-applicability of competition legislation. A general principle is effective, according to which a special act cancels a general act, if they contain different kind of regulations on the same issue.

In principle, the supervisors' territories are thus overlapping. In practice, however, the division of work has turned out rather clear-cut. The authorities refer such issues to each other wherein they consider their power to be inadequate and request statements on the issues under consideration.

The field of telecommunications as a technical and rapidly developing one requires deep sectoral expertise. However, competition-related problems remain the same for the field of telecommunications as for other fields being liberalized or having liberalized from special regulation. The Finnish situation is characterized and even typified by the supervisory authorities having adopted a policy which is favourable to competition. Even if the Ministry of Transport and Communications can be criticized for single solutions related to deregulation, the main goal - opening up the telecommunications field for competition - has succeeded fairly well.

The division of work between the authorities has proved fairly successful in the situation described above, for competition authorities have not had to worry about the positive attitude of sectoral authorities to competition. In a situation where the sectoral authorities do not see it as their goal to increase competition, the job of the competition authorities is that much harder.

The new Telecommunications Services Act is estimated to be effective from March 1996. The new Act, which is currently in the stage of a proposal, would decrease license considerations and transfer part of the supervisory duties from the Ministry of Transport and Communications and the Telecommunications Administration Centre to the competition authorities. The scope of special regulation would be more limited and competition control would increasingly become part of the general competition legislation.

GERMANY

1. Post Reform I and Post Reform II

Before the telecommunications markets in Germany were opened up to competition, the present Deutsche Telekom AG (DT) was part of Deutsche Bundespost (the German Federal Postal Administration). The state-owned enterprise performed both governmental and entrepreneurial tasks and in return was granted far-reaching monopoly rights including the monopoly on networks and voice service.

In Germany, the telecommunications markets are liberalised in three stages, two of which were completed in 1989 and 1994 respectively[1]:

The first step involved separating governmental tasks from entrepreneurial tasks, assigning them to Telecom, Mail Service and Postbank. The monopoly on terminal equipment was dismantled and telecommunications services other than voice services were liberalised, whereas inter alia DT's networks and voice service monopolies were retained. Therefore, competitors could provide services only via leased lines, if at all.

The second stage of liberalisation brought about mainly organisational changes, which hardly affected potential competitors or customers. The passage of a special law[2] set the necessary regulatory framework which perpetuated a situation where owner and regulator are identical. The telecommunications sector was converted into Deutsche Telekom AG, whose parent is "Bundesanstalt für Post und Telekommunikation Deutsche Bundespost", which in turn reports to the Federal Ministry of Post and Telecommunications (BMPT). Telecommunications services are currently provided by the Federal Postal Administrations' successors, on a private enterprise basis, or by private firms. For a transitional period until full liberalisation, the monopoly rights have been transferred to those successors[3].

2. Post Reform III

Since the European Union requires the telephone service monopoly to be lifted by 31 December 1997, discussions are now under way in Germany to prepare a new regulatory framework. At the end of July 1995, the BMPT submitted a draft Telecommunications Bill, which still has to be approved by the Bundestag and the Bundesrat (Lower and Upper Houses of Parliament). The legislative procedure is expected to be completed by the autumn of 1996.

The following are the main provisions of the new draft Telecommunications Bill that are relevant to competition[4]:

Objectives[5]

The legislative project aims not only at securing equal opportunities for competitors and promoting workable competition in the telecommunications markets, but also at attaining the distributional policy goal of full coverage.

Market access[6]

Firms wishing to enter the market need a licence from a regulatory body to be set up. If the technological requirements are satisfied and the applicants are qualified, licences are granted without restrictions. In certain circumstances licences may be granted subject to rights and obligations as well as for a limited period of time (see below).

Market-dominating firms

If a licensee is a market-dominating firm or has a share of at least 25 per cent of the market, the regulatory body may attach special conditions to a licence. At first, this clause will mainly affect DT since it still has dominant positions in all markets. Among other things, the regulator may require the licensee to submit its prices for approval[7].

Regulation of prices

The comprehensive price provisions are applicable only to market-dominating firms. As far as the criteria for determining a dominant position are concerned, the draft refers to the Act against Restraints of Competition. The provisions regulating market-dominating providers are also applicable to firms having a share of at least 25 per cent of the market, which is expected to be the case in the near future mainly with DT. Therefore, charges for the provision of transmission paths and voice telephony services for the public have to be submitted to the regulator for approval[8]. All services for third parties except closed user groups are thus subject to approval. The regulator has a right to object to the provision of mobile radio and satellite services. The level of charges has to be based on the costs of efficient services provision.

Special abuse control

Market-dominating firms must grant competitors access to their services, whether used internally or offered on the market, if those services are essential and cannot be obtained from any other source. The terms of access must not differ significantly from those the dominant firm grants itself[9].

A market-dominating provider of a public telecommunications network has to allow interconnection between its own network and networks of other providers as well as granting other users access to its own networks.

3. Regulatory body

According to the Bill the regulatory authority to be set up will be responsible for regulating all technical, economic and *competition-related* matters. It is intended as an independent body whose decisions are not subject to directions from policy-makers. The regulator is meant to co-operate with the Bundeskartellamt (BKartA), in particular in determining whether a firm has a dominant position in the market[10].

The Bill provides for comprehensive, sector-specific abuse control over market-dominating firms in the markets for telecommunications (see above), to be exercised by the regulator, rather than by the BKartA. Apart from leaving open other questions, the Bill does not answer the question whether - in addition to specific abuse control - firms will be subject to the provisions of the Act against Restraints of Competition, and how potential conflicts are to be resolved.[11]

Within the scope of abuse supervision, the regulator is also empowered to issue orders laying down the details of interconnection between telecommunications networks and network access. It may also

stipulate technical, operational and economic conditions if interconnection agreements have not been made within a reasonable time[12].

4. Deutsche Telekom AG

DT engages in some 20 different activities, including the provision of analogue and digital transmission paths, on-line data transmission paths, satellite and mobile radio connections and more than about 90 per cent of cable networks. In addition, DT has so far been the sole operator of a full coverage telephone network and will retain the network monopoly (exclusive right to set up and operate terrestrial networks, including for cable television) and the telephone service monopoly (exclusive right of voice transmission to the public) until 1998. DT covers the majority of German households, with over 40 million telephones, 14 million cable connections and some 1.6 million mobile radio users.

In some 15 activities DT now competes with other providers. But even in those already liberalised markets - e.g. corporate networks, mobile radio and satellite services and licensed mobile telephone services - DT is by far the largest provider. Competitors have recently prepared themselves for entering the markets for almost all activities. In recent years individual competitors have even entered certain fields of the telephone service, e.g. BT Telecom Deutschland, Cable & Wireless or Sprint.

5. Competition law issues

Deregulation of the telecommunications markets is aimed at integrating them into the market economy. It is therefore necessary to set up competitive structures. In this process, the BKartA considers its main task to be to challenge hindering strategies and concentration processes which might render entry by new competitors difficult or impossible. However, the BKartA's scope for action ends where practices objectionable to the BKartA are sanctioned by governmental act.

Market entry by new competitors

In some markets there is competition only as a result of invitations to tender and the granting of licences. Here, the BKartA's efforts are directed at preventing the formation of anticompetitive bidding syndicates.

When examining several joint ventures in the fields of mobile data communication and paging, the BKartA found that DT had a paramount market position. New entrants are often dependent on the monopoly services of their competitor, i.e., DT. DT not only still has monopoly rights, but also superior know-how and substantial financial strength. Therefore, co-operation among private providers in the form of joint ventures will probably not give rise to competition concern as long as DT is not a partner in the joint venture and the latter remain independent of each other.

The alliances which had applied or intend to apply for a licence in the liberalised markets included not only German energy supply companies, but also large industrial groups like Veba, Thyssen and Mannesmann, or banks and foreign telephone companies[13]. So far those ventures have not been prohibited under competition law. However, those competitors' share in turnover was rather small (about 14 per cent). Some 7 per cent of turnover was recorded by private mobile radio providers.

New market entries are anticipated when voice services to the public are liberalised. In the meantime, potential applicants for a telephone licence (from 1998) have reached agreement with partners already experienced in that field: Veba has teamed up with Cable & Wireless, Thyssen with BellSouth (USA), Viag with British Telecom, Daimler Benz Aerospace with Northern Telecom (Canada) and DT together with France Télécom with Sprint (USA).

Energy supply companies as potential competitors

Energy supply companies are of special importance as potential or actual competitors in the telecommunications markets. As a rule they have the advantage of a nation-wide infrastructure. Even prior to liberalisation, they were allowed as private companies to set up their own networks for internal data transmission. By laying additional optical fibre cables they will be in a position to provide data and voice communication facilities at no great additional expense (compared to other industrial firms) within a comparatively short time. In the case of local lines, energy supply companies have the additional advantage of direct access to the individual households through their cable shafts. The number of participations and joint ventures or alliances in the telecommunications sector in which energy supply companies participate seems to confirm this trend.

Co-operation of Deutsche Telekom AG with foreign parties

DT tries to extend its activities beyond the German market through joint ventures or alliances with other companies such as France Télécom. One of such joint projects concerns the proposed acquisition of a stake in Sprint, the third-largest US telephone company together with France Télécom[14]. This may pose the risk that potential competitors are deterred from entering the market and thus substantial competition is prevented from developing at all. Moreover, already now a potential competitor who is already active in some fields would be kept away from the respective domestic markets by the planned co-operative arrangement.

Further participations of DT in foreign countries are, among others, as follows: Hungary (60 per cent share in MagyarCom Matav), the Netherlands (50 per cent share in Eunetcom BV), the USA (21.6 per cent share in Infonet Service Corp.; 10 per cent share in Sprint; four per cent share in INTELSAT).

Cross-subsidisation

Where cross-subsidisation activities within DT result in the competitive chances of other enterprises being impaired without any factual reason the Federal Minister for Post and Telecommunications has to take action together with the Federal Minister of Economics to remedy that situation. For this purpose, the assistance of the BKartA may be requested.

A relevant case which had to be examined by the BKartA was whether Deutsche Telekom has cross-subsidised the competitive Datex-P service (packet-switched data transmission) with profits earned with its monopoly services and whether this has led to impairing the competitive chances of private service providers. So long as DT still possesses the network monopoly, private providers are required to rent the data transmission paths from its competitor, which holds 90 per cent of the relevant market. According to the BKartA’s findings, there was a lasting non-recovery of full cost by DT in this market. In view of the cross-subsidisation found by the BKartA, DT was ordered to reorganise the Datex-P service.

Notes

1. I.e., the so-called Post Reform I and Post Reform II

2. PTRegG (Gesetz über die Regulierung der Telekommunikation und des Postwesens)

3. See Articles 87f and 143b GG (Basic Law)

4. Unless otherwise stated, the following information is based on the 27 July 1995 draft of a Telecommunications Act.

5. Section 2 Telecommunications Act (draft)

6. Sections 6 - 16 Telecommunications Act (draft)

7. § 13 Telecommunications Act (draft). Also, the regulator may require the licensee

   (a) in certain circumstances not to merge with competitors;
   (b) to secure equal opportunities for non-discriminatory, open access to its telecommunications services (in particular, its networks);
   (c) to comply with the terms governing the obligation to inter connect telecommunications networks

8. Section 25 Telecommunications Act (draft)

9. See Section 32 Telecommunications Act (draft)

10. Section 86 Telecommunications Act (draft)

11. There are still other open questions: For example, the decisions of specific abuse control are made within the regulatory authority by independent decision-making panels; the other decisions are made in the same way as any other administrative decisions. The regulators' decisions are subject to review by administrative courts, whereas the BKartA's decisions are subject to review by a specific competition law bench of the court. The regulatory authority bears in mind distributional policy objectives, not just competition.

12. Section 38 Telecommunications Act (draft)

13. Industrial groups and energy supply companies: RWE Telliance AG; Vebacom GmbH; Thyssen Telecom AG; Mannesmann Eurokom GmbH; ViagInterkom KG; Mannesmann Mobilfunk GmbH; foreign telecommunications companies: Cable & Wireless (UK); BellSouth Corp. (USA); British Telecom (UK) AT&T, Unisource N.V., France Télécom and Sprint are also interested in forming alliances in the German telecommunications markets.

14. The projects are being reviewed by the EC Commission at present.

ITALY

1. The regulation of telecommunication services in Italy

The Italian telecommunications system has been characterised by the existence of a strict legal monopoly that, mainly because of pressures from the European Commission, has been recently partially lifted. In 1991 the monopoly on terminal equipment was eliminated. In 1993, in order to separate entrepreneurial from regulatory tasks, the State run company ASST, which was responsible for the supply of a number of long distance services, was sold to Sip (now Telecom), the State owned telecommunications monopolist. Finally in March 1995 European Directive 90/388/EU, liberalising telecommunication services with the exception of voice telephony, has been finally adopted by the Italian Parliament, although with a five year delay.

Sip has been the only provider of TACS analogue mobile telephony since 1990. Because of a number of public statements by the Antitrust Authority and of the conclusions of an abuse of dominance case carried out against Telecom[1], in March 1994 a second GSM licence was granted, via a public auction, to Omnitel-Pronto Italia. In 1995 the European Commission started an infringement procedure against the Italian Government because Omnitel-Pronto Italia was asked to pay an access fee for operating in the market of mobile telephony services whereas Telecom, the State owned telecommunications monopolist, was exempted. Pending a decision on the European Commission action, Omnitel-Pronto Italia started offering its services in September 1995, competing with Telecom Italia Mobile (TIM), a fully owned subsidiary of Telecom[2].

2. Further prospects for liberalisation

In January 1998, according to a 1993 European Council Resolution, all telecommunications services including voice telephony will be liberalised. Furthermore it is possible that in 1996 all alternative available telecommunications infrastructures will be authorised to operate commercially, carrying signals for the provision of already liberalised services (data transmission and value added services). There are a number of private networks[3] in the country owned by the electricity supply company (2 000 Km.), the gas company (800 Km.), the highways (2 300 Km.) and the railways (20 000 Km.) that could be effectively used for commercially oriented purposes.

Probably because of the rapid opening up of traditional TV broadcasting markets coupled with a favourable geophysical environment that made possible a high quality TV image, cable TV has not been developed at all in Italy. Recently however a number of proposals have been presented to Parliament in order to grant local cable-TV licences. The general orientation of most of these proposals has an extensive regulatory nature and very little is left to market mechanisms.

3. Regulatory Agencies

Regulation of telecommunications services is now performed by the Ministry of Post and Telecommunications. However the approval by Parliament of a bill setting up independent Agencies for regulating technical and economic matters is at its final stage. Recognising the strict interrelationship between the two fields, the independent Agency for Telecommunications is supposed to have jurisdiction also for broadcasting. The relationship between the regulatory body and the Antitrust Authority is co-

operative in nature. The regulatory Agency will inform the Authority of any violation of the Antitrust Act by the companies subject to its supervision. Furthermore, since one of the goals of regulation is the attainment of a competitive environment it is expected that regulators seek the advice of competition authorities whenever there is a structural change in the market, such as the issuing of a new licence, a change in the system of price regulation etc.

The power of the Antitrust Authority with respect to regulated companies will still be defined by section 8, paragraph 2 of the Antitrust Act stating that only firm conduct which is strictly related to the attainment of specific tasks of general economic and social interest may be excluded from the scope of the antitrust law. However, should a certain restrictive behaviour be decided autonomously by the firm and not be imposed on it by the regulatory Agency, it would be exempted from the application of antitrust legislation only if the chosen course of action is the only one possible for attaining these specific goals. This implies that where it is possible for a firm to perform its assigned tasks by taking alternative measures which are less restrictive of competition, the antitrust legislation would fully apply.

For instance in the case of tariff regulation based on a price-cap mechanism, companies maintain a certain amount of freedom in the determination of the prices for their individual services. Price caps only constrain the aggregate price of the supplied services. In such a case, should the price charged for some particular service be considered to restrict competition, because of some type of cross-subsidisation, the antitrust authority would intervene in order to establish more competitive conditions.

4. Some general considerations for competition in telecommunications

The main justifications for a monopoly in telecommunications services are: a) the production technology exhibits the property of a natural monopoly; b) universal service obligations are so important that opening up to competition leads to inefficient results from a social welfare point of view.

Is the production technology a natural monopoly?

A production technology exhibits natural monopoly properties when one firm is able to operate in the market with lower costs than those sustained by more firms supplying the same level of output. The existence of natural monopoly characteristics of the production technology generally depends on the presence of economies of scale which in telecommunications services are strictly related to fixed costs associated to the construction of the network. If the market is not contestable and is supplied by a monopolist it is necessary to regulate the prices of its services in order to eliminate monopoly profits.

However the regulation of a natural monopoly does not necessarily imply introducing restrictions to entry into the industry. Only in very special circumstances, when a natural monopoly is not sustainable, it is necessary to protect the monopolist from outside entry[4]. In fact a monopoly is called natural because it emerges naturally from the working of market forces. If a market started off with a number of active firms and the technology of production exhibits natural monopoly characteristics, it would naturally evolve into a monopoly and there would be no need to protect it from outside entry. However by restricting entry in the market through regulation, the process of evolution towards a monopolistic structure, where a single company efficiently supplies the market, can be probably drastically shortened. Such efficiency consideration is one of the most important justifications for not opening up to competition industries characterised by production technologies showing natural monopoly properties.

In telecommunications, where the amount of fixed investments is large, the extent of sunk costs is high and strategic behaviour by the incumbent is very likely, a new entrant would probably never duplicate existing infrastructure, unless it would find it profitable to do so (if new entry would be profitable, the technology would not be characterized by natural monopoly properties). In such a situation it would be wise not to restrict entry. However, even if infrastructure would not be duplicated, some cost saving

(especially transaction costs), given that technology is commonly known and that it is unique and stable, could nevertheless be guaranteed by restricting entry into a national telecommunications market to one single firm.

Let us assume that the telecommunications market is characterized by a number of local monopolies and that long distance services can be efficiently supplied by one single company[5]. If entry would not be restricted the market would be characterized (in the long run) by a number of local monopolies and one long distance monopolist. The number of contracts needed for having an acceptable functioning market in such a situation would probably be very high and, assuming (an heroic assumption) that regulation can be effective in giving the regulated companies the right incentives for reaching efficiency, allowing for the whole market to be supplied by a single company can save some transaction (and regulatory) costs.

However the actual situation of the telecommunications industry makes it very unlikely that regulatory barriers to entry would be beneficial. First of all, there is no existing single best technology for telecommunications transmission. Second, nobody really knows which technology will emerge in the future. Finally, especially with reference to long distance telephony, substantial duplication of facilities has already occurred. Even in the Italian situation alternative infrastructures do exist (those owned by the other public utilities) and if the market would be left free to operate also satellite, cellular and other radio technologies could be rapidly introduced as effective competitors to the fixed network. The variety of competing transmission technologies and the possibility that all can be used in unknown proportions imply that it is no longer possible to define a natural monopoly for voice telephony, even if only local loops are considered.

In many countries, most households are connected both to the cable TV and to the telephone companies. This implies that an alternative to the local loop monopoly is already easily available. However in those situations in which this is not the case, such as in Italy where cable TV has not yet been developed, the introduction of competition in the local loop should be one of the most relevant arguments supporting asymmetrical regulation: cable companies are authorised to provide telecommunications services, but the dominant telecommunications company is banned from entering into the cable TV business.

Universal service obligations

One of the most popular justifications for protecting the incumbent firm from the entry of outside competitors is related to the existence of cross subsidies in the tariff structure in order to attain some social goals, so that some services are provided at a loss and others show high profit in order to make up for these losses. In such a situations, should markets be completely opened up to competition without removing regulated cross subsidies, new companies might enter the market not because of any real advantages in terms of their efficiency, but simply in order to exploit the profit opportunities originated by a distorted tariff structure. The resultant cream skimming of the most profitable areas of business by the incoming company would damage the incumbent firm, which, at least in the long run, might be forced out of the market.

In those situations where cross subsidies are imposed with respect to the tariff structure of a public utility, existing regulation generally prevents entry into the market. This protects the monopolist from cream skimming entry, but at the same time delays the introduction of technological progress in the provision of services and prevents the range of services to be supplied from being broadened and improved. A legally protected monopolist is in fact slow in innovating, especially when the assets with which it is operating are still economically viable.

Should it be necessary for the network operator or the dominant firm to provide services of general interest (such as for example supplying at a loss telecommunications services to disadvantageous locations), an access tax to the network might be imposed on all users in order to finance this general

service[6]. On the other hand in those cases where cross subsidies are actually instruments of an income redistribution policy they should be eliminated and substituted by transfers funded through general taxation. They would have the advantage of not distorting relative prices and so guaranteeing neutrality.

A different type of argument refers to the extent of universal service obligations. Such obligations are usually imposed on a dominant public utility company in order for it to provide its services to all at affordable prices. First of all, it is clear that these obligations should be (exceptionally) imposed only with reference to services already in existence and sufficiently widespread in use. For new services, the imposition of universal service obligations cannot be justified, at least at the first stage of their development. It is impossible, when the constraint is based upon investments to be made, that new services be supplied instantaneously to all. Every company starts off supplying new services to the most profitable customers, also because those are the customers that value these services the most. Only at a later stage, should it be evident that such services are indispensable to all, it might become necessary to introduce universal service obligations. However this might be acceptable only in those situations where the private interests of the company(ies) concerned would not be sufficient to attain such goals.

Notes

1. In October 1993 Telecom was found in violation of Section 3 of the Antitrust Act (abuse of dominance) because it conducted a widespread marketing campaign, promoting its GSM services, failing to inform the public that the service was carried out on an experimental basis; the Authority ruled that this conduct was threatening to provide Telecom with a dominant position in the GSM market, well before the Government decided on the actual number of authorised operators.

2. When the market was opened up to a second licensee, Telecom was forced to create a separate company for supplying mobile telephony services.

3. As a benchmark reference, notice that the Telecom network is 155 000 Km long.

4. In such rare cases entry, even though it would be profitable, would result in higher costs for the industry than possible with one single firm.

5. This derives form the assumption that the technology of production is unique and stable.

6. A way for having all market participants share the cost of universal service obligations is envisaged by Baumol and Willig in their efficient component pricing rule.

NEW ZEALAND

1. Introduction

This note is based on, and updates a presentation made by New Zealand to an OECD workshop on telecommunications infrastructure competition held in Athens on 19 October 1994.

New Zealand's experience is of interest for three reasons. First, New Zealand, on 1 April 1989, became the first member of the OECD to introduce full competition to all sectors of telecommunications. Secondly, no licences are required for entry into any of those sectors. Thirdly, New Zealand relies primarily on negotiated agreements and general competition law to regulate telecommunications competition. There is no industry-specific regulatory agency.

Some of this experience is controversial. While there have been a number of interconnection agreements reached successfully between the incumbent, Telecom Corporation of New Zealand Ltd (Telecom) and new entrants, there have also been periods of prolonged dispute between these parties.

This paper describes the New Zealand regulatory structures for telecommunications and telecommunications competition. After outlining the background in section 2, the regulatory environment is outlined in section 3. Competition issues are discussed in section 4 and performance in section 5. Section 6 provides conclusions.

2. Background

The recent history of New Zealand telecommunications begins on 1 April 1987, when the former PTT, the New Zealand Post Office, was split into three entities. These were Telecom, Post Office Bank Ltd, and New Zealand Post Ltd. All were established as companies, charged under s. 4 of the State Owned Enterprises Act 1986 with operating as a successful business and to this end, to be -

(a) As profitable and efficient as comparable businesses that are not owned by the Crown; and

(b) A good employer; and

(c) An organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage these when able to do so.

Policy advice on communications markets and radio spectrum management, which were Post Office functions, became the responsibility of the Department of Trade and Industry, replaced by the Ministry of Commerce in 1988.

Prior to 1987, the only suppliers of facilities-based services of any note, other than the Post Office, were other State-owned enterprises able to invest in facilities for their own use. For example, New Zealand Rail owned a fibre optic cable and a conventional copper cable-based communication system.

From 1 October 1987, the provision of customer premises equipment was progressively opened up to competition. Open entry into all telecommunications services markets was allowed from 1 April 1989.

In August 1990, the last major change to the environment was implemented, with the sale of Telecom to a consortium, lead by Bell Atlantic and Ameritech. The sale was conditional upon at least $500 million of shares being offered to the New Zealand market (which was substantially done in a public float in July 1991) and that the American shareholders sell down their combined shareholdings to 49.9 per cent or less.

Experience to date indicates that new entry has occurred despite the lack of statutory limitation on the number of entrants and the relatively small size of the economy. Entry into customer premises equipment competition was rapid. The first entry into resale based services competition occurred in 1989. Clear Communications Ltd, a consortium of MCI International, Bell Canada Enterprises, Television New Zealand Ltd, New Zealand Rail Ltd and Todd Corporation Ltd, commenced providing facilities-based long distance services in May 1991. BellSouth NZ Ltd began offering a competing GSM cellular service in July 1993. Clear's first independent local access customer was provided with service in 1994, although its largest long distance customers have for some years been provided with Clear direct access links for the originating part of their long distance calls.

Other smaller facilities-based competitors provide services which require interconnection. These include international services (most recently Sprint NZ Ltd, which concluded an interconnection agreement with Telecom allowing it to provide international services in Auckland in March 1995, in conjunction with Tele-Pacific); and trunked mobile radio services such those of Broadcast Communications Ltd.

Further competition, which has not necessarily required formal interconnection agreements, has been provided by cable television services, with which Telecom now is seen as a competitor in the provision of video services.[1] For example, resale based activities have brought further competition from New Zealand Post Ltd which provides frame relay and some voice services; Tele-Pacific Holdings Ltd, now owned by Racal, which provides voice and data services; and smaller mobile radio services, which effectively add contact with Telecom's network through their own PABXs. Callback operators have also added to international competition.

3. The Regulatory Environment

Current situation

Despite the lack of licensing requirements for telecommunications companies and the lack of an industry specific regulator, New Zealand has still had to address the issue of what should be regulated. There is extensive, if light-handed, regulation in place. Most of the matters subject to regulation in overseas regulatory regimes are found in New Zealand, but often in a less intrusive manner. Formal legislative measures are accompanied by important informal measures.

The main features of New Zealand's "light-handed" regulatory environment are:

-- the absence of controls on entry;

-- the absence of an industry-specific regulator;

-- reliance on competition law, the Commerce Act 1986, to deal with anticompetitive behaviour;

-- requirements on Telecom to disclose information about terms and conditions for interconnexion;

-- a radio spectrum allocation system;

-- no price control, except in relation to domestic customers' access charges under the "Kiwi share"; and

-- the threat of the introduction of other regulatory measures, such as price control.

The regime is currently subject to review as a result of a Privy Council decision *Telecom Corp of NZ Ltd v Clear Communications Ltd* [1994] 5 NZBLC 103,552; 6 TCLR 138; [1995] 1 NZLR 385. This decision is discussed below. If changes are made to the regime as a result of the decision it is unlikely that they would represent a departure from the light-handed philosophy of the existing regime.

New Zealand's open entry policies may be seen as founded on the concept that competition itself will carry out many of the functions often carried out by regulatory means. The opportunity to enter telecommunications markets, as with most other competitive markets, should provide discipline over prices, ensure that services are provided where demand exists, provide incentives to raise service quality and provide incentives to introduce new technologies. These incentives should apply equally to both new entrants and incumbents.

It is accepted that the threat of entry cannot be expected to provide the same level of market discipline as entry itself. It is also clear that the fundamental source of regulatory difficulty in New Zealand telecommunications, as elsewhere, is that there are significant barriers to rapid entry into local access markets. New Zealand experience suggests that there are several dimensions to this. First, the capital investment required to replicate Telecom's sunk cost-based local loop services, using conventional access technologies, is large. Secondly, replicating cable or radio based infrastructure in light traffic areas may be uneconomic, although this position appears to be changing rapidly. Thirdly, even in those areas where entry is likely to be commercially viable, entry takes time, both to plan and negotiate the roll-out and because lower risk, higher return investment opportunities, such as provision of long distance services, are likely to be pursued first by those interested in providing services.

The role of competition law

The Government relies on competition law to address competition issues which might arise in telecommunications markets. Hence, there is no limitation on the extent to which the Commerce Act 1986 applies to telecommunications markets. The key provisions are the prohibitions on mergers that create or strengthen a dominant position in a market (s.47); exclusionary behaviour by dominant firms (s.36); and agreements that substantially lessen competition (s.27). The Act also provides for control of prices where the Minister of Commerce considers that competition is limited and there is a need to protect the interests of consumers (Part IV).

The most important provision is s.36, which was the basis for the *Telecom v Clear* case relating to the terms and conditions offered for local access interconnection by Telecom. Few other cases have reached substantive hearings, however, although a number have been initiated or subject to initial investigation by the Commerce Commission. The merger provisions also apply to acquisitions of radio frequency rights, and have been used to prevent Telecom from acquiring three out of four blocks of spectrum rights available for cellular services.[2] The price control provisions have not been applied to telecommunications services.

No Industry-Specific Regulator

There is no telecommunications industry-specific regulator as it is considered that general competition law can control the specific competition issues which might arise, including in interconnection disputes. This has the advantages of saving the fiscal cost of a specific regulator, allowing concentration of expertise in the general enforcement body (the Commerce Commission) allowing the development of

precedents through the Court system which may be useful in providing guidance for industry conduct generally, and promoting consistency of approach between industries.

The Telecommunications Act 1987

The Telecommunications Act provides for regulations concerning information disclosure and international services. It also provides for access to land and cable facilities and miscellaneous provisions concerning such matters as use of offensive language on the telephone.

The information disclosure provisions are intended to supplement the Commerce Act. They require Telecom to disclose prices, terms and conditions for all local access-related services, including the whole text of any interconnection agreements; prices for any leased line and long distance services; discounts offered which exceed 10 per cent of listed prices; and accounting results. This information is intended to provide a minor, supplementary role to assist interconnection negotiations and to assist parties to take action under the Commerce Act.

The International Services Regulations protect New Zealand carriers from any disadvantages they might face in having to negotiate terms for the exchange of international traffic with carriers in countries without competition. They are similar to regulations in other countries, such as Australia, in allowing for conditions such as parallel accounting and proportionate return to be imposed if necessary. No such conditions are currently imposed under the regulations, as a large proportion of New Zealand's traffic is exchanged with countries with competition.

The Radiocommunications Act 1989

An essential element of the introduction of competition was to provide for radio spectrum to be readily available to newcomers and incumbents alike. The Radiocommunications Act provides a framework for the market-based allocation of frequencies. Unallocated frequencies or blocks of frequencies have been sold to the highest bidder and are then fully tradable. Incumbent frequency holders have paid a concessional fee towards the market value of their rights which then also become tradeable over a lifetime of up to 20 years, rather than administratively licensed.

Pending bringing frequencies within the market-based regime, some frequencies continue to be allocated by traditional administrative means. The policy is not to withhold frequencies from the market where there is an expressed demand. For example, although land mobile and VHF TV-suitable frequencies have not yet been brought within the market regime because of the time required to define the rights involved adequately, frequencies continue to be made available where practicable, pending tendering. There has, to date, been no great difficulty in meeting the demand for frequencies. However, the strong preference is to use market-based allocation of frequencies where demand warrants this approach.

The Kiwi Share

The Government retained a Kiwi share in Telecom, which was written into its Articles when it was privatised. The main purpose of the Kiwi share is to ensure universal service to residential users, and restrain increases in telephone rentals. It requires that:

-- local free calling will remain a tariff option available to all residential customers;

-- the standard residential rental for a phone line will not rise faster than movements in the Consumer Price Index unless Telecom's profits are unreasonably impaired; and

-- phone line rentals for residential customers in rural areas will be no higher than the standard residential rental, and the residential service will remain as widely available as was at the time of privatisation.

In addition the Kiwi Shareholder has the right to restrict the maximum shareholding of any single foreign party to no greater than 49.9 percent; the maximum interest in voting shares of any party to no more than 10 percent; and to require half Telecom's Board of Directors to be New Zealand citizens. No special foreign investment restrictions apply to any other telecommunications company.

Telecom Undertaking

Telecom undertook in writing to the Government on 6 July 1989 that it would provide interconnection on fair and reasonable terms. While this obviously left room for argument about what those terms should be, it left no doubt that the Government expected interconnection would be approached by Telecom in good faith. The undertaking remains in place.

Government Policy Statements

A number of policy statements have been issued by the Government about the introduction of competition. The most important was issued by the Minister of Communications in December 1991. It states that the main focus of Government policy is to provide for the development of an efficient telecommunications industry. It iterates the Government's view that agreement on interconnection terms are to be reached with the parties making genuine efforts to reach agreement and restates Government policy that it is essential that interconnection be achieved and that further regulatory measures will be introduced if necessary.

Service Quality Indicators

Prior to privatisation, the Minister of Consumer Affairs obtained Telecom's agreement to the six-monthly publication of quality of service indicators, as a means of monitoring service quality. These include, for example, the average time in seconds to answer directory assistance calls and the availability of electronic payphones.

Joint Briefings

In 1992, BellSouth, while negotiating its interconnection agreement with Telecom, requested that the Government be prepared to have officials present at interconnection negotiations to monitor conduct. The Minister of Communications did not agree, on the grounds that this could inhibit bargaining. However, instead, it was proposed that joint briefings of officials by both parties to interconnection disputes, under formal rules, could proceed, as a means of ascertaining the true positions of the parties, rather than depending upon separate statements being made at the time.

Three such joint briefings were held, involving BellSouth and Telecom; and Clear and Telecom. They proved to be a useful instrument for clarifying the parties' positions and showed some signs of assisting the parties to understand each others' positions. The procedure remains available at the request of the parties.

New Zealand Telecommunications Numbering Advisory Group (NZTNAG)

Historically, Telecom determined numbering issues in New Zealand, in accordance with its statutory monopoly. The importance of numbering issues for competition was not fully apparent in 1987 when Telecom was established as a commercial enterprise or when Telecom was privatised in 1990.

NZTNAG was established following the entry of Clear. This body is chaired and serviced by the Ministry of Commerce, with an agreed set of rules but no formal registered charter. All significant carriers are entitled to participate, as are two consumers groups.

The NZTNAG is empowered to discuss numbering issues and advise the Minister of Communications on the outcomes if necessary. So far, it has proven to be an effective body for reaching agreement on several numbering issues, including local access numbers to be made available to new entrants.

4. Issues

New Zealand experience may provide something of a catalogue of the competition issues most likely to arise when entry to telecommunications is opened up, given that its light-handed regulatory environment might be expected to allow any such problems more opportunity to arise than a more interventionist approach.

Interconnection

The issue which has caused the most concern has been interconnection. Interconnection with Telecom's network has been agreed by various parties for most services including local access, long distance and cellular services. While most of these negotiations have been resolved in a reasonable timeframe, the longest running dispute, between Clear and Telecom over the terms for local access interconnection, took three and a half years to reach an interim settlement, providing for lineside-based local access.

The dispute was primarily about the price of interconnection.[3] Clear argued that interconnection should be priced at the incremental cost of providing it, with payments between the carriers being determined on a basis of full reciprocity. Telecom advanced the Baumol-Willig (BW) rule (or the Efficient Components Pricing Rule as it is also known). In essence, the rule states that a firm seeking access should pay the incumbent a sum sufficient to compensate it for the opportunity cost of customers lost to the entrant, including its foregone profits, if any.

The BW rule was upheld in the High Court, but rejected in the Court of Appeal. The High Court found Telecom in breach of s.36 in refusing to provide PABX-type interconnection to Clear for the purpose of providing local access service to the Justice Department, but refused to award damages because Clear would not have accepted the modified BW rule and had not, therefore, suffered any loss.[4]

The Court of Appeal found that delay in negotiations could amount to a breach of s.36; that the BW rule could amount to a breach of s.36 insofar as it requires a competitor to indemnify a monopolist for any loss of custom; and that the system proposed by Telecom could "mean a vista of continual disputes or arbitrations, so daunting in itself as to transgress the Commerce Act".[5] However, the Court refused to award damages to Clear because it would not have accepted a price which included a contribution to Telecom's local loop access deficit. Clear was not seen as likely to agree to reasonable charges by Telecom.

The Privy Council upheld the approach taken by the High Court, that the BW rule as a basis of pricing interconnection did not contravene s.36 in the particular circumstances of the case. It found that there was no evidence that Clear would be unable to compete and considered that if monopoly profits were present in Telecom's pricing, these could be addressed through the Act's price control provisions.

Subsequently, officials released a discussion document focusing on whether light-handed regulation was adequately dealing with market foreclosure by dominant incumbents and outlining a possible mandatory arbitration regime for prolonged disputes. Among other things, the document noted that:

> the BW rule was solely designed to achieve the goal of productive efficiency. In the simplest, static and no-uncertainty contexts the rule achieves this goal. However, if other factors are introduced such as uncertainty and sunk costs, or if the dynamic benefits of competition are considered, the BW rule may, in fact, deter efficient entry.[6]
>
> Officials will report to the Government in 1996.

In the meantime, the Government has used the final limb of light-handed regulation: the threat of more heavy-handed regulation. In the months following the Privy Council decision, Clear and Telecom had not concluded an interconnection agreement, with Telecom reserving its right to use the BW rule and Clear stating that BW pricing was totally unacceptable to it. This led the Prime Minister to warn the two chief executives that if they did not reach an interconnection agreement soon, the Government would do it for them. In addition, the Minister of Commerce gave a speech indicating that the Government was seriously considering imposing price control.

Shortly after these actions and the release of the discussion document Telecom and Clear reached a heads of agreement covering the full range of interconnection issues. It specifies interconnection prices and provides for compulsory timebound arbitration where the parties are unable to reach an agreement within a specified time. The final details of a written contract to implement the agreement are still being negotiated.

Conclusion on the application of competition law to pricing matters

There is probably a consensus in New Zealand that there is unlikely to be another major case under the Commerce Act where an entrant will claim that the dominant incumbent is behaving in an exclusionary manner by seeking too high a price for interconnection. The *Telecom v Clear* litigation has illustrated the very considerable difficulties[7] in meeting the evidential requirements. The High Court said:

> It has not been established to our satisfaction whether or not Telecom is currently earning monopoly rents. But we cannot take the evidence further. This Court is not a regulatory agency. We cannot pursue investigations as to whether: (1) Telecom's return on shareholders' funds contain monopoly rent; (2) particular segments of Telecom's business . . . contain monopoly rents; (3) Telecom has established excess capacity or wasteful capacity in its networks; (4) Telecom's operations are conducted in an inefficient manner.[8]

Other Issues

Other issues surrounding the introduction of competition have been less contentious (e.g. number allocation and spectrum allocation). Access to INTELSAT, which requires that it only deal with one signatory in each member state, has been an issue. Telecom has been required to establish an "office of signatory affairs" to overcome the problem. Steps by INTELSAT to facilitate more direct dealings make this less of a problem, as does the increasing advent of competing satellite systems. The Ministry of Commerce has issued general principles which form an agreed basis for New Zealand parties selling INTELSAT access.

Clear has also alleged that Telecom has unfairly bundled services which Clear did not provide, such as local access and customer premises equipment, into discounted packages with long distance service. However, the Commerce Commission concluded that there was no clear evidence that the practice was anticompetitive, but rather, was a source of benefit to service users.

Standards setting has been reviewed by the Ministry, to ensure that telecommunications technical standards setting has not generated competition issues. Currently, each carrier has the ability to determine standards to apply to its own network, including for customer premises equipment. Freedom for carriers to set their own standards for customer premises equipment has probably helped to contain the costs of obtaining approvals. Until recently, this has generated little debate, reflecting the fact that only Telecom has an access network. However, there is some dissatisfaction that Telecom can determine technical standards for interconnection.

Technical aspects of interconnection have been debated within the context of interconnection negotiations. Subject to the not unreasonable principle that those seeking particular facilities not already provided on Telecom's network must expect to pay the cost of those facilities provision, these issues have, however, been less contentious than interconnection pricing.

In principle, most of the contentious and unresolved issues mentioned above could be capable of generating s.36 cases, should the new entrants wish to take them.

5. Performance

Although competition has raised some serious issues since its introduction in 1989, the Government has been very satisfied with the progress of the regime. The main criteria for judging these results can be taken as effects on prices, provision of services, and service quality.

Prices

The extent of competition makes it very difficult to get a firm grasp of price changes. Listed prices do not disclose the many discounts which now apply. For instance, Telecom provided 19 business customers with substantial discounts, over and above any discounts in its standard charges. The largest of these was for 31.52 per cent for national and Australia calls and 22.51 per cent for international calls.

Perhaps the best overall indicator for the business most subject to competition is Telecom's overall price per minute for national long distance calls - down 55 per cent in nominal terms between the 1988 and 1994 March years.

Another indicator is that Statistics New Zealand have observed a 6.9 per cent fall in the real price for a residential basket of residential services between 1990 and 1994. Restrained by the Kiwi Share, residential access charges have increased in line with the consumer price index, and the free local calling option continues. Telecom's charge for telephone handset rental has increased substantially, but customers are free to purchase and install their own telephone handsets, a lower cost alternative.

The total charge residential tariff basket price trend compares favourably with the OECD average. Between 1990 and 1995, the OECD average has increased by 0.7 per cent while the equivalent for New Zealand has been a reduction of 5.9 per cent.[9] The table for business charges over the same period shows that New Zealand charges fell by 9.4 per cent while the OECD average fell by 8.5 per cent.[10]

Prices have also fallen substantially for other services subject to competition, such as leased two megabit links. They appear to have fallen less in areas where competition has not become established, such as local access service, although Telecom has reduced prices for central business district customers with large numbers of access lines, perhaps in anticipation of this being a likely target for its competitors.

As might reasonably be expected in a market dominated by two large competitors, after three years, price competition now seems less intense, with both competitors having, for example, similar consumer pricing structures. Price reductions are still occurring. For example, Telecom and Clear have

both, since early September, been providing unlimited length national residential toll calls for a maximum charge of NZ$5 (US$3.25) every weekend until Christmas 1995.

There has also been price competition in the cellular market, with BellSouth offering incentives to join its network.

Services

Universal service has been well maintained. The Kiwi Share requirement, for service to be maintained has ensured that it would be but has also meant that New Zealand has not really tested whether competition might threaten universal service. There is little reason to think that it would. It is in operators' interests to maintain extensive networks both for competition and public relations reasons.

In fact, Telecom has continued to upgrade its network, including in rural areas, to the point where it has been able to announce that by 1998, its network will be 100 per cent digital[11] (Telecom's network is currently 98 per cent digital, while those of BellSouth and Clear are 100 per cent digital).

There has been no increase in household penetration of telephone service in recent years. According to a Department of Statistics survey, it fell from 95.7 per cent in 1989 to 93.7 per cent in 1994. This is not statistically significant.

Telecom's mainlines have been increasing rapidly in recent years. New Zealand had approximately 47 mainlines per 100 population as at 31 March 1995.

New Services

Competition is helping to promote the introduction of new services. Generally, New Zealand is unlikely to be at the forefront of developing new telecommunications technologies for reasons of history, distance and population. However, New Zealand is a relatively early adopter of new technologies as they are established.

BellSouth's introduction of GSM in mid-1993 and Telecom's introduction of digital AMPs in 1992 are two examples. BellSouth is now rapidly extending its GSM network, recognising that extensive coverage is essential if it is to compete successfully with Telecom. BellSouth has launched a mobile digital data GSM service. Telecom is trialling PCS and ATM services in 1995.[12] Trunked special mobile radio services have been introduced by BCL[13] and others, planning to win a portion of the cellular market. Importantly, these facilities are being built without the stimulus of either government-awarded franchises or any requirement to meet particular timetables for the roll-out of facilities.

Service Quality

Anecdotal evidence of improved service quality is strong. Very few complaints about service quality are now made to politicians, in contrast to the position prior to 1987. Consultants familiar with the business market have also confirmed improved service levels. Clear in particular has made service quality a major part of its competitive thrust and is widely acknowledged as having achieved its goal.

A more tangible indicator of service quality is Telecom's programme introduced in September 1993, which enabled its frontline service staff to "put it right" when service difficulties arise. For example, any sub-standard toll call is put right with a free call and/or the provision of a free Telecom phone card.

The consumer quality indicators published by Telecom have also generally shown a substantial improvement since initial publication, although the latest results have shown that quality is still vulnerable to natural disasters, restructuring and rapid increases in demand.

Productivity Improvements

Arguably, these have been the most impressive result of the regime. From a figure of 86 access lines per operating employee in 1990, Telecom has moved to 248 as of March 1995. Telecom has done this through reducing its workforce from 26 500 in 1987 to 8 900 in March 1995.

The reduction in employment within Telecom has been offset to a modest extent by employment growth elsewhere within the industry, although it is likely that there has also been some employment growth in areas such as telemarketing and CPE retailing outside the telecommunications industry.

6. Conclusions

The New Zealand telecommunications regime has produced substantial productivity gains, consumer and user benefits and fostered the introduction of new technology. Choice of service provider now exists in many areas, but there is only limited choice in the availability of local access service.

Moreover, these gains have been possible with light-handed regulation, without a specialist regulator but relying primarily upon general competition law and the threat of further regulation to resolve interconnection disputes. The regime has, however, produced a sometimes intense public debate about how competition disputes, particularly about interconnection, should be resolved.

Neither Clear nor BellSouth have been satisfied that the regime is optimal for resolving interconnection disputes. However, they support the retention of light-handed regulation and there is little publicly expressed support for establishing a specialist regulator or price control.

Aspects of the regime which have been less satisfactory include the costs of and delays in resolving litigation over interconnection. This may have delayed the benefits of competition in local access that have been seen elsewhere in the industry. This, combined with the outcome of the Privy Council local access decision, has lead the Government to consider whether New Zealand could do better in meeting its telecommunications industry goals. Officials expect to report to ministers shortly.

Notes

1. Telecom has announced its intention to expand its provision of video services, initially providing 17 channels of television in an Auckland trial using fibre and coaxial cable to reach 600 households.

2. On 23 June 1992, the Court of Appeal upheld an appeal by Telecom against a Commerce Commission decision to prevent Telecom from acquiring the second (and only remaining) block of spectrum suitable for AMPS-type services. Telecom undertook to the Commerce Commission to relinquish rights to one of two blocks of spectrum suitable for GSM type services, the other right having been won by BellSouth. *Telecom Corporation of NZ Ltd v Commerce Commission* [1992] 3 NZLR 429; [1992] 4 NZBLC 102, 724.

3. Issues arising earlier in the case about the need for access codes between networks have largely been resolved.

4. *Clear Communications Ltd v Telecom Corporation of New Zealand Ltd* [1991] 4 TCLR 473; 3 NZBLC 102,340; [1992] NZAR 193.

5. *Clear Communications Ltd v Telecom Corporation of New Zealand Ltd* [1993] 4 NZBLC 103,340.

6. “Regulation of Access to Vertically-Integrated Natural Monopolies - A Discussion Paper”, Wellington, August 1995 at p.33.

7. These difficulties appear to be at least as great as the difficulties associated with predatory pricing cases.

8. (1992) 5 TCLR 166 at 217.

9. DSTI/ICCP/TISP(95)11 Table 3.7 at p.29.

10. ib id Table 3.3 at p.26.

11. Commitment made by Telecom at its Annual General meeting in August 1994.

12. Telecom media release 3 August 1994: "Our vision for PCS is to put wireless services into the hands of more than 30 per cent of the population by the year 2004".

13. BCL claims its "Teamtalk" product will be up to 50 per cent cheaper than cellphones for fleet managers.

UNITED KINGDOM

The UK Government's objective is full competition in all sectors of the telecommunications market, and especially in infrastructure as well as in services. The process has involved both privatisation and liberalisation, with the latter aimed explicitly at promoting market entry. The first step was taken in 1984 when Mercury was licensed to compete against a privatised British Telecom (BT). Competition from Mercury encouraged BT to improve its services and reduce its prices. The success of this limited liberalisation led the Government to open up the market to new operators. This was announced in the 1991 policy document *Competition and Choice: Telecommunications Policy for the 1990s*, which set out a number of measures encourage the growth and expansion of the telecommunications market.

The measures were aimed particularly at the development of competition in the local loop, because that was the sector where competition had penetrated the least - Mercury had established itself primarily as a competitor in the trunk and business market. Other sectors, including mobile and fixed radio, were also liberalised. Four years later there are signs that genuine competition in the local loop is becoming firmly established in at least three areas stemming from those changes.

1. Cable

The first and, at least in the short term, principal source of competition is in the services provided by cable TV companies. The 1991 policy document reinforced the established policy of separate local franchises and gave commitments that the industry would be safeguarded from competition in the provision of entertainment on a nation-wide basis from telecommunications operators. Prior to the 1991 review, cable operators were only allowed to offer voice telephony over their cable networks in conjunction with either BT or Mercury. They may now offer telephony in their own right. The confirmation of the regulatory framework combined with the ability to provide telephony alongside cable television services has transformed the prospects for the cable companies and brought about a dramatic change in the performance of the sector.

Investment in UK cable has increased sharply since 1991 with the accelerated construction of new cable networks. Investment this year is likely to be £2bn compared with £1.2bn last year and the £1.7 bn invested in the first ten years of franchising to the end-1993. Cable networks now pass 4.9 million homes, compared to 1.9 million at the end of 1993. It is the growth of cable telephony which has been the most striking, with the number of cable telephone lines installed rising from some 2 000 lines at the beginning of 1991 to just over a million lines currently. New lines are now being installed at a rate of 50 000 per month. Cable TV has now become a dynamic sector which is investing at an impressive rate and extending its reach more widely.

At present, there are 125 franchises covering 14.5 million homes, or two-thirds of UK homes. New franchises are being offered which permit the use of radio in addition to cable to deliver services. The new franchises awarded to date cover an additional 1.5 million homes. Over the next few years, as more franchises are awarded, total franchise coverage is expected to reach 80-85 per cent of all UK homes.

2. PCNs

A second form of local competition is now beginning to come from operators providing services by mobile radio such as Personal Communications Networks. These operators have been investing heavily in building their networks. Mercury One-2-One, which started services in September 1993, operating initially in the London region, now covers 30 per cent of the UK population. Hutchison (Orange) started services on 28 April 1994 covering 50 per cent of the population, and is expected to cover 90 per cent by the end of 1995. One of the most exciting features of PCN is that it could break down the formerly sharp distinction between fixed and mobile services. It is early days for these new mobile operators, but already they are seeing considerable success in the market, and have spurred the two established players, Vodafone and Cellnet, into tariff reductions and investment in new digital services.

3. Fixed radio

A third source of future local competition is expected to come from the operators who will provide services by fixed radio. Three companies have been licensed to date. Ionica was the first company to be licensed to provide services to residential and small business customers by fixed radio link. Ionica should begin offering services next year, with national roll-out over the following two to three years. Liberty, the second, was licensed earlier this year and a third, Atlantic Communications, is to provide services by fixed radio in the Glasgow/Strathclyde region, using innovative technology. Others are exploring the possibility of providing similar services. The Government radio is releasing radio spectrum to provide additional services nationally to SMEs and also to extend telecommunications services to customers living in certain rural areas.

In addition to the competition represented by cable, mobile radio and fixed radio there is the prospect of more competition from a growing number of new national and regional Public Telecommunications Operator licensees, including several electricity supply companies, as well as conventional telecommunications companies. These operators plan to provide local links to certain kinds of customers. They will not be operating on the same scale as the cable operators, but could contribute to an increasing range of choice for customers in certain areas.

4. Comment

The lessons emerging from the UK experience are clear. Competition in infrastructure as well as services is essential if customers are to benefit from genuine choice and truly competitive prices. Full competition will not develop with a very limited number of competitors, though this may be a necessary interim step to encourage investment (as with the BT-Mercury fixed link duopoly in the 1980s). There needs to be competition at all levels of the market - local as well as trunk - to generate real choice for residential customers and small businesses.

Developing genuine competition to an overwhelmingly dominant operator is, however, long-term. For example, although in the UK telephone lines supplied by cable operators have more than doubled in the last year, BT still has more than 95 per cent of all residential lines. BT still has huge in-built advantages - an existing local network, a comprehensive customer base and high cashflow from established operations. If competitive infrastructures are to be achieved, particularly in the local loop, the new entrants must be allowed a period to establish their own networks.

UNITED STATES

In the 1970s and 1980s, the United States promoted the development of competitive markets for the provision of long distance telephone services and the manufacturing of telecommunications equipment. This policy was developed and implemented through a variety of measures undertaken by the Federal Communications Commission (FCC) and through the antitrust suit brought by the Department of Justice against AT&T, which then held a monopoly position in local, long distance, and manufacturing markets. This suit culminated in 1982 with the Modification of Final Judgment (MFJ) under which the Bell Operating Companies (BOCs), providers of local exchange service in most markets in the United States, were separated from their parent AT&T, which continued to manufacture equipment and provide long distance service. The BOCs, which were and are the largest providers of local telephone service, were not permitted to provide long distance service or to manufacture telecommunications equipment, because of concerns that they could impede competition in those markets through their control of their local monopolies.

In the decade since implementation of the MFJ, residential long distance prices have declined in real terms by well over 50 per cent, construction by private companies of four competing fiber optic networks was completed (these networks also serve now as the backbone of the Internet in the U.S.), and there has been a wave of new products and services reflecting not only innovation but also better quality. Not only has this cheaper service and better quality led to vastly increased use of long distance by consumers, but in 1994 more than 25 million residential customers changed long distance carriers -- reflecting real choice in the marketplace. There are literally hundreds of facilities-based long distance providers or resellers active in the U.S. marketplace.

1. State Efforts to Promote Local Telecommunications Competition

Following on the success in developing competitive markets for long distance services and equipment manufacturing, the United States is now seeking to introduce competition in the provision of local telecommunications services. For most of this century, local telephone service in the United States has been provided by monopoly carriers: local exchange carriers (LECs) have provided service to all customers, residential and business, within their respective service areas, without any wireline competition, and have been overseen by state and federal regulators. While this paradigm is still predominantly true, various technological and regulatory developments suggest the possible erosion of the LECs' monopolies in the future. Technological developments include the continued expansion of the wireless market, the entrance of competitive providers of local exchange and access services, and the possibility of provision of local telecommunications service by cable television providers. While there remains substantial uncertainty about the speed and extent to which competition will emerge, there is a consensus that competition in the provision of local telephone service would be desirable.

In recent years, several States have revised their regulation of local telecommunications services in order to foster the development of competition within their markets. For example, in 1994 the New York Public Service Commission (NYPSC) approved an Open Market Plan originally proposed by Rochester Telephone whereby Rochester split its operations into wholesale and retail offerings. The wholesale operation provides local telephone service on a wholesale basis to Rochester's own retail operation and to competing providers, which resell the wholesale service to end-users. The NYPSC also has instituted several regulatory proceedings to promote competition by, among other things, requiring the

unbundling of the local telephone network and establishing reciprocal compensation between competitive LECs for the completion of each others' traffic.

California, too, decided to open its telecommunications markets to competition and adopted a 1997 deadline for completing this process. California will be open to new competitors providing local service as well as additional competitors providing interexchange service. The California Public Utilities Commission is to determine the terms of fair unbundling and interconnection to the local exchange.

Two other states, Illinois and Michigan, also reformed their regulations to promote competition in local telecommunications. These efforts had prompted the Department of Justice to recommend a limited waiver of MFJ restrictions, to permit Ameritech (the BOC providing local service in those states) to provide long distance service on a trial basis. (This proposed trial has now been rendered moot by the passage of the federal legislation described below.)

Other states have followed the lead of these states to facilitate the development of local competition. Forty-four states have authorized switched local competition or have proceedings pending to do so. Thus, throughout the United States, significant progress has been achieved in defining and implementing the conditions needed for local competition.

2. Federal Regulatory Reform

On February 8, 1996, President Clinton signed into law the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("Telecommunications Act" or "Act"). The Act sets long-range national policies for the telecommunications industry, building upon the tremendous success of the MFJ. The Act is designed to foster fundamental and procompetitive changes throughout the telecommunications industry: it seeks to open all communications markets, including local exchange services, to more competition, and it preempts state entry barriers, so to limit the ability of a state to prevent competition in telecommunications.

The Act encourages the development of local competition in a variety of ways. Section 251 of the Act, among other things:

-- requires all telecommunications companies to allow other carriers to interconnect with their network. Interconnection of networks is necessary to allow competing carriers' customers to call and to receive calls from the LEC's customers. As the carriers complete each others' calls, each may be compensated for the service it provides the other in "terminating" or connecting the incoming call to its own customer. The amount of or mechanism for calculating this reciprocal compensation is a significant part of the entire interconnection arrangement.

-- requires all LECs to permit resale of their services. Resale of LEC services may be a means of quick entry by competitors. The Act requires incumbent LECs to provide wholesale rates to these resellers, defined as retail rates less costs avoided by the LEC in selling to the reseller rather than the end-user.

-- requires number portability (which allows customers to retain the same phone number when changing between local service providers). Number portability is significant to customers, particularly businesses, who have an investment in their phone number and who may be reluctant to change service providers if they must also change their phone number.

-- requires dialling parity. Dialling parity will ensure that customers are not discouraged from using an alternative carrier by having to dial extra digits to reach that carrier. (Dialling

parity may be achieved by having customers presubscribe to the carrier to whom they wish their calls routed.)

-- requires LECs to provide access to rights of way, which will facilitate the construction of competitive networks.

Section 271 of the Act governs BOC entry into long distance markets. Under the Act, a BOC may provide out-of-region and certain incidental long distance services immediately. In order to provide long distance services originating within their service area, however, the BOCs must obtain authorization from the FCC. In order to grant such authorization, the FCC must find that the BOC has complied with fourteen-point competitive checklist[1] either by agreement with another facilities-based carrier providing service to residential and business subscribers or by tariff (either of which must be approved by the state) and that the BOC entry is consistent with the public interest. The BOC must also comply with separate subsidiary requirements. The FCC must consult with the Department of Justice, and give substantial weight to the Department's views.

With respect to conduct occurring after its enactment, the Act supersedes the MFJ. Accordingly, the Department of Justice has moved to formally terminate the MFJ.

3. Other Factors in Local Telecommunications Competition

Wireless telecommunications services continue to experience strong growth in the United States. These services first came into widespread use in the 1980s, when the FCC awarded two licenses in each local geographic area for the use of spectrum to provide "cellular" telephone service. One of these licenses was awarded to the wireline LEC servicing the area (for most areas, one of the BOCs); the second license was awarded to another firm. The largest cellular providers today are the BOCs (operating both within and outside of their wireline service areas) and AT&T (through its recent acquisition of McCaw). There are now more than 24 million cellular subscribers in the U.S.

The FCC is in the process of licensing additional spectrum for wireless communications services, including "Personal Communications Services" (PCS). PCS providers are expected to offer cellular-like services when they enter the market, in 1996-97. Their entry is expected to substantially increase the capacity for wireless communications.

For a variety of reasons, including price and quality, wireless services are generally used as complements to, rather than substitutes for, wireline telephone services. However, the allocation of additional spectrum capacity, improved technology, and increased competition as PCS providers enter the market are expected to lead to continued expansion of wireless services.

Note

1. The fourteen-point competitive checklist requires the BOC to make available: (1) interconnection, (2) nondiscriminatory access to network elements, (3) nondiscriminatory access to pipes, conduits and other rights of way, (4) unbundled local loop, (5) unbundled local transport, (6) unbundled switching, (7) nondiscriminatory access to 911, directory assistance, operator call completion, etc., (8) white pages directory listings, (9) nondiscriminatory access to telephone numbers (until this responsibility has been reassigned), (10) nondiscriminatory access to databases and signalling for call completion, (11) interim number portability (until true number portability has been ordered), (12) local dialling parity, (13) reciprocal compensation (bill-and-keep is not precluded), and (14) wholesale rates for resale of services.

COMMISSION OF THE EUROPEAN COMMUNITIES

In its December 22 1994 resolution the Council agreed with a time-table for opening up telecommunication infrastructure to competition.

According to the time-table set out in its Communication of 3 May 1995 on the "consultation on the Green Paper on the Liberalisation of Telecommunications Infrastructure and Cable Television Networks" (COM(95) 158 final), the Commission has tabled three Directives in order to match the deadlines set out in the Council Resolution.

1. The opening of alternative infrastructures

An essential aim of these measures is to lift the current restrictions on the use of alternative infrastructures. It is crucial that operators of such infrastructures enter into the telecommunications market to guarantee effective competition in 1998. As shown in particular by the UK experience, the introduction of competition in voice telephony and facilities appears much more difficult than in new markets such as mobile communications. Since the profitability of new entrants will to a large extent be determined by interconnection rules and possibility of access to public and private land - i.e., by the concerned Member State - operators of already authorised alternative networks could have assets (and in particular their strong links with the government) that new entrants would lack.

The aim of favouring the entry of providers of alternative infrastructures in the telecommunications market, is reflected in the following three (draft) Directives amending Commission Directive 90/388/EEC on competition in the markets for telecommunications services [See OJ C 76/8-12, 28 March 1995; C 197/5-11, 1 August 1995 and C 263/6-17, 10 October 1995]. It concerns:

-- the use of cable television networks for the provision of already liberalised services (this covers voice and data services for corporate networks and closed user groups[1], as well as all other telecommunications services, other than the provision of voice telephony services to the general public), which Member States are requested to authorise under the Directive adopted by the Commission on 18 October 1995;

-- the use of own - including micro-waves - and already authorised infrastructures, for the provision of mobile and personal communications as from 1 January 1996, which is included in the draft directive of 21 June 1995..

-- the lifting of restrictions on the use of all authorized networks (other than cable TV networks) for all liberalised services other than mobile and personal communications, which will be required by the Directive regarding the implementation of full competition in telecommunications markets.

Subject to the global safeguard during this first stage of excluding provision of public voice telephony via these networks, studies carried out indicate that any impact on the revenues of Telecommunications Organisations would be gradual and limited. It should be noted in this context that Directives already in force require the Telecommunications Organisations to orient provision of their infrastructures (in particular leased lines) towards costs and therefore re-enforce their position with regard to any price competition by alternative providers[2].

The first of the measures listed is the most important since in the medium term, cable television networks will remain the only alternative to the networks of the telecommunications organisations for the delivery of telecommunications services to the final users.

The situation where telecommunications operators also control cable television networks or plan to pre-empt the development of such networks by potential competitors is therefore also of particular concern for the Commission. Complaints were lodged to the Commission by smaller cable operators against Telecommunications Organisation regarding their practices in the cable television market. Requests for information were sent regarding the plans of other telecommunications organisations to start providing cable television services.

In certain Member States, there is also a tendency for municipalities to enter into the market for local telecommunications infrastructure provision.

2. The introduction of full competition

The 19th July 1995 Draft Commission Directive amending Commission Directive 90/388/EEC, regarding the implementation of full competition in telecommunications markets sets out the framework for the overall reform process in the EU Member States up to 1998:

-- the lifting of all remaining exclusive and special rights in the sector, in particular for public voice telephony and network infrastructure at the latest on 1 January 1998, with additional transition periods for Greece, Ireland, Portugal and Spain;

-- limitation of the conditions which can be included in national licences. The draft directive stipulates that, as regards voice telephony and the provision of public telecommunications networks, Member States may include in licensing or declaration procedures only those conditions aimed at compliance with essential requirements as specified in the Directive, public service specifications relating to permanence, availability and quality of service and financial obligations with regard to universal service;

-- a firm time schedule for the required national reforms, in order to allow market participants to plan for market entry.

Member States must :

-- notify required licensing or declaration procedures no later than 1 January 1997 to the Commission;

-- ensure publication of these procedures no later than 1 July 1997;

-- ensure availability of adequate numbers for all telecommunications services before 1 July 1997;

-- publish interconnection terms no later than 1 July 1997.

The Directive was published in the Official Journal for a two month public comment period. Its content could still be altered at the end of this consultation.

Notes

1. Corporate networks are generally networks established by a single organisation encompassing distinct legal entities, such as a company and its subsidiaries or its branches in other Member States incorporated under the relevant domestic company law.

   Closed User Groups (CUGs) refer to entities not necessarily bound by economic links, but which can be identified as being part of a group on the basis of a lasting professional relationship among themselves, or with another entity of the group, and whose internal communications needs result from the common interest underlying this lasting relationship. In general, the link between the members of the group is a common business activity. Examples of activities likely to fall into this category are fund transfers for the banking industry, reservation systems for airlines, information transfers between universities involved in a common research project, re-insurance for the insurance industry, inter-library activities, common design projects, and different institutions or services of intergovernmental or international organisations.

   In the context of the Commission Directive 90/388/EEC of 28 June 1990 on competition in the markets for telecommunications services, individual cases and definitions used in Member States are subject to screening by the Commission. The Directive indeed refers to the public and not to CUG's. The Commission must therefore ascertain that the definitions of CUG by Member States doe not exclude voice telephony between users who have existing common links between themselves, such that they could not reasonably be regarded as being members of the public (i.e., any random person, without distinction of belonging or membership).

2. As regards satellite communications, the studies find very minor potential impact on the revenues of the Telecommunications Organisations. As the satellite market constitutes less than 0.3 per cent of the total expenditure on corporate communications, this would indicate the limit of potential losses to the incumbent TOs.

   As regards the use of own or third party transmission infrastructure for mobile communications (e.g. linkage of radio-base stations and switching centers) the effect on incumbent TOs' revenues is expected to be very limited, once cost-oriented agreements on provision of leased lines and interconnection are put in place between mobile network operators and the incumbent TOs, as required by the Mobile Green Paper and strongly supported in the broad consultation now being concluded. This is confirmed by the experience in all those Member States where the provision of own infrastructure has been authorized to date.

   As regards corporate and closed user group networks, Directive 90/388/EEC on competition in the telecommunications markets and Directive 90/387/EEC on open network provision, already require that access to TO infrastructure should be cost-oriented. Directive 92/44/EEC requires in particularly that leased lines must be offered on a cost-oriented basis. Given this obligation, and, given that Member States must comply with it anyway, the opening of alternative supply is not expected to alter the market position of TOs in this area substantially.

   The potential direct revenue effect (i.e., on the revenues derived currently by TOs from leased line revenue) can be expected to be very limited given that the total share of leased line revenues as a percentage of total TO revenues in the Union is less than 6.5 per cent. As regards indirect revenue effects on the TOs in the corporate communications and closed user group markets, while those markets are substantial, it is expected that only a small part of these markets would be exposed to competition, and therefore indirect revenue effects would be very limited, given that the TOs will maintain a very strong market position, as they adjust prices in these areas towards costs, in line with their existing legal obligations.

The effect would therefore be limited and gradual, as also confirmed by experiences in those Member States where alternative infrastructure provision is already taking place, as well as experiences in other parts of the world, such as in the United States, Canada and Australia. In the London City area, where one would expect the effect of competitive entry in the corporate networks market to be at its highest, the leading alternative infrastructure provider has managed to claim only 1.2 per cent of the business services market.

SLOVAK REPUBLIC

Telecommunications is generally regarded as one of the most dynamic parts of the infrastructure that directly influences private sector development. The current telecommunications regime in the Slovak Republic proceeds from the former planned economy and from the decisions of former federal authorities before the break-up of Czechoslovakia. Telecommunications in the Slovak Republic is provided by the United Telecommunications Network, owned by the state. The management of the telecommunications network is entrusted to Slovak Telecommunications, a state enterprise, on the basis of the 1964 Law on Telecommunications, amended in 1992 and 1993.

At present, the new law on telecommunications is being prepared. It will take into consideration the European Union recommendations contained in a recent White Paper. The new law will provide the juridical skeleton for the liberalisation process and the regulatory regime.

1. Market structure

Slovak Telecommunications, s.e., exclusively provides the following services:

-- voice services (telephone) except public mobile telephone,
-- text services (public telegraph, telex),
-- document services (postfax).

Moreover, Slovak Telecommunications provides data transmission services. IBM has the license, valid since the preceding period, to operate the data transmission network. From 1991 to April 1996, EUROTEL, the joint venture of Slovak Telecommunications (51 per cent) and US WEST and BELL ATLANTIC (49 per cent), has the license to provide services on the mobile telephone network and the public packet switched data network. The tender for granting new licenses for the provision of these services is being prepared and there is a presumption that two licenses will be granted. (Mobile telephone services are currently limited by the lack of free frequencies because the majority of usable frequencies are reserved to the army and the Home Office for five to ten years. However, a revision of the frequency allocation is being prepared.) In addition, twelve licenses for satellite communication services have been granted.

2. Regulatory regime

The central body for the communications sector is the Ministry of Transport, Post and Telecommunications of the Slovak Republic (MTPT). It is the founder and ultimate manager of Slovak Telecommunications and the regulatory body for the Unified Telecommunications Network. It also manages the use of the frequency spectrum for all branches of the national economy. MTPT directs the Telecommunications Office, which is the regulatory authority for those sectors of telecommunications which are not controlled by MTPT. However, the budget of the Telecommunications Office forms part of the budget of MTPT and its director is appointed by the Minister.

Exclusive rights are issued in the form of licenses according to the Law on Telecommunications as amended in 1993. MTPT issues the licenses for providing public services and operating the public network. The Telecommunications Office issues licenses for using frequencies and frequency ranges,

licenses for installing and using transmitting radio equipment, licenses for installation, connection and operation of telecommunications equipment by other operators and licenses for providing telecommunications services, the establishment and use of transfer lines and equipment for phone services outside the Unified Telecommunications Network.

The procedure for granting these licenses follows generally compulsory instructions, which guarantees equal conditions for all applicants. A 15 per cent preference rule for domestic firms is applied at the tenders. Simple repeated sale of a license is not permitted.

The quality of service is monitored by the local branches of the Telecommunications Office. Customer claims are resolved by Slovak Telecommunications, s.e. If a customer is dissatisfied, he can appeal to the Telecommunications Office or MTPT, who will issue a decision in a regular proceedings.

Since 1991 the markets for telecommunications terminal equipment and the construction of telecommunications networks have been fully liberalized. (Licenses for terminal equipment require a guarantee of safe operation.) Services in the public radiotelephone network, public packet switched data networks and paging systems have being supplied by various companies with foreign capital participation.

3. Regulation of tariffs

According to existing legislation, the Ministry of Finance determines tariff policy and regulates the tariffs of exclusively provided services. At the moment, tariffs are subject to a price cap. This regulation applies to value added services for telephones, telegraph and telex, leasing radio bands, radio broadcasting by wire and by cable, and data transmission in communication services providing to individuals and legal persons. The price of mobile telephone services provided by EUROTEL is not regulated.

Since 1 July 1995, the Ministry of Finance has approved the changes in the tariffs suggested by Slovak Telecommunications, s.e. These changes correspond to cost calculations. They have resulted in an increase in the tariff for local calls, a slight increase in the tariff for inter-city calls and some decrease in the tariffs for international calls.

4. Plans for liberalisation and expansion of the network

The schedule of gradual liberalization of all telecommunications services is being prepared and will be realized during 1995, except that voice services (telephone) is scheduled to be liberalized in 2002, after the requirement of 30 main lines per 100 inhabitants has been met. New licenses for the telecommunications services will be issued according to schedule in 1995-1996.

Exclusivity in providing telephone services through the fixed infrastructure is conditioned on the network covering the entire territory of Slovakia. In the new licenses, there will be a requirement that the licensee cover the entire territory of Slovakia. The objectives of the Telecommunications Project I and the Telecommunications Project II are:

- digitalization of a minimum 70 per cent of the total network capacity by the year 2000,
- attain telephone density of 30 main lines per 100 habitants (50 lines per 100 inhabitants in urban areas) by the year 2000,
- the ability to install a telephone line within one month from the date of application by 2000-2005,
- the full digitalization of the network and attain telephone density of 40 main lines per 100 inhabitants in 2006-2010.

Equal quality and price level throughout all regions of the Slovak Republic is a necessary condition for providing telecommunications services. This requires modernization of the telecommunications infrastructure. The necessary resources can be obtained from internal sources (55 per cent) as well as from loans from foreign banks and credits from technology suppliers. During 1993 the government signed several guarantee contracts for loans for telecommunications development. Regarding the requirement of the investment return guarantee, the transformation of Slovak Telecommunications, s.e., into a wholly state-owned joint-stock company is planned. (The Law on Securing the State Interests in Privatisation of the Strategically Important State Enterprises and Joint Stock Companies, passed in September 1995, prohibits the privatisation of the state property that is entrusted to Slovak Telecommunications, s.e.)

5. Privatisation

The Antimonopoly Office has worked out a method of privatisation based on "spin offs". Units that can be effectively exposed to competition because of their economic and technological conditions may be separated and sold to or managed by local investors.

The Antimonopoly Office has another proposal in the area of telecommunications services. Specified licenses could be completely or partially sold in auctions. If the auction sales were efficiently exploited, both state budget revenues and competition would probably be enhanced. Given that the state has an interest in using other criteria in addition to price for the choice of the license owner, a multicriterial rating -- with the weights determined in advance -- can be applied. In addition to the above-mentioned advantages, such a solution would make the whole process of license granting more transparent and would lower the probability of scandal.

AIDE MEMOIRE OF THE DISCUSSION

Note by the Secretariat

Antitrust and regulation (institutional aspects)

The delegate from Germany said that, during the last few years, Germany has taken the first steps toward deregulation and liberalisation in telecommunications resulting in the beginning of competition. *DeutscheTelekom* continues to hold a monopoly on voice services and the network. This may change in connection with the *Atlas* case (a proposed joint venture between *DeutscheTelekom* and *France Telecom*), which the European Commission has announced it would approve provided certain conditions were met, among them that alternative infrastructures were liberalised in 1996. Energy supply companies are especially eager to enter telecommunications markets and use their own networks.

A discussion of the draft telecommunications law is in the note. One issue is whether a sector-specific regulator is necessary or advisable. In the special abuse provision of the draft bill, the 25 per cent threshold has been removed and dominant companies will be under a special abuse control if their dominance is ascertained under the *Act Against Restraints on Competition*. The interconnection obligation has been expanded to apply to all suppliers of public services and not only to market-dominating companies. The relationship between the sector-specific regulator and the Federal Cartel Office remains undetermined. It remains to be determined whether the Federal Cartel Office can use its powers against abuse of dominance to facilitate market entry. Currently, these provisions are focused more on preserving existing competition. The personnel of the new regulator will probably be drawn largely from the personnel of the old Ministry for Postal Services, which controlled the former state company.

The delegate from Australia said that there will be no longer be a telecommunications sector-specific regulator in Australia but rather that competition in telecommunications would come under the general competition regulator. Before 1990, there was only one telecom supplier, *Australia Telecom*. The government decided to have a phased move toward competition. A private competitor (*Optus*) in fixed services and cellular services, and a second private competitor (*Vodafone*) in cellular services were licensed. Austel, an independent regulator, was created. The general competition law applies and there are also competition provisions in the *Telecommunications Act*, applied by Austel, that apply to the former telecommunications monopolist. These provisions basically relate to price discrimination and withholding of service provision. *Telecom* is subject to price-cap regulation, where the cap on its annual price increase is RPI-5.5 per cent.

The government recently announced that these interim arrangements will end in 1997. In 1997, anyone who meets certain minimum technical requirements will be able to become a telecommunications carrier. Austel will cease to be a competition regulator, with those functions transferred to the Australian Competition and Consumer Commission. The general competition legislative provisions and two additional provisions -- relating to discrimination in tariffs and to abuse of substantial market power -- will apply to telecommunications carriers generally, i.e., to any which has a substantial position in a telecommunications market. The former telecom monopolist is expected to retain a substantial market position in most telecom markets for the initial years of free and open competition. Therefore, the special competition safeguards provisions in the general competition law were inserted. Those provisions are expected to be used with diminishing frequency.

After 1997, there will be a general price cap regime of RPI-7.5 per cent along with some sub-price caps operating under the general regime. The Australian experience with price capping in markets with

limited competition since 1992 has been that price caps act more as a safeguard and have often been non-binding.

The delegate from Canada said that Canada began the process of regulatory reform in telecommunications with nine regional and provincial carriers which had been subject to both federal and provincial regulation. Now, telecom regulation is consolidated at the federal level under the Canadian Radio-television and Telecommunications Commission (CRTC). The 1993 *Telecommunications Act* gives the CRTC broad regulatory powers but it is required to rely on market forces to the maximum extent possible and to forbear from regulation where competition has sufficiently developed to protect subscribers. Under the *Competition Act*, the Director of Investigation and Research of the Competition Bureau has special powers to intervene before federal and provincial regulatory boards and agencies. This power has been frequently used before the CRTC in order to promote competition and least-intrusive-of-competition regulation. In 1991-1992, the Director recommended open market competition and open entry in long-distance telecom. He also recommended eliminating rate-of-return regulation in favour of price caps, opening local markets to competition, and a test for the exercise of the CRTC's forbearance power. In 1995, the Director argued for open competition in broadcasting and no mandated period of protection for the cable industry. Now, work is underway on rate rebalancing, the details of developing local competition and the implementation of the price cap regime.

Where there is specific regulation of particular conduct, that conduct is beyond the reach of the *Competition Act*. While this is not in the *Act*, it is in the jurisprudence and the Director is governed by it in enforcement. Furthermore, the CRTC has its own regulatory safeguards for competition. Nevertheless, the Competition Bureau has been active with respect to opening the yellow pages industry to competition and obtaining access to support structures (telephone poles, conduits, etc.) for cable companies wishing to lay fibre optic cable to compete with the telephone companies.

The Canadian delegate sees the role of the regulator as evolving away from tariff-setting and approval of qualifying services towards facilitation of entry and competition as it increasingly exercises its forbearance powers. It has already forborne to use its powers with respect to cellular services and terminal equipment. This increases the scope of application of the competition law.

The delegate from the United States said that the independent regulator, Federal Communications Commission (FCC), focuses principally on interstate and international issues, with responsibility for broadcasting, long distance telecom, cable rights, satellites and wireless markets. The FCC recently played a major role in auctioning off spectrum rights. Most often the FCC applies a broad "public interest standard" which includes promotion of universal service and some competition considerations. There is a public comment process, in which the antitrust authorities have often participated by sending comments.

The fifty states regulate local telecom -- determining whether competition will be allowed and what pricing regulation to apply -- and some aspects of cable television (CATV). One of their principal concerns is universal service and another is, increasingly, local competition.

The Department of Justice and, to a certain extent, the Federal Trade Commission, have had a major impact on the development of communications policy through the application of the antitrust law through enforcement actions that led to the breakup of the monopoly Bell System in the early 1980s and through merger policy, e.g. the consent decree on *GTE* (a large local exchange company). The FCC has a role in merger policy because the communications law restricts certain types of cross-ownership. Hence, a great number of merger transactions are never proposed.

The delegate from France said that France is about to enter an active phase of opening telecommunications to competition. Currently, all services except public voice telephony is open to competition and there are many authorised operators. Nevertheless, *France Telecom* retains an absolute

monopoly on fixed infrastructure and, with the exception of cellular telephony and international services, competitors to *France Telecom* have only marginally penetrated the market.

At the occasion of the examination by the European Commission of the proposed *Atlas* venture between *France Telecom* and *Deutsche Telekom*, the French Minister of Telecommunications announced that alternative infrastructures would be liberalised as of 1 July 1996. Anyone wishing to be an operator of the liberalised services could install the corresponding infrastructure, including use of public facilities, pursuant to the conditions provided in the law.

Pursuant to a decision of the European Commission, all telecommunications services and infrastructures will be open to competition as of 1 January 1998. This includes the removal of all regulatory barriers to entry. To prepare for this change, relevant draft laws will be presented to Parliament in the first part of 1996 and a group of experts has been formed to propose the future form of regulation and to consider interconnection tariffs and means of financing universal service.

It is known that lifting legal barriers to competition is not, itself, sufficient to instantly create sufficient *de facto* competition. In sectors with natural monopoly, scale effects may create significant entry barriers. Also, there is a need to take account of network effects when balancing competition against productive efficiency. It is therefore necessary to determine the interconnection conditions that will guarantee the creation of effective competition in conditions compatible with economic efficiency. To do this, it seems necessary to have two regulations:

-- Upstream from the operators, there must be a new regulation to safeguard or organise new entry and, in particular, to regulate the relations between the incumbent *France Telecom* and the new entrants.

-- Downstream, there needs to be a system of surveillance of the operation of the market based on ordinary competition law. This would mean making a clear division between regulation and market surveillance on the basis of competition law and ensuring an adequate degree of co-operation between these two forms of regulation.

For the French delegate, it seems that the purpose of regulation, perhaps for a transitory period, is to make competition emerge where it otherwise would not due to legal barriers or to structural constraints such as scale or network effects or the rarity of certain resources.

Regulation with two objectives (to develop effective competition and to ensure economic efficiency) should therefore define access conditions both to service markets and to infrastructure. It should assign, where necessary, specific rights and should organise the finance for universal service. Certain of these measures differ from those typically used by competition authorities, not only in being taken *a priori* rather than *a posteriori* but they may diverge from the usual principles of competition law. For example, it may be necessary to have a "positive discrimination" of access to a network that is managed as a monopoly or to an essential facility in order to facilitate entry of new operators. Or it may be necessary to impose on the incumbent operator specific obligations since the network remains an essential part of the service provided.

At the same time, it is necessary to know where and when to end this specific regulatory mission. For example, when the resource is not rare, scale effects are not large or consumers are sufficiently satisfied, then it is not necessary to have market access limitations because the market mechanism should be able to do this.

It is necessary to provide for the intervention of competition authorities in defining the scope of activities subject to specific regulation and the scope of activities subject to the general competition laws, as well as determining the access conditions to rare resources. French competition law already provides

for obligatory consultation of the Competition Council when a regulatory regime would have the effect of restricting competition. Requiring that all regulations assigning rare resources or limiting access to certain networks (in ways which have long-term structural effects on markets) be submitted to review by the Council is being considered. It is felt that competition law should control competition wherever that is possible. The administration is convinced that the existing jurisprudence on the abuse of dominance is adequate to ensure a satisfactory functioning of the telecommunications markets. Consequently, it seems that even if a distinct telecommunications regulator is created, it should not replace the powers given to the Competition Council. It is thought that such a specific regulatory body should itself be able to refer cases to the Competition Council.

The delegate from Ireland said that, historically, state-owned *Telecom Ireland* had a reserved monopoly in telecom. Recently, some competition has been introduced in international services and, yet more recently, in long distance services with two additional operators using leased lines. A second GSM mobile license has been announced. The government is in the process of partly privatising *Telecom Ireland* and there is discussion regarding the possible establishment of a specialist regulator. While Ireland has a high penetration rate of CATV in urban areas, the majority shareholding of the main CATV companies is held by *Telecom Ireland*.

Consideration is being given to having a single regulatory agency for all public utilities because they seem to involve similar issues and, in a small economy, there would seem to be efficiencies in placing all the specialist regulatory knowledge in one office. The arguments in favour of a specialist regulator are that the necessary information and expertise are specific to the sector and it may be difficult for a general agency or the courts to properly resolve the issues that arise. However, regulation and general competition law are not substitutes and there is a concern about regulatory capture. Further, economic regulation assumes that incumbents would abuse their dominance. If this is so, which guidelines or yardsticks does one use to decide whether regulation or general competition law is the more appropriate regime?

The delegate from Italy said that, until recently, *Telecom Italia* had a statutory monopoly in telecom. This position has been eroded by the Commission of the European Union and the Antitrust Authority. In 1994, regulatory and service provision functions were separated. In March 1995, Italy adopted European Directive 90/388 which liberalises a number of telecom services. A second GSM license was given to a private operator, *Omnitel-Pronto Italia*. A bill now before Parliament could liberalise alternative telecommunications infrastructures as early as 1996. In Italy, these include the networks for electricity, natural gas, highways and railways. There is no CATV in Italy.

Section 8, para. 2 of the *Antitrust Act* states that only conduct which is strictly related to the attainment of specific tasks of general economic and social interest may be excluded from the scope of the antitrust law. However, if it is possible for the firm to perform its assigned tasks by taking alternative measures which are less restrictive of competition, the antitrust legislation fully applies.

The Italian delegate said that telecom-specific regulators should not deal with competition issues; rather, they should be left to competition authorities. He provided an example from 1994 in which *Telecom Italia*, holding a statutory monopoly in local telecommunications, denied access to the local network by *Telsystem*, a private closed user system, for a service that had already been liberalised by EU directive 388/90. Although Italy had not yet adopted the relevant directive, the antitrust authority found *Telecom Italia* guilty of abuse of dominance and forced it to grant access.

The delegate from Japan said that basic institutional reform in telecom in 1985 transformed the former Telephone and Telegram Public Corporation into the current NTT, a private entity, and allowed new entrants to operate in long distance services markets. These markets remain supervised by the Ministry of Post and Telecommunications. Since the 1985 reform, three new entrants (in addition to the incumbent NTT), with a combined market share of almost one-third, have entered the market for long distance or inter-prefectorial services. In international services, there are two new entrants -- with a combined market share

of about one-third -- in addition to the incumbent, KDD. With regard to local, or intra-prefectorial services, which account for about 80 per cent of total telecom businesses, NTT has about a 99 per cent market share. Accordingly, promoting competition in local services is the largest challenge for Japan. One way to promote competition is deregulation. Currently, there are government regulations on entry and charges. The JFTC believes that entry regulations should, in principle, be abolished. Further, according to the JFTC, regulation of services where there already is competition should also be abolished.

Another means to promote competition is the creation of a level playing field. Any competitor needs access to the local network, which is owned by NTT. Since NTT operates both local and long distance services, measures must be taken to create equal conditions for NTT and non-NTT providers of long distance services. Some measures in this direction have already been introduced. One is the "multi-department system," according to which NTT's operations in long distance and local markets have separate accounting and information about customers gathered by the local department is not available to the long distance department. In future, there is a need for more measures in this direction. There have been heated discussion regarding whether NTT should to be divided. The government position is to be finalised by the end of March 1996.

The delegate from New Zealand began by saying that the New Zealand regulatory regime in telecom relies, more than in any other OECD country, on competitive forces to regulate markets. There are no entry restrictions, no industry-specific regulator, no price control except on retail access for domestic consumers, and no exemption from general competition law. Indeed, there have been a number of conduct and merger cases. As a result, key decisions about the industry are made by the players in the market. This regime does not require making any assumptions about the extent of natural monopoly. As this is an industry undergoing rapid change, there is a risk that authorities would make the wrong assumption about the extent of natural monopoly and act to exclude competition from where it would have been possible.

Many theories of regulation are based on the assumption that regulation is perfect or nearly perfect. This assumption is not borne out by empirical evidence. The New Zealand regulatory regime is based on the assumption that there is significant regulatory failure: regulatory creep, regulatory capture and information asymmetries. The government has rejected the idea that industry-specific regulators would make better decisions than those who are in the market. The only regulator is the Communications Division in the Ministry of Commerce, which plays a monitoring and facilitation role.

Given the market power held by *Telecom Corporation of New Zealand*, the sole owner of the public switched network in New Zealand, how do parties actually gain access? First, parties are to try to negotiate on their own. A number of interconnection agreements have been reached in this way, in part because of the other three elements of the regulatory regime. Second, the general competition law deals with exclusionary behaviour. While the law cannot adequately deal with allegations of excessive pricing, it can deal will refusals to supply and constructive refusals to supply. The third element of the regulatory regime is information disclosure requirements. Every three months, *Telecom* must disclose the contents of its contracts, including both standard contract terms and contracts that include discounts of 10 per cent or more from the standard contracts. This is intended to let potential entrants have information about possible profit opportunities in various market segments. The fourth element includes regulation such as price control. This acts as a credible threat.

Regarding monopoly pricing, the New Zealand view is that monopoly profits exist whether prices are regulated or not. New Zealand is concerned about the difficulty of defining the natural monopoly and about regulatory failure. Therefore, it finds its regulatory regime, while perhaps enabling firms to have higher accounting profits, creates superior outcomes

The delegate from the United Kingdom provided a brief history of telecommunications liberalisation in the United Kingdom, benefits that have accrued to date, and the lessons that may be learned from the experience. The duopoly of *British Telecom* (*BT*) and *Mercury* ended after a decision in 1991.

This introduced potential competition in all domestic market segments in the United Kingdom. The cable companies have been most active in responding to the new rules. There are now 126 companies building networks. By August 1995, one million telephone lines were provided by cable companies. Licenses have also been issued for radio-based access.

The United Kingdom's telecom industry has expanded both with respect to the services offered and the volume of business. Investment reached a new high of 4.5 billion pounds in 1994. Mobile telecom had about 4.3 million subscribers in mid-1995. The United Kingdom has the two largest cellular networks in the world. Prices have fallen by 35 per cent in real terms since 1984. *BT* remains very profitable.

In 1984, it had been feared that universal service would be abandoned. In fact, universal service is still guaranteed, phone ownership has increased and subscribers have a choice of service providers. There had been a fear that low-income subscribers would suffer from liberalisation, but all customers have benefited from lower prices and *BT*'s low-user scheme protects the most vulnerable. It had been feared that the *BT* network was a natural monopoly and that competition could not be established. But now there are three competing trunk networks. In the City of London, five firms provide infrastructure. Customers are joining cable networks at a rapid rate.

The lessons to be drawn from the United Kingdom's experience include that competition in infrastructure as well as services is necessary for customers to benefit.

The delegate from the European Commission said that European competition law could be applied at the national level by competition authorities and by the courts. At the Community level, the Directorate General for Competition could propose decisions to the European Commission which, if adopted, would be applicable throughout the Member States. Regulation occurs at the national level but, at the European level, there is no "proper" regulatory body but rather committees in which national regulators are represented. A problem that is occurring with increasing frequency is the existence of parallel procedures in the competition authorities and regulators, whether at a national or European level. These parallel procedures waste resources and time and it seems that a solution should be found to enable one or the other authority to take action.

Two types of cases arise. In one type, an enterprise in a dominant position refuses to sell or manifestly discriminates in a way which completely closes a market to potential competitors and, perhaps, existing competitors. This is an extremely serious type of behaviour that is easy to characterise, and it seems that the competition authorities would be ideally situated to impose a decision and rapidly apply remedies. The other type of case of alleged abuse are cases dealing with access to a network, which could be leased lines, where the issue could be price or other access terms and conditions. Here, it is extremely difficult for competition authorities to take a quick decision, in particular in the absence of historical information on costs and practices. Further, regulators have at their disposal the relevant information to deal with this type of case with minimal delay. It seems that some type of division of labour between competition authorities and regulators would be possible, as well as some mechanism for transferring some of the accumulated knowledge from regulators to competition authorities.

The delegate from Poland summarised recent developments in telecommunications in Poland. The transformation of *Polish Telecom* began with the separation of post from telecom. The telecom part acts in a commercial manner, but the government is sole shareholder and it is controlled by the Ministry of Communications. A majority-owned subsidiary of *Polish Telecom*, the holder of the initial mobile telephone license, was forbidden to bid for either of the two additional mobile telecom licenses. Local telecom is open to new competitors, but *Polish Telecom* has tried to use technical conditions of connection as a barrier to entry. *Polish Telecom* retains a monopoly in international calls.

The delegate from Switzerland summarised the situation in Switzerland. The PTT retains a monopoly in fixed network and for voice telephony. A new telecommunications law in 1992 opened some

markets to competition, e.g. the markets for customer equipment and services like data transmission, mobile communications and value-added services.

In the equipment market, it was easy to create fair "rules of the game." Prices fell and customer choice increased. In services, competitors to *Swiss PTT* have taken a long time to establish themselves and have confronted problems like high tariffs for leased lines and abuse of market power. The regulatory body created at the same time as the law has few instruments for intervention and the general competition authority has not been very helpful. Competition in services is not developing as was hoped and private users do not get many benefits.

Switzerland is preparing a new law which is intended to open up telecommunications markets to competition. In building the new framework, the competition rules especially regarding interconnection are crucial. The competition authorities believe these rules should be based on commercial contracts and that the obligation to interconnect should be imposed on market-dominating operators. They see sector-specific rules as a complement to the general competition rules. The competition authorities are aware that the burden of regulation must be reasonable to allow market entry. They are in favour of an independent telecom regulator, which must share its task with the competition authorities.

The Korean delegate reported on the state of competition and the regulatory regime in Korea. There is competition in international and long-distance markets. There will be facilities-based competition in the long-distance market. There is no competition in local markets and none is expected in the near future because CATV is at an infant stage in Korea and broadcasting industry regulations make it impossible for a CATV company to enter the telecommunications market. In mobile telephony, there is one analogue network and another firm has a license to operate a digital network and is expected to begin service in 1996.

The government of Korea plans to extend competition in the future. In 1996, a third license for international services, two or three licenses and associated spectrum for PCS and another CATV operating license will be given out. More licenses for domestic long distance services are expected in the near future.

Twenty percent of the shares of *Korea Telecom* are in the hands of the public and total privatisation is under consideration. The Ministry of Information and Communications has virtually all the authority to regulate the telecommunications industry on a broad range of items: licenses, spectrum allocation, tariffs, access charges and universal service obligations. However, the Korean Fair Trade Commission is consulted in advance on laws and decrees that restrain competition.

The delegate from Korea notes that the benefits from competition come not from having "more firms" but from having more profit-seeking firms in competition. He asked why a public enterprise would seek lower costs under a price-cap regime.

The delegate from Norway said that the Norwegian telecom sector is being deregulated and will probably be entirely deregulated by 1998. A new telecommunications act comes into effect 1 January 1996. Under this act, the former regulatory body will be given new powers including the power to act as a competition authority. There will be parallel competence with the general competition authority and an agreement has been reached with respect to procedures.

The French delegate said that France had not yet taken a position regarding the choice between a specialist regulator and coverage by the general competition law. In his view, a specialist regulator is possible, and perhaps necessary, if the purpose of the regulation is to create competition as quickly as possible, for example, if different obligations have to be imposed on different categories of operators or if network access price and terms need to be fixed to permit the most rapid entry by new operators, or if the effects of large scale need to be counterbalanced to make a monopoly infrastructure open to entry by

smaller operators. On the other hand, if regulation prevents the results that competition could create on its own, then specific regulation is undesirable.

The delegate from Australia responded to the Korean delegate's question by saying that government business enterprises are corporatised and have rate of return on assets objectives and a requirement to pay annual dividends to the government "as a shareholder." Capital requirements must be financed by retained earnings or borrowings in the capital markets.

Responding to a question from the Spanish delegate, the Australian delegate said that Austel has arbitration and mediation powers. In the initial stage, the Minister, on advice of the regulator, determined the access price. After *Optus* acquired a certain market share, the access price was determined through commercial negotiation between *Optus* and *Telecom*. If they could not reach agreement, Austel can arbitrate and determine the price. That power will shift to the general competition authority.

Responding to a question from the Chairman, the delegate from Australia said that the personnel of Austel who currently deal with competition matters will go into the general competition authority and the personnel who currently deal with technical matters will be combined with other technical regulators. In this manner, regulation will be technologically neutral without distinct regulation or regulators for telecom, broadcasting and radio communications. There will be unified regulators for each of competition, content and technical matters.

The delegate from New Zealand responding to a question, said that there is a universal service obligation in New Zealand. When *Telecom* was privatised, the crown retained a single share, the "Kiwi share," which imposes upon *Telecom* certain obligations with respect to its domestic telecom services. *Inter alia*, it is required to maintain a local free calling tariff option, to restrict the rate of price increases for standard residential services to the rate of inflation, to maintain the extent of the network to that which it had when it was privatised in 1990, and to ensure that rural rentals do not exceed the standard urban rental rate.

There is no transparent process for calculating the costs of these various obligations, which raises the possibility of cross-subsidies and the potential implications that has for competition. The subsidised services may not experience entry by a more efficient firm and the subsidising services may attract entry from a less efficient firm. Furthermore, the "Kiwi share" obligations complicate negotiations between *Telecom* and potential entrants because there is an information asymmetry. This is currently under study, and one view is that increased transparency is unlikely to have a significant effect because common costs are so large relative to the incremental cost of a service that an arbitrary allocation of the common costs would not be very helpful. There is strong public support for the "Kiwi share" obligation even though they cause competition problems in the markets.

The Australian delegate, responding to a question about the incentive mechanism that is applied when rate of return goals are not met, said that the requirements on government business enterprises are agreed between the senior management of the enterprise and the government on a rolling 3-year basis. *Telecom* has not failed to meet those requirements. He suspects that if they did fail, absent a good explanation, the senior management might lose their jobs.

The delegate from New Zealand, characterising the ACCC as a "super regulator" and noting that recent amendments to the law created an essential facilities regime, queried whether a monopoly was being created.

The Australian delegate said that this issue has been raised in public discussion. The attempt was made to limit the facilities that would potentially be subject to the ACCC access regime. The system emphasises commercial negotiation even if the facilities come under the access regime. The regulatory

regime traded off the danger of concentration of power to regulate competition against the advantages of consistent competition policy across sectors. The new competition regime comes into force in three stages:

-- changes in the existing laws governing market conduct (August 1995);

-- new access regime and new competition institutions (November 1995);

-- extension of the coverage of the competition law to those areas of the economy to which it does not currently apply (basically state government enterprises and the unincorporated sector) (July 1996);

-- Competition in long-distance and local telecom.

The Finnish delegate said that, in Finland before total deregulation at the beginning 1994, there were almost 50 local operators -- of which 46 were subscriber-owned companies -- and state-owned *Telecom Finland* had some local areas as its local monopoly. In 1994, local monopolies were abolished and local operators were licensed to offer long distance services throughout Finland. The result has been dramatic changes in market shares: *Telecom Finland* had had almost 100 percent of the long distance market; after one year it was less than 50 percent. Local companies that have a jointly-owned long-distance carrier have about 70 percent of subscriber lines. The price level has decreased since the onset of competition. However, the long distance tariffs and some international tariffs charged by *Telecom Finland* and the *Finnet Group* have been the same for almost a year. This may not be a cartel but a duopoly situation because the third operator -- *Telivo*, owned by the state energy company -- had been subject to, until August 1995, a market share limit of 5 percent.

The other entrants are primarily service providers and resellers. The new *Telecommunications Act* will enable such firms to act without an operating license.

The delegate from New Zealand said that there have been two main entrants into long distance telecom. *Clear*, in the market just over four years, has a toll bypass operation and has 22 per cent of the domestic toll market and 23 per cent of the international market. *BellSouth* has entered the cellular market with GSM technology but has a vision to operate a fully integrated telecommunications business. It has made the largest infrastructure investment in New Zealand over the past twelve months. *Sprint* and *KallBack* have both entered the international toll market.

Local competition has not yet begun, largely due to the protracted dispute between *Telecom* and *Clear* over interconnection. (*Clear* has its own network but it is smaller and simpler than *Telecom*'s so it remains dependent on interconnection with *Telecom*'s network.) As it became clear that the parties would not reach an agreement on their own, the Minister of Commerce said that the government might impose price control. This speech enabled the parties to reach the outline of an agreement on a range of interconnection issues. There have been concerns about the length of time taken to reach agreement.

The Japanese delegate said that the interconnection policy in Japan had three main aspects:

-- the realisation of various interconnection agreements through carriers' initiative;

-- the provision of safeguards for cases when carriers' negotiations for interconnection have failed;

-- ensuring fair conditions for interconnection.

The incumbent carrier, *NTT*, remains overwhelmingly dominant, so it is difficult for new common carriers to negotiate with *NTT* on an equal basis. Each carrier may ask the Ministry of Post and

Telecommunications to order the other carrier to interconnect. Each carrier may also ask MPT to arbitrate disputes regarding interconnection terms and conditions. Third, to ensure fair conditions for interconnection and to realise the gains from fair and effective competition, interconnection charges must be cost-based and there must be no discrimination in interconnection terms and conditions.

The most important interconnection issues have to do with *NTT*'s local network where it is almost a monopoly. Therefore, *NCC* cannot provide services without connection with *NTT*'s local network. In February 1995, decisions were adopted by MPT to facilitate such interconnection. These include enhancing the transparency of the interconnection negotiation process, unbundling interconnection costs, disclosure of interconnection agreements, improving the process of disclosure of technical information necessary for interconnection, promoting interconnection of common channel signalling networks and promoting number portability.

Interconnection costs were unbundled to enhance the transparency of the cost-basis for interconnection charges and because there were growing needs to know the cost of *NTT*'s local networks. The interconnection of signalling networks is necessary for *NCC* to provide certain advanced services. Accordingly, MPT promoted their interconnection. MPT has managed the numbering scheme for fixed telephone services since *NTT* was privatised in April 1985.

The French delegate asked what degree of competition is possible, and what degree should be sought, in local or in long-distance telecommunications. Can one aspire to more intensive competition than a more or less co-operative duopoly for each of the various services?

Second, what needs to be given priority? Is it important to ensure the rapid development of competition in services or the rapid development of competition in infrastructure? Is it necessary to try to have, quickly, competitive infrastructure operators where the incumbent operator remains a monopolist in infrastructure, in order to create sufficiently competitive functioning of the services markets or, to the contrary, does the historical operator of the network itself create positive externalities so that, rather than try to duplicate the network, one should try to have as much access as possible to the network, which would remain an essential network for a very long time?

Under what conditions should the access price be set by a regulator (public authority) and under what conditions by commercial negotiations among the parties? If the access price is set by a regulator, what should be the objectives? Is it to make the infrastructure market contestable? Is it to facilitate access to service providers?

Third, what is the medium term purpose of public information about the access price? Is the level of the access price more important for service providers than the public knowledge about the level? How can one guarantee a sufficiently stable access price for service providers and network operators to make their own investments?

It is necessary to distinguish the ownership of the network and the management of the cable television network? Under a state plan, *France Telecom* installed and became the owner of cable networks in the forty largest cities in France. There are three main managers of the cable networks; *France Telecom* manages only a small portion of the networks. This poses a problem if cable networks can offer telecommunication services in competition with *France Telecom* after 1 January 1998. Obviously, it is hoped that these existing networks could offer telecom services at a price reflecting synergies with its other services, if not at marginal cost. But at the same time, an essential condition will be that *France Telecom* lose its present right to control and authorise the services provided over its cable networks. It's necessary to evaluate the ownership of the networks and to completely reorganise their ownership, separating the assets of the network from the assets of the management of the network for television services and then distributing the assets among the different operators. This is not easy to achieve.

The delegate from United States noted that competition was a central principle of building the information infrastructure of the United States. There is increasing convergence of technologies for providing voice services, video services and information services, and increasingly on a two-way basis. The development of a competitive marketplace enables the market, rather than regulators, to develop the information infrastructure of the future. The global information infrastructure will be built in the same way. Private investment is the best means to get to optimal information infrastructure and the United States would like to see private investment world-wide.

The theory of the *AT&T* case was that the local loop was the monopoly that gave the integrated telecommunications company the power to discriminate and to cross-subsidise with respect to long distance service and with respect to manufacturing. In the breakup of *AT&T*, the bottleneck monopolies were separated from the potentially competitive markets of long-distance service and manufacturing. (When the FCC tried to make manufacturing competitive, the company claimed that safety of the network required that protective couplings between other firms' products and the network were required. These claims were not accepted.) There are now four privately-built fibre optic networks spanning the country, forming the backbone of the Internet. Real prices for residential consumers are more than 50 per cent lower than before the break-up. New services are available. In 1994, more than 25 million consumers changed long distance service providers, indicating real choice.

Local competition is just getting started. In Rochester, NY, the cable company is offering telecommunications services over its cable network to some customers, after some upgrades. When there is local competition, long distance providers would have a choice about how to reach their customers.

The question was raised, Do we need alternative infrastructure or do we need re-sale? The answer is both. For example, in the United States, the long-distance companies that built the fibre optic networks first entered the market through resale. This enabled them to build up their customer base, which ultimately made it economical for them to build their own networks.

Resale, standing along, is perilous. In Rochester, NY some companies entered the local market through resale of unbundled services from the local telephone monopoly. These companies remain open to the threat that all of their customers can be cut off by the monopolist, i.e., they remain dependent on a monopolist. It is therefore important to encourage competing infrastructure, with cable television companies, wireless companies, satellite companies and traditional telecommunications companies in competition.

The existing local cable television companies will have a tremendous incentive to upgrade their networks and to compete in the local telephone markets. Some telephone companies are using a wireless video technology to bridge the time until they have the technology and funds to upgrade their wired networks to compete for video services. Hence, currently the Department of Justice is trying to prevent the merger of local telephone companies and cable companies within the same service areas.

The sequence of deregulation is crucial in determining whether deregulation benefits consumers. Deregulation must occur after competition exists.

The Canadian delegate noted that Canada began liberalising telecommunications in 1979 with terminal equipment, following-up with decisions regarding private lines and resale. In 1991-1992, the regulator permitted facilities-based competition to begin. In 1985, an application for interconnection to the Canadian Radio-television and Telecommunications Commission (CRTC) had been denied. In 1991, the same company made an application for interconnection. This prompted a significant public proceeding in which the Bureau of Competition was a participant. The question before the CRTC was: Is competition in long distance telecommunications service in the public interest, would it jeopardise universal service and other public policy goals? The proceeding provided substantial information about costs of providing

interconnection, which enabled the CRTC to form a basis for determining the cost regime for interconnection in the industry.

The delegate from Canada agrees that, given the high common costs in the industry, it is difficult to know with certainty the costs of providing individual services. Nevertheless the CRTC came to a conclusion and ordered interconnection on the basis of the cost of providing access, the common costs and the costs to the telephone company of facilitating interconnection. In addition, the CRTC concluded that new entrants would have to contribute towards the deficit of providing local telephone service. This proved to be a difficult issue for the CRTC.

Several significant issues arose in Canada after competition in long distance telecom was introduced in 1992.

-- The telecommunications industry was regulated on a rate-base rate-of-return basis, which was incompatible with a competition-based system. Recognising that, the CRTC held a proceeding and decided to change to a price-caps system. This is intended to be the chief regulatory safeguard against cross-subsidy.

-- Rate rebalancing was necessary. (The deficit ranged from 15 to 25 dollars (Canadian) per subscriber line.) Local telecom had been subsidised in many directions: urban versus rural, business versus residential and especially long distance versus local service.

-- The disputes that have arisen between new entrants and the existing telecom companies, which are arbitrated by the CRTC, do not have so much to do with the cost or terms of interconnection, which have been fairly well settled, but with the amount of "contribution" that new entrants must pay towards subsidising local service. This calls out for rate rebalancing, but this is a difficult issue from a political viewpoint. The Commission is gradually raising the monthly charge for consumers.

There has been significant entry in long distance. Now, there are two national carriers competing with the incumbents, *Sprint Canada* (allied with *Sprint US*) and *Unitel* (allied with *AT&T*). Canadian long distance rates have fallen substantially. Incumbents have lost 20 to 25 per cent of their markets, depending on the particular service or province. The Commission is moving towards implementing the balance of its regulatory framework with price caps and forbearance from regulation where there is sufficient competition.

With respect to local competition, the CRTC is in the midst of a proceeding related to interconnection, unbundling, number portability and other issues. Local competition is critically important to deregulating entirely the industry. There are expected to be substantial debate on what, precisely, are the essential facilities or bottlenecks and whether there are elements of the local loop that are not, in fact, essential facilities, but where access nevertheless should be mandated.

The delegate from Australia said that, when competition was introduced in 1992, there was a right of access by the new entrant, *Optus*, to the network of the incumbent monopolist, *Telecom*. The Minister on advice from the regulator, Austel, determined the initial access prices. At the time *Optus* was laying its own cables among Australian cities, there was a series of ballots for consumers to choose either *Telecom* or *Optus* for their domestic and international long distance service. The ballots delivered to *Optus* about 15 per cent of the market, varying across parts of the market. Since the balloting process, the access price has been determined by commercial negotiation between *Optus* and *Telecom*.

Optus initially chose not to compete head to head with *Telecom* in local telecom markets except in cities. With changes in technology that enable cables to carry telephony, pay TV and broadband services, *Optus* has subsequently decided to roll out its own local loops. *Telecom* is now also rolling out fibre optic coaxial cables. It is expected that, within a couple of years, both *Telecom* and *Optus* will have

cable passing 50 per cent of Australian homes. *Optus* already offers CATV and plans, in early 1996, to begin offering local telecom services.

Mobile telecom was very competitive from the outset. There are three mobile phone operators in Australia, *Telecom*, *Optus* and *Vodafone*. About 13 per cent of the population has mobile phones. At the moment, *Optus* has the right of access to and uses *Telecom*'s mobile phone network. *Optus* and *Vodafone* are building their own digital networks and analogue networks are expected to phase out by 1999. Each of the three, plus any new entrants after 1997, will run its own digital network albeit with rights of access.

One lesson that can be learned from the Australian experience it that it is not adequate to rely on rights of access and resale. For true competition, facilities-based competition, along with rights of access and rights of resale, are needed.

There are four CATV operators in Australia: *Telecom*, *Optus*, a satellite-based company, and a company using a mixture of satellites and microwave. The fourth company has all but disappeared through merger. Until 1997, there is a limit on the number of telecom companies (two fixed, three mobile) so there is, at the moment, no scope for new CATV companies to enter telephony.

The delegate from BIAC said that he could not provide an overall business consensus view of the issues. In the United States, there is currently an intense debate over the future of the telecommunications industry. Therefore, he provided a more general business/legal view based on conversations with users in various countries. More competition is generally better than less. Absolute entry prohibitions are generally bad. Some transitional regulation may be, and probably is, necessary at least where there is a monopoly and monopolisation has been found. The transitions include a transition to line of business entry where entry has been barred and a transition from public to private ownership. In this connection, dual regulation may be inevitable at least during a transition period. Antitrust principles and competition policy should be fully applicable before, during and after the transition period.

The United States experience is unique in that the local telecom companies are forbidden to enter long distance telephony. This is largely due to the Modification of Final Judgement which split up the Bell system.

The key issue is interconnection. In the United States, one company remains the dominant interexchange telecom provider. Interexchange carriers point out that the local carrier continues to have a dominant position if not a monopoly position and they express concern over the terms, quality and price of access to the local loop. The United States legislation provides for a transition period to permit the local exchange carriers into the interexchange markets provided that they grant connection at fair and non-discriminatory rates, grant equal access, unbundle services, provide co-location in some form and make available resale opportunities.

These particular transitional regulatory provisions would be determined by the regulatory agency. The issue then becomes, in part, which agency should see whether these conditions are satisfied, whether these conditions are adequate, and what should be the role of the Department of Justice with respect to these conditions during the transition period. The delegate from BIAC would suggest that a fair business view would be that those conditions, appropriately specified, could be given to the regulator to determine whether they were satisfied, and the DOJ should have a consultative and influential role and be given unbridled authority to continue to enforce the antitrust laws without immunity in that area.

The delegate from Commission of the European Commission, responded to a point raised by the French delegation regarding whether it is sufficient to concentrate on competition in services, taking advantage of the economies of scale that may exist in infrastructure, or whether one should promote competition in infrastructure itself. The experience gained by the Commission over the past few years in

the market for value-added services has been, unfortunately, that it is not possible to have well-developed competition in services when there is not effective competition in the underlying infrastructure. Several phenomena may be observed, but the most important has been the high prices of leased lines, notably those for value added services. The relatively high prices in Europe tend to demonstrate that, contrary to what has sometimes been said, the regulator does not have the sole objective of promoting competition but rather a number of other legitimate social and economic objectives. It seems, therefore, that if one wishes to have an effective level of competition in services then a certain degree of competition must be progressively introduced in infrastructure, leading finally to full competition in infrastructure.

The second possibility, as was done in the United States, is a separation of regional from long distance operators. The long distance operators, along with the regulator, can provide a counterweight to the local monopolies, benefiting not only themselves but also consumers.

In order to create effective competition at the level of infrastructure, notably at the level of access to the local loop, alternative new technologies might be promoted and it is conceivable that the regulator may set access terms to favour such access. A simple method that was used to increase artificially the profitability of cable television network operators was to grant them exclusive territories over a specified term.

General discussion

The delegate from New Zealand recalls that the United States delegation said that there is no merit in deregulating before one had competition. That's exactly what New Zealand did. The United States delegate also said that the FCC could not implement its competition initiatives, that they were frustrated by the monopolist. These two statements cannot be reconciled. Regulation frequently does not work as anticipated and quite often fails. One must be sceptical about the ability of regulators, especially industry-specific regulators, to promote competition. They have their own incentives. They frequently do not have the powers, the knowledge or the skills to perform as was intended.

The Japanese delegate asked about the effects of horizontal division of local telecom services. This is an issue in the discussion of *NTT*. What was the effect on competition in local services of the division of the Bell System into seven "baby bells"? Was it intended to promote competition in local telecom services? Did this division affect the availability of R&D to the local telephone companies?

The delegate from United States replied that there was not a big effect on research and development at Bell Laboratories; it remained intact within *AT&T*, the long-distance company. Each of the regional bell companies began to engage in its own R&D so probably total R&D has increased. This is an important issue in Japan. There was no intention to create local competition through the break-up of *AT&T*. There was no effect on competition in local telephony and more remains to be done in that direction. When the breakup was conceived and executed, it was still not known whether local competition could emerge and how effective it might be. It was known and believed that competition in long distance telephony, manufacturing and information services was possible and was potentially being thwarted by a unified, integrated monopoly.

While competition is preferred to regulation, if the choice is unregulated monopoly versus regulation, the question is different. The New Zealand delegate indicated that, in New Zealand, there is a form of rate regulation that was inherent from the start, there was a tie of certain prices to inflation and there were various provisions related to universal service. What New Zealand has done has been tremendously effective and is an important example but, without question, removal of rate regulation and universal service obligations before the development of competition would be very, very bad for consumers. One needs to promote competition and, after competition is developed, to deregulate because then regulation would be unnecessary and in the way.

The Chairman noted a need to specify what one means by regulation, for example, entry regulation and rate regulation.

A Delegate from the United States said that there are potential benefits to private negotiation in shaping interconnection arrangements. The pending legislation takes this approach, but also holds the regulator as a potential intervener. One should not confuse negotiation with a monopolist with negotiation among equals in a marketplace.

The Canadian delegate said that the evolution of technology is an important driver in the evolution of regulation. Once a broadcast signal or voice signal or data pack stream is digitised, they are all the same. Governments have a whole regulatory scheme premised around a certain technological configuration. Similarly, there has been an improvement in handling traffic by telephone companies. To a certain extent, the distinction between local and international, once the signal is in the switch, is irrelevant because the difference in marginal costs is insignificant. The regulatory regime is grappling with the question, How do you pay for the wire in the ground?

As there are more competitive pressures and changing technology, the subsidies built into the regulatory scheme are increasingly challenged. To the extent that a regulatory regime will continue to exist, it needs to be re-designed to meet the specific social policy objectives.

In redesigning the regulatory regime that persists, the competition authority in Canada has found that they have had tremendous success in acting as a competition advocate, as opposed to acting in its enforcement role. Interventions before the legislature and the regulator have been very positive in pushing the agenda in that direction.

The Canadian delegate posed the question of countries with experience in local competition, Should an antitrust standard of an essential facility be used as a criteria for mandatory unbundling, or should there be some other standard? Is there a danger of a regulator going too far in requiring unbundling, having an effect of discouraging the development of alternative networks?

The Australian delegate said that the post-1997 arrangements were intended to be a technology-neutral regime. The current telecom regulator, Austel, estimates on the basis of its experience in the 1990s that, due to changing technology, any decision it makes has a lifespan of two years or less. Hence, a technology-neutral regulatory system is recommended.

The Chairman said that we think of local telecom competition as being provided by owners of wires. But, in some countries, there are developments in fixed radio. He asked, Can we count on fixed radio being a competitor to the local network?

The delegate from Spain wished to comment on exchange between the United States and New Zealand on regulation versus no regulation. Is not the real question the system of regulation? In New Zealand regulation was done by the judicial system. With network systems it is hard not to have regulation of one type or another as there does not exist a relevant marginal cost. Regulation is needed when there market failure.

The Canadian delegate noted that there are now calls for licensing PCS, a wireless competitor to local telecom.

The delegate from United States echoed the Canadian delegate's comment. The product of the future will be a telephone call, not a local or a long-distance telephone call. So current differences are a transitional phenomenon. Wireless communications holds a great deal of potential but it is not clear what the effect of PCS in the United States will be. PCS license holders paid a lot of money for their licenses and build-out requirements will be expensive. Originally, it was thought that PCS would be another mobile

service, competitive with mobile. But now it is thought that PCS may be used by some license holders for fixed use in place of the local loop. However, two-way communications require a lot of spectrum. Hence, the two wires (CATV and telephone) are thought to hold out the best prospects in the short run for local telephone competition. Therefore, the Department of Justice supports a ban on most such mergers in the same service area. As market conditions change, it may be possible to lift this ban. There is an exception to this ban in rural areas and the Department would allow shared use of common drop wire.

The delegate from Australia, responding to the Canadian delegation, said that the essential facility criteria applied in telecom is more rigorous in telecom than that applied in other network industries because the network externalities are differentiated, i.e., a consumer does not care which generator's electricity she receives but does care which telephone calls she receives. Therefore, anyone who gets a carrier license after 1997 must provide access to other carriers to ensure any-to-any connectivity, a crucial feature of communications.

The delegate from New Zealand, following up the comment from the Spanish delegate, said that the question is not one of "regulation" versus "no regulation" but rather of degree, of what the regulator actually does. In New Zealand, the regulator does not make important decisions on behalf of industry nor does it make commercial decisions. He noted that the lay members of the High Court, where some competition cases are heard, are very highly trained economists.

The delegate from the United Kingdom, responding to a question regarding the experience with fixed radio extensions of the telecom network, said that the length of experience is still too short to provide useful insights.

AIDE-MÉMOIRE DE LA DISCUSSION

Note du Secrétariat

Antitrust et réglementation (aspects institutionnels)

Le délégué de l'Allemagne a déclaré qu'au cours des quelques dernières années, l'Allemagne avait pris les premières mesures axées sur la déréglementation et la libéralisation des communications, qui ont marqué l'avènement de la concurrence. *Deutsche Telekom* conserve le monopole pour les services vocaux et le réseau. Cette situation pourrait changer à l'occasion de l'affaire *Atlas* (projet d'entreprise commune entre *Deutsche Telekom* et *France Telecom*), la Commission européenne ayant en effet annoncé qu'elle donnerait son approbation sous réserve qu'il soit satisfait à certaines conditions, notamment la libéralisation en 1996 des infrastructures de substitution. Les entreprises de fourniture d'énergie sont particulièrement impatientes d'accéder aux marchés des télécommunications et d'utiliser leurs propres réseaux.

Une présentation du projet de loi sur les télécommunications figure dans la note. Il s'agit notamment de savoir s'il est nécessaire ou souhaitable de mettre en place un régulateur propre au secteur. Dans la disposition du projet de loi relative aux abus, le seuil de 25 pour cent a été supprimé et les sociétés dominantes seront soumises à un contrôle spécial des abus si leur domination est établie au regard de la *loi sur les restrictions à concurrence*. L'obligation d'interconnexion a été élargie à tous les fournisseurs de services publics et ne se limite plus aux sociétés dominant le marché. La relation entre l'instance de réglementation propre au secteur et l'Office fédéral des ententes n'est toujours pas définie. Il reste à déterminer si l'Office fédéral des ententes peut faire usage de ses pouvoirs contre les abus de position dominante afin de faciliter l'accès au marché. Actuellement, ces dispositions sont davantage axées sur la protection de la concurrence existante. Le personnel de la nouvelle instance de réglementation viendra probablement en grande partie de l'ancien Ministère des services postaux, qui contrôlait l'ancienne entreprise publique.

Le délégué de l'Australie a déclaré qu'il n'y aura plus en Australie d'instance de réglementation propre au secteur des télécommunications, et que la concurrence dans les télécommunications relèvera plutôt de l'instance chargée de la concurrence en général. Jusqu'en 1990, le secteur des télécommunications ne comptait qu'un seul fournisseur, *Australia Telecom*. Le Gouvernement a décidé de s'orienter progressivement vers la concurrence. Un concurrent privé (*Optus*) dans le secteur des services fixes et des services cellulaires, et un deuxième concurrent privé (*Vodafone*) pour les services cellulaires ont obtenu une licence. Austel, organe de réglementation indépendant, a été créé. La loi générale sur la concurrence est applicable et l'on trouve également des dispositions relatives à la concurrence dans la loi sur les télécommunications, appliquée par Austel, et dont relève la société qui détenait précédemment le monopole des télécommunications. Ces dispositions visent essentiellement la discrimination par les prix et le refus de fournir un service. *Telecom* est assujetti au plafonnement des prix, la majoration annuelle du prix ne pouvant dépasser l'IPC-5.5 pour cent.

Récemment, le gouvernement a annoncé que ces dispositions intérimaires prendront fin en 1997. A cette date, quiconque satisfait à certaines conditions techniques minimales pourra devenir transporteur de télécommunications. Austel ne sera plus l'instance chargée de réglementer la concurrence, et ses fonctions seront transférées à l'Australian Competition and Consumer Commission (Commission australienne chargée de la concurrence et des affaires intéressant les consommateurs). Les dispositions législatives générales sur la concurrence et deux dispositions supplémentaires -- visant la discrimination par les tarifs et les abus de pouvoirs de marché importants -- s'appliqueront de façon générale aux transporteurs de télécommunications, c'est-à-dire à quiconque occupe une situation importante sur le marché des télécommunications. L'ancien monopoleur devrait conserver une position importante sur la plupart des

marchés de télécommunications pendant les premières années de libre concurrence. C'est pourquoi, les dispositions spéciales destinées à sauvegarder la concurrence ont été introduites dans la loi générale sur la concurrence. Ces dispositions devraient être utilisées de plus en plus rarement.

A partir de 1997, s'appliquera un régime général de plafonnement des prix à l'IPC-7.5 pour cent, ainsi que certains plafonnements des sous-prix dans le cadre du régime général. On a pu constater en Australie que le plafonnement des prix sur les marchés sur lesquels s'exerce une concurrence des prix limitée depuis 1992 faisait davantage office de garde-fou et qu'il n'avait pas été souvent contraignant.

Le délégué du Canada a fait savoir que le Canada avait entamé le processus de réforme de la réglementation dans le secteur des télécommunications avec neuf transporteurs régionaux et provinciaux qui avaient été soumis à la fois à la réglementation fédérale et à la réglementation applicable dans les provinces. A présent, la réglementation en matière des télécommunications relève au niveau fédéral essentiellement du CRTC (Conseil de la radiotélévision et des télécommunications canadiennes). La loi de 1993 sur les télécommunications accorde de larges pouvoirs de réglementation au CRTC, mais celui-ci est tenu de s'appuyer le plus possible sur les mécanismes du marché et de s'abstenir de réglementer dès lors que la concurrence est suffisamment développée pour protéger les abonnés. Aux termes de la loi sur la concurrence, le Directeur des enquêtes et recherches du Bureau de la concurrence dispose de pouvoirs spéciaux qui lui permettent d'intervenir devant les offices et les agences de réglementation tant fédérales que provinciales. Ce pouvoir a souvent été utilisé pour favoriser la concurrence et l'option d'une réglementation empiétant le moins possible sur la concurrence. En 1991 et en 1992, le Directeur a recommandé d'ouvrir le marché à la concurrence et de libéraliser les marchés des télécommunications longue distance. Il a également préconisé de supprimer la réglementation sur le taux de rendement pour privilégier les plafonnements de prix, d'ouvrir des marchés locaux à la concurrence, et de mettre à l'épreuve l'exercice par le CRTC de son pouvoir d'abstention. En 1995, le Directeur a plaidé pour la libre-concurrence dans le secteur de la radiodiffusion et pour un système qui ne fixerait pas de date limite pour la période de protection de l'industrie du câble. A présent, les responsables travaillent à un rééquilibrage des tarifs, au développement de la concurrence locale et à ses modalités, et à la mise en oeuvre du régime de plafonnement des prix.

Tout comportement qui fait l'objet d'une réglementation spécifique échappe à l'application de la Loi sur la concurrence. Ceci n'est pas stipulé expressément dans la Loi, mais le Directeur tient compte de la jurisprudence. Par ailleurs, le CRTC dispose de ses propres garde-fous en matière de concurrence. Néanmoins, le Bureau de la concurrence a tout fait pour ouvrir les pages jaunes à la concurrence et obtenir l'accès aux structures de soutien (poteaux téléphoniques, tubes, etc.) pour les compagnies de câble qui souhaitaient mettre en place un câble à fibres optiques pour concurrencer les compagnies de téléphone.

Pour le délégué canadien, l'instance chargée de la réglementation, qui était jusque là chargée de fixer les tarifs et d'agréer les services habilités, devrait évoluer vers un comportement propre à faciliter l'accès et la concurrence en renonçant de plus en plus à exercer certains de ses pouvoirs. Elle s'est déjà abstenue d'utiliser ses pouvoirs pour les services cellulaires et les terminaux. Le champ d'application du droit de la concurrence s'en trouve élargi.

Le délégué des Etats-Unis a déclaré que l'instance de réglementation indépendante, la Federal Communications Commission (FCC), s'intéresse principalement aux problèmes inter-Etats et internationaux, et qu'elle est chargée des marchés de radiodiffusion, des télécommunications longue distance, des droits de câble, des satellites et de la téléphonie sans fil. Elle a récemment joué un rôle majeur en vendant les fréquences aux enchères. Le plus souvent, la FCC applique au sens large le critère d'"intérêt général" qui tient compte de la possibilité de promouvoir le service universel ainsi que de certains éléments de concurrence. Les autorités antitrust ont souvent participé aux audiences publiques en adressant des commentaires.

Les cinquante Etats réglementent les télécommunications locales -- en déterminant si la concurrence sera ou non autorisée et quelle sera la réglementation applicable en matière de prix -- ainsi que certains éléments de la télévision câblée (CATV). L'une de leurs principales préoccupations est de favoriser le service universel et aussi, et de plus en plus, la concurrence locale.

Le Ministère de la Justice et, dans une certaine mesure, la Federal Trade Commission, sont intervenus de façon déterminante dans l'élaboration de la politique en matière de télécommunications en appliquant le droit antitrust par le biais des actions en exécution qui ont abouti au démantèlement du monopole du système Bell au début des années 80, ainsi que par la politique appliquée en matière de fusions, et l'on rappellera notamment le règlement amiable pris dans l'affaire *GTE* (grosse société locale de communications interurbaines). Comme la loi sur les communications limite certains types de propriété croisée, la FCC est intervenue dans la politique en matière de fusions. C'est la raison pour laquelle un grand nombre d'opérations de fusions ne sont jamais proposées.

Le délégué français a déclaré qu'en France, l'ouverture des télécommunications à la concurrence est sur le point d'entrer dans une phase active. Actuellement, tous les services à l'exception des services publics de téléphonie vocale sont ouverts à la concurrence et le marché compte plusieurs opérateurs autorisés. Néanmoins, *France Telecom* conserve le monopole absolu sur les infrastructures fixes et, à l'exception des services internationaux et de téléphonie cellulaire, les concurrents de *France Telecom* n'ont accédé au marché que de façon marginale.

Lors de l'examen par la Commission européenne du projet d'entreprise commune *Atlas* entre *France Telecom* et *Deutsche Telecom*, le Ministre français des Télécommunications a annoncé que d'autres infrastructures seraient libéralisées à compter du 1er juillet 1996. Quiconque souhaite opérer les services libéralisés pourrait installer l'infrastructure correspondante, et utiliser également les installations publiques, dans les conditions prévues par la loi.

Conformément à une décision de la Commission européenne, tous les services et les infrastructures des télécommunications seront ouverts à la concurrence à compter du 1er janvier 1998. Ceci comprend la suppression de tous les obstacles réglementaires à l'accès au marché. Pour préparer ce changement, les projets de loi correspondants seront présentés au Parlement dans les premiers mois de 1996 et un groupe d'experts a été constitué : il doit faire des propositions concernant la forme future de la réglementation et étudier les tarifs d'interconnexion ainsi que les moyens de financer le service universel.

Comme on le sait, il ne suffit pas de lever les obstacles juridiques à la concurrence pour créer instantanément une concurrence *de facto* suffisante. Dans les secteurs où existe un monopole naturel, les effets d'échelle peuvent créer des barrières à l'entrée importantes. Par ailleurs, il est également nécessaire de tenir compte des effets de réseau, lorsque l'on met en balance la concurrence et l'efficience productive. Par conséquent, il est nécessaire de déterminer les conditions d'interconnexion qui garantiront la création d'une concurrence effective dans des conditions compatibles avec l'efficience économique. Pour cela, deux réglementations paraissent nécessaires :

-- En aval des opérateurs, une nouvelle réglementation doit protéger ou organiser les nouveaux entrants et en particulier réglementer les relations entre eux et *France Telecom* déjà implantée sur le marché.
-- En aval, il est nécessaire de mettre en place un dispositif pour surveiller le fonctionnement du marché fondé sur le droit commun de la concurrence. Cela supposerait d'établir une nette distinction entre la réglementation et la surveillance du marché à partir du droit de la concurrence et assurer un degré suffisant de coopération entre ces deux formes de réglementation.

Pour le délégué français, il semble que l'objectif de la réglementation, peut-être pendant une période transitoire, est de faire naître la concurrence là où elle n'existerait pas en raison des obstacles

juridiques ou des contraintes structurelles telles que l'ampleur des effets de réseau ou la rareté de certaines ressources.

Visant deux objectifs (mettre en place une concurrence effective et garantir l'efficience économique), la réglementation devrait donc définir les conditions d'accès tant aux marchés de services qu'aux infrastructures. Le cas échéant, elle devrait assigner des droits spécifiques et organiser le financement du service universel. Certaines de ces mesures diffèrent de celles qu'utilisent les autorités chargées de la concurrence, non seulement parce qu'elles sont prises *a priori* et non *a posteriori*, mais aussi parce qu'elles peuvent être différentes des principes habituels du droit de la concurrence. Par exemple, il peut être nécessaire de recourir à une "discrimination positive" d'accès à un réseau géré comme un monopole, ou à un équipement essentiel pour faciliter l'accès de nouveaux opérateurs. Ou bien encore, il peut être nécessaire d'imposer à l'opérateur déjà sur le marché des obligations spécifiques puisque le réseau reste une partie essentielle du service fourni.

Dans le même temps, il est nécessaire de savoir où et quand mettre fin à cette mission spécifique de la réglementation. Par exemple, lorsqu'il s'agit d'une ressource qui n'est pas rare, les effets d'échelle ne sont pas importants, ou bien encore les consommateurs sont suffisamment satisfaits, auquel cas il n'est pas nécessaire de prévoir des limitations d'accès au marché car les mécanismes de ce dernier devraient suffire.

Il est nécessaire de prévoir l'intervention des autorités chargées de la concurrence lorsqu'il s'agit de définir l'ampleur des activités soumises à une réglementation spécifique ainsi que le champ des activités assujetties aux lois générales de la concurrence, et de déterminer également les conditions d'accès aux sources rares. Le droit français de la concurrence prévoit déjà que le Conseil de la concurrence doit être obligatoirement consulté lorsque le régime de réglementation aurait pour effet de restreindre la concurrence. On envisage actuellement de soumettre à l'examen du Conseil toutes les réglementations qui attribuent des ressources rares ou qui limitent l'accès à certains réseaux (selon des modalités qui ont des effets structurels à long terme sur les marchés). On estime que le droit de la concurrence devrait contrôler la concurrence toutes les fois que cela est possible. L'administration est convaincue que la jurisprudence actuelle sur les abus de domination du marché suffit à assurer un fonctionnement satisfaisant des marchés des télécommunications. Il semble, par conséquent, que même si une instance distincte était mise en place pour réglementer les télécommunications, elle ne devrait pas remplacer les pouvoirs attribués au Conseil de la concurrence. On estime que cette instance spécifique de réglementation devrait pouvoir elle aussi saisir le Conseil de la concurrence.

Le délégué de l'Irlande a indiqué que, historiquement, *Telecom Ireland*, entreprise à capitaux publics, avait un monopole réservé dans les télécommunications. Récemment, une légère concurrence a été introduite dans les services internationaux et, plus récemment encore, dans les services longue distance, avec deux opérateurs supplémentaires qui utilisent des lignes louées. Il a été annoncé qu'un deuxième mobile GSM ferait l'objet d'une licence. Le gouvernement a entrepris de privatiser partiellement *Telecom Ireland* et il est question d'établir éventuellement une instance de réglementation spécifique. Le taux de pénétration de télévision par câble est élevé dans les zones urbaines, mais *Telecom Ireland* détient la majorité des actions dans les principales sociétés de TV par câble.

Il est envisagé de mettre en place une seule agence de réglementation pour toutes les installations publiques car elles paraissent soulever des problèmes identiques, et dans un petit pays, il semblerait efficient de regrouper dans un seul bureau tous les spécialistes des questions de réglementation. Les arguments favorables à la mise en place d'une instance spécialisée sont la spécificité des informations et des connaissances nécessaires et, par ailleurs, le fait qu'il peut être difficile pour une instance générale ou pour les tribunaux de régler comme il convient les problèmes qui peuvent se poser. Toutefois la réglementation et le droit général de la concurrence ne peuvent pas se substituer l'un à l'autre et l'on peut craindre un détournement des réglementations. En outre, une réglementation économique suppose que les entreprises déjà sur le marché abuseraient de leur pouvoir de domination. Dans ce cas, à quelles lignes directrices ou

à quels critères se référer pour décider quel est de la réglementation ou du droit général de la concurrence, le régime le mieux approprié.

Le délégué de l'Italie a déclaré que jusqu'à une date récente, *Telecom Italia* détenait le monopole statutaire du secteur des télécommunications. Ce monopole a été écorné par la Commission de l'Union européenne et l'Autorité antitrust. En 1994, les fonctions de prestation de services et de réglementation ont été dissociées. En mars 1995, l'Italie a adopté la Directive européenne 90/388 qui libéralise un certain nombre de services de télécommunications. Une seconde licence GSM a été accordée à un opérateur privé, *Omnitel-Pronto Italia*. Un projet de loi dont est saisi actuellement le Parlement pourrait libéraliser dès 1996 les infrastructures alternatives des télécommunications. En Italie, il s'agit des réseaux d'électricité, de gaz naturel, des autoroutes et des chemins de fer. Il n'existe pas en Italie de télévision par câble.

L'article 8, paragraphe 2 de la *Loi antitrust* stipule que seul un comportement lié rigoureusement à l'exercice de tâches spécifiques d'intérêt social et économique général peut être exclu du champ d'application de ladite loi. Toutefois, l'entreprise peut accomplir les tâches qui lui sont assignées en adoptant d'autres mesures ayant un effet moins restrictif sur la concurrence, auquel cas la législation antitrust est pleinement applicable.

Le délégué italien a déclaré que les instances chargées de réglementer spécifiquement les télécommunications ne devraient pas traiter des questions de concurrence ; celles-ci devraient incomber aux instances qui en sont spécifiquement chargées. Il a rappelé à titre d'exemple, qu'en 1994, *Telecom Italia* qui détenait un monopole statutaire dans les télécommunications vocales, a refusé l'accès au réseau local à *Telsystem*, système d'utilisateurs privé et fermé, pour un service qui avait déjà été libéralisé par la Directive communautaire 388/90. Bien que l'Italie n'ait pas encore adopté cette directive, l'Autorité antitrust a estimé que *Telecom Italia* s'était rendu coupable d'un abus de position dominante et l'a contraint à accorder l'accès.

Le délégué du Japon a indiqué que la refonte institutionnelle intervenue dans les télécommunications en 1985 a transformé l'ancienne compagnie publique de téléphone et télégramme dans l'actuelle NTT, entité privée, et autorisé de nouveaux entrants à opérer sur les marchés de services longue distance. Ces marchés restent sous le contrôle du Ministère des Postes et des Télécommunications. Depuis la réforme de 1985, trois nouveaux entrants (outre NTT déjà sur le marché), qui détiennent globalement près du tiers du marché, ont accédé au secteur des services longue distance et inter-départementaux. Sur les services internationaux, deux nouvelles sociétés, qui détiennent ensemble environ le tiers du marché sont venues s'ajouter à KDD, déjà implantée. NTT détient une part d'environ 99 pour cent du marché des services locaux, ou intra-départementaux, qui représentent environ 80 pour cent de la totalité des services de télécommunications. C'est pourquoi, le plus grand défi que doit relever le Japon est de promouvoir la concurrence dans les services locaux. L'une des façons de le faire est de recourir à la déréglementation. Actuellement, les pouvoirs publics réglementent l'accès au marché et les redevances. La FTC japonaise estime que les réglementations relatives à l'accès devraient en principe être supprimées. En outre, selon elle, la réglementation devrait être également supprimée pour les services dans lesquels la concurrence s'exerce déjà.

Pour promouvoir la concurrence, il existe un autre moyen, à savoir l'adoption de nouvelles règles du jeu. Tout concurrent doit pouvoir accéder au réseau local, dont NTT est propriétaire. Comme NTT exploite à la fois les services locaux et les services longue distance, des mesures doivent être prises pour créer des conditions d'égalité entre lui et les autres prestataires de services longue distance. Certaines mesures ont déjà été adoptées en ce sens. L'une d'elles est le "système multi-départements" aux termes duquel les opérations de NTT sont comptabilisées séparément selon qu'il s'agit des marchés locaux ou longue distance ; par ailleurs, les renseignements recueillis par le département local au sujet de la clientèle ne peuvent pas être communiqués au département longue distance. D'autres mesures devront être prises dans l'avenir. La question de savoir s'il y avait lieu de fractionner NTT fait l'objet d'un vif débat. Le Gouvernement devrait faire connaître sa position définitive d'ici la fin de mars 1996.

Le délégué de la Nouvelle-Zélande a commencé son intervention en indiquant que pour réguler les marchés, le régime de réglementation des télécommunications s'appuyait en Nouvelle-Zélande plus que dans n'importe quel autre pays de l'OCDE, sur les mécanismes de la concurrence. Il n'existe aucune restriction à l'entrée, aucune instance chargée de réglementer expressément le secteur, aucun contrôle des prix sinon sur les prix de détail appliqués à la clientèle nationale, ni aucune dérogation au droit commun de la concurrence. En fait, la Nouvelle-Zélande a connu un certain nombre d'affaires de fusions et d'affaires liées au comportement sur le marché. Les décisions fondamentales concernant la branche d'activité sont donc prises par les forces prenantes sur le marché. Il n'est pas nécessaire de formuler des hypothèses quant à l'ampleur du monopole naturel. Comme la branche d'activité évolue rapidement, les autorités risquent de formuler à ce sujet une hypothèse erronée et intervenir pour exclure la concurrence là où elle aurait été possible.

La réglementation fait l'objet de nombreuses théories qui s'appuient sur l'hypothèse que celle-ci est parfaite ou quasi-parfaite. Aucun fait concret ne corrobore cette hypothèse. Le régime réglementaire néo-zélandais s'appuie sur l'hypothèse selon laquelle le système de réglementation présente de nombreux défauts : réglementation rampante, captation de la réglementation, asymétries au niveau de l'information. Les pouvoirs publics ont rejeté l'idée selon laquelle les instances spécifiques prendraient de meilleures décisions que les intervenants sur le marché. La Division des communications au sein du Ministère du Commerce est l'unique régulateur et elle a des fonctions de surveillance et de facilitation.

Etant donné que le pouvoir de marché est détenu par *Telecom Corporation of New Zealand*, l'unique propriétaire du réseau connecté public de Nouvelle-Zélande, comment les parties peuvent-elles en fait accéder au marché ? En premier lieu, les parties doivent s'efforcer de négocier elles-mêmes. Plusieurs accords d'interconnexion ont été conclus de cette façon, en raison, pour partie, des trois autres éléments du régime de réglementation. En second lieu, le droit commun de la concurrence traite des comportements exclusifs. Alors que la loi ne peut ne pas régler comme il convient les présomptions de prix abusifs, elle peut traiter des refus de vendre et des refus implicites de vente. En troisième lieu, l'obligation de divulguer des informations est prévue dans le régime de réglementation. Tous les trois mois, *Telecom* doit divulguer le contenu de ses contrats, notamment les clauses contractuelles-type, ainsi que les contrats qui comportent des rabais de 10 pour cent ou davantage par rapport au contrat-type. Cette obligation est destinée à informer les entrants potentiels sur les possibilités réelles de bénéfices sur les différents segments du marché. En quatrième lieu, la réglementation peut instituer, par exemple, un contrôle des prix, ce qui constitue une menace plausible.

En ce qui concerne la fixation des prix de monopole, la Nouvelle-Zélande estime que les monopoles entraînent des bénéfices, que les prix soient réglementés ou non. Il n'est pas facile, selon elle, de définir le monopole naturel ni les insuffisances de la réglementation. Aussi, estime-t-elle que même s'il permet aux entreprises de réaliser des bénéfices comptables plus élevés, son régime de réglementation présente plus d'avantages.

Le délégué du Royaume-Uni expose rapidement les antécédents de la libéralisation des télécommunications au Royaume-Uni, les avantages qui en sont résultés à ce jour, ainsi que les enseignements que l'on peut tirer de l'expérience. Le duopole que se partagent *British Telecom (BT)* et *Mercury* a pris fin après une décision de 1991. Il est en résulté une concurrence potentielle sur les segments du marché intérieur. Ce sont les sociétés de câbles qui ont réagi de la façon la plus dynamique aux nouvelles règles. Actuellement, 126 entreprises mettent en place des réseaux. En août 1995, elles ont fourni 1 million de lignes téléphoniques. Des licences ont également été délivrées pour l'accès hertzien.

L'industrie des télécommunications s'est développée au Royaume-Uni tant pour les prestations de services que pour le volume des opérations. Les investissements ont atteint avec 4,5 milliards de livres, un nouveau chiffre record en 1994. Les télécommunications mobiles ont donné lieu à environ 4,3 millions d'abonnements au milieu de 1995. Le Royaume-Uni dispose des deux réseaux cellulaires les plus importants du monde. Depuis 1984, les prix ont chuté de 35 pour cent en termes réels. *BT* est toujours très rentable.

En 1984, on avait pu craindre un abandon du service universel. En fait, ce service est toujours garanti, le nombre de propriétaires de téléphones a augmenté et les abonnés peuvent choisir entre plusieurs prestataires de services. On a pu croire que les abonnés à faible revenu risquaient de pâtir de la libéralisation mais tous ont bénéficié de la baisse des prix et le dispositif mis en place par *BT* pour les utilisateurs à faibles revenus protège les plus vulnérables d'entre eux. On a pu craindre aussi que le réseau *BT* ne devienne un monopole naturel et que la concurrence ne pourrait pas s'exercer. Mais à présent, on compte trois réseaux en concurrence. Dans la Cité de Londres, cinq entreprises fournissent l'infrastructure. Les clients s'abonnent à un rythme rapide aux réseaux câblés.

Parmi les enseignements à tirer de l'expérience du Royaume-Uni, on indiquera que la concurrence au niveau des infrastructures ainsi qu'au niveau des services est indispensable si l'on veut que la clientèle en bénéficie.

Le délégué de la Commission européenne a déclaré que le droit communautaire de la concurrence pouvait être appliqué au niveau national par les instances chargées de la concurrence ainsi que par les tribunaux. Au niveau de la Communauté, la Direction générale de la concurrence pourrait proposer des décisions à la Commission européenne, et si celles-ci sont adoptées, elles seraient applicables dans tous les Etats Membres. Les réglementations interviennent au niveau national, mais au niveau européen, il n'existe pas d'instance de réglementation spécifique, mais plutôt des commissions dans lesquelles sont représentés les régulateurs nationaux. Le problème qui se pose de plus en plus fréquemment est celui de l'existence de procédures que mettraient en oeuvre en parallèle les instances chargées de la concurrence et les instances de réglementation, que ce soit au niveau national ou au niveau européen. Ces procédures parallèles constituent un gaspillage de ressources et de temps et il faudrait, semble-t-il, trouver une solution pour permettre à l'une ou l'autre instance de prendre les mesures nécessaires.

Deux types de cas peuvent se poser. Dans le premier, une entreprise qui occupe une position dominante refuse de vendre ou pratique manifestement une discrimination qui ferme totalement un marché aux concurrents potentiels, voire aux concurrents implantés. C'est là un type de comportement extrêmement grave, qu'il est facile de caractériser, et il semble que les instances chargées de la concurrence soient théoriquement bien placées pour imposer une décision et appliquer rapidement les remèdes nécessaires. L'autre type de cas d'abus présumé vise l'accès à un réseau, par exemple la location de lignes, auquel cas, il pourrait s'agir d'un problème de prix ou d'autres termes et conditions d'accès. Dans ce type d'affaires, il est extrêmement difficile pour les autorités de la concurrence de prendre une décision rapide, surtout parce que les données relatives aux coûts et aux pratiques antérieures font défaut. En outre, les instances de réglementation disposent des informations pertinentes pour traiter ce type d'affaire sans retard. Il semble qu'il serait possible d'établir une sorte de division du travail entre les autorités chargées de la concurrence et les régulateurs, de même qu'une sorte de dispositif par lequel les régulateurs transféreraient une partie des connaissances qu'ils ont accumulées aux autorités chargées de la concurrence.

Le délégué de la Pologne a résumé l'évolution récente de la situation dans le secteur des télécommunications polonais. Pour transformer *Polish Telecom*, on a commencé par dissocier la poste des télécommunications. Le secteur des télécommunications opère selon les règles du commerce, mais le Gouvernement est l'unique actionnaire et le secteur est contrôlé par le ministère des Communications. Il a été interdit à la filiale dans laquelle *Polish Telecom* est majoritaire et qui était concessionnaire de la première licence de téléphone mobile de soumissionner pour l'une ou l'autre des deux autres licences de télécommunications mobiles. Les télécommunications locales sont ouvertes aux nouveaux concurrents, mais *Polish Telecom* s'est efforcée de se servir des conditions techniques de connexion pour leur interdire l'accès du marché. *Polish Telecom* conserve le monopole pour les appels internationaux.

Le délégué suisse a résumé la situation qui prévaut en Suisse. Les PTT conservent le monopole du réseau fixe et de la téléphonie vocale. En 1992, une nouvelle loi sur les télécommunications a ouvert certains marchés à la concurrence, notamment le marché de l'équipement de la clientèle et celui des

services, comme par exemple la transmission des données, les communications mobiles et les services à valeur ajoutée.

Sur le marché de l'équipement, il a été facile d'instaurer des règles du jeu équitables. Les prix ont chuté et le choix offert à la clientèle s'est élargi. Dans le secteur des services, les concurrents ont mis longtemps à s'établir face à *Swiss PTT* et ils ont été confrontés au problème des tarifs élevés pratiqués pour la location des lignes et aux abus de pouvoir de marché. Les moyens d'intervention dont dispose l'instance de réglementation créée en même temps que la loi sont peu nombreux et l'instance générale de la concurrence n'a pas été très coopérative. La concurrence au niveau des services ne se développe pas comme on l'espérait et les utilisateurs du secteur privé ne tirent pas beaucoup d'avantages.

La Suisse a préparé une nouvelle loi destinée à ouvrir les marchés des télécommunications à la concurrence. Dans la mise en place du nouveau cadre, les règles de concurrence, en ce qui concerne en particulier l'interconnexion, ont une importance cruciale. Les autorités chargées de la concurrence estiment que ces règles devraient s'appuyer sur les contrats commerciaux et qu'il devrait être fait obligation aux exploitants dominant le marché d'assurer l'interconnexion. Pour elles, les règles spécifiques au secteur complètent les règles générales de la concurrence. Elles n'ignorent pas que pour permettre l'accès au marché, les réglementations ne doivent pas être excessives. Elles sont favorables à un régulateur indépendant des télécommunications qui doit partager ses tâches avec elles.

Le délégué de la Corée a exposé la situation de la concurrence et du régime de la réglementation dans son pays. La concurrence s'exerce sur les marchés internationaux et longue distance. Sur les marchés longue distance, la concurrence s'appuiera sur les installations. Il n'y a pas de concurrence sur les marchés locaux et il ne devrait pas y en avoir dans un avenir prochain car la télévision câblée en est à ses tout débuts en Corée et les réglementations de l'industrie de la radiodiffusion font qu'il est impossible à une entreprise de télévision câblée d'accéder au marché des télécommunications. Il existe un réseau analogique dans la téléphonie mobile et une autre entreprise a obtenu une licence pour exploiter un réseau numérique qui devrait entrer en service en 1996.

Le Gouvernement coréen envisage d'intensifier la concurrence à l'avenir. En 1996, une troisième licence pour les services internationaux, deux ou trois licences et une fréquence correspondante pour les PCS, ainsi qu'une autre licence d'exploitation de télévision câblée seront délivrées. Plusieurs autres licences devraient être accordées dans un avenir prochain pour les services longue distance intérieurs.

Le public détient 20 pour cent des actions de *Korea Telecom* dont la privatisation totale est à l'étude. Le ministère de l'Information et des Communications dispose pratiquement de tous les pouvoirs pour réglementer l'industrie des télécommunications dans une large gamme de domaines : licences, attribution des fréquences, tarifs, redevances d'accès et obligations de service universel. Toutefois, la Fair Trade Commission coréenne est consultée préalablement à l'adoption des lois et des décrets qui restreignent la concurrence.

Le délégué de la Corée a observé que les avantages de la concurrence viennent non du fait qu'il y a plus d'entreprises, mais du fait qu'il existe davantage d'entreprises qui recherchent le profit dans la concurrence. Pourquoi une entreprise publique chercherait-elle à abaisser ses coûts dès lors que les prix sont plafonnés ?

Le délégué de la Norvège a déclaré que le secteur norvégien des télécommunications est en cours de déréglementation et qu'il sera totalement déréglementé d'ici à 1998. Une nouvelle loi sur les télécommunications est entrée en vigueur le 1er janvier 1996. Aux termes de cette loi, l'ancienne instance de réglementation sera dotée de nouveaux pouvoirs et, notamment, elle pourra agir comme une instance chargée de la concurrence. Sa compétence sera parallèle à celle de l'autorité chargée des règles générales de la concurrence ; par ailleurs, un accord sur les procédures a été conclu.

Le délégué français a déclaré que la France n'avait pas encore pris position en ce qui concerne le choix entre le régulateur spécialisé et le recours au droit général de la concurrence. A son avis, un régulateur spécialisé est possible et peut-être nécessaire si la réglementation a pour objet de créer une concurrence aussi rapidement que possible, par exemple s'il y a lieu d'imposer des obligations différentes aux différentes catégories d'opérateurs ou s'il est nécessaire de fixer les conditions d'accès au réseau pour que de nouveaux opérateurs puissent accéder plus rapidement au marché, ou encore s'il faut compenser les effets de grande échelle pour permettre à une infrastructure monopolistique de s'ouvrir aux opérateurs moins importants. En revanche, si une réglementation empêche de parvenir aux résultats que pourrait obtenir la concurrence, une réglementation spécifique est alors inopportune.

Le délégué australien a répondu à la question posée par le délégué de la Corée en déclarant que les entreprises d'Etat sont soumises aux règles applicables aux sociétés et qu'elles ont l'obligation d'obtenir un certain taux de rendement, ainsi que l'obligation de verser chaque année des dividendes au gouvernement en tant qu'"actionnaire". Les besoins en capital doivent être financés par les bénéfices non distribués ou par des emprunts sur les marchés financiers.

Répondant à une question du délégué de l'Espagne, le délégué australien a déclaré qu'Austel a des pouvoirs d'arbitrage et de médiation. Au début, le Ministre, sur l'avis du régulateur, a fixé le prix d'accès. Après qu'*Optus* eût acquis une certaine part de marché, le prix d'accès a été déterminé par voie de négociations commerciales entre *Optus* et *Telecom*. S'ils ne peuvent parvenir à un accord, Austel peut arbitrer et fixer le prix. Ce pouvoir sera transféré à l'instance chargée de la concurrence.

A une question du Président, le délégué australien a répondu que le personnel d'Austel, qui traite actuellement des questions de concurrence, sera intégré dans l'instance chargée de la concurrence et que le personnel qui traite actuellement des questions techniques rejoindra les autres régulateurs techniques. De cette façon, la réglementation sera technologiquement neutre et il n'y aura pas de réglementation ni de régulateurs distincts pour les télécommunications, la radiodiffusion et les communications radio. Il y aura des régulateurs pour chacun des domaines -- concurrence, contenu et questions techniques.

Interrogé, le délégué de la Nouvelle-Zélande a déclaré qu'il existait en Nouvelle-Zélande une obligation de service universel. Lorsque *Telecom* a été privatisé, le Gouvernement a conservé une seule action, l'"action Kiwi" qui impose à *Telecom* certaines obligations en ce qui concerne les services de télécommunications intérieurs. *Telecom* doit, entre autres, conserver une possibilité de tarification locale gratuite, limiter au taux d'inflation le taux des hausses de prix appliqués aux services résidentiels standard, maintenir les dimensions du réseau à celles qu'il avait lors de la privatisation en 1990, et faire en sorte que les taux des loyers ruraux ne dépassent pas le taux standard des loyers urbains.

Le calcul des coûts de ces diverses obligations reste opaque, ce qui augmente les risques de péréquation des tarifs et les conséquences qui peuvent en résulter pour la concurrence. Une entreprise plus efficiente risque de ne pas pouvoir accéder aux services subventionnés ; quant aux services qui accordent les subventions, ils peuvent attirer sur le marché une entreprise moins efficiente. En outre, les obligations liées à l'"action Kiwi" compliquent les négociations entre *Telecom* et les entrants potentiels car il y a asymétrie au niveau des informations. Cette question est actuellement à l'étude et pour certains, l'accroissement de la transparence n'aura probablement pas d'effet significatif car les coûts communs sont si importants au regard du coût marginal d'un service qu'il ne serait pas très utile de les répartir de façon arbitraire. Les obligations liées à l'"action Kiwi" bénéficient d'un ferme appui de la part des pouvoirs publics même s'il en résulte des problèmes de concurrence sur les marchés.

Interrogé sur le dispositif incitatif appliqué lorsque les objectifs de taux de rendement ne sont pas atteints, le délégué australien a déclaré que les obligations pesant sur les entreprises commerciales publiques font l'objet d'un accord entre les principaux dirigeants de l'entreprise et l'administration, et sont révisables tous les trois ans. *Telecom* a toujours satisfait à ces conditions. Le délégué australien pense que si elle ne le faisait pas sans raison valable, les dirigeants pourraient perdre leur emploi.

Le délégué de la Nouvelle-Zélande, qualifiant l'ACCC de "super-régulateur" et notant que les amendements apportés récemment à la loi avaient mis en place un régime privilégiant les installations essentielles, a demandé si un monopole avait été créé.

Le délégué de l'Australie a répondu que cette question avait fait l'objet d'un débat public. On s'est efforcé de limiter le nombre des installations qui pouvaient éventuellement faire l'objet du régime d'accès prévu par l'ACCC. L'accent est mis sur les négociations commerciales même si les installations relèvent du régime d'accès. Le régime de réglementation a mis en balance le danger d'une concentration du pouvoir de réglementation de la concurrence et les avantages liés à une politique de concurrence cohérente dans tous les secteurs. Le nouveau régime de concurrence doit être mis en place en trois étapes :

-- modifications apportées aux lois en vigueur qui régissent le comportement sur le marché (août 1995)
-- nouveau régime d'accès et nouvelles institutions chargées de la concurrence (novembre 1995)
-- élargissement du champ d'application de la loi de la concurrence aux secteurs de l'économie auxquels ce droit n'est actuellement pas applicable (il s'agit pour l'essentiel des entreprises publiques et des entreprises ne relevant pas du droit des sociétés) (juillet 1996)
-- concurrence dans le secteur des télécommunications locales et longue distance.

Le délégué de la Finlande a déclaré qu'avant la déréglementation totale intervenue au début de 1994, on comptait, en Finlande, environ 50 opérateurs locaux -- dont 46 étaient les sociétés appartenant aux abonnés -- et *Telecom Finland*, compagnie à capitaux publics, qui exerçait un monopole sur certaines zones. En 1994, les monopoles locaux ont été supprimés et les opérateurs locaux ont obtenu des licences qui leur ont permis de proposer des services longue distance sur tout le territoire de la Finlande. Cette décision a eu des effets spectaculaires sur les parts de marché : un an après, *Telecom Finland*, qui contrôlait la quasi-totalité du marché longue distance, en détenait moins de 50 pour cent. Les compagnies locales qui opèrent un transporteur longue distance en commun détiennent environ 70 pour cent des lignes. Les prix ont diminué dès que la concurrence a commencé à s'exercer. Toutefois, les tarifs longue distance et certains tarifs internationaux pratiqués par *Telecom Finland* et par le *Groupe Finnet* sont restés les mêmes pendant près d'un an. Il ne s'agit peut-être pas d'une entente mais d'un duopole car le troisième opérateur -- *Telivo*, qui est la propriété de l'entreprise publique pour l'énergie -- avait vu jusqu'en août 1995 sa part de marché limitée à cinq pour cent.

Les autres entrants sont avant tout des prestataires de services et des revendeurs. La nouvelle *loi sur les Télécommunications* permettra à ces entreprises d'opérer sans avoir licence.

Le délégué de la Nouvelle-Zélande a déclaré que deux grosses entreprises avaient accédé au marché des télécommunications longue distance. *Clear*, opérant sur le marché depuis plus de quatre ans, exploitait l'interurbain et détenait 22 pour cent du marché interurbain intérieur et 23 pour cent du marché international. *BellSouth* a accédé au marché cellulaire avec la technologie GSM, mais envisage d'exploiter un service de télécommunications totalement intégré. Elle a réalisé dans les infrastructures les investissements les plus élevés de ces douze derniers mois. *Sprint* et *KallBack* ont l'un et l'autre accédé au marché interurbain international.

La concurrence locale n'a pas encore commencé à jouer, en raison principalement du litige qui oppose depuis un certain temps *Telecom* et *Clear* dans le domaine de l'interconnexion. (*Clear* a son propre réseau mais celui-ci est plus réduit et plus simple que celui de *Telecom* de sorte qu'elle reste tributaire de son interconnexion au réseau de *Telecom*). Comme à l'évidence, les parties ne parvenaient pas à se mettre d'accord, le Ministre du commerce a déclaré que le gouvernement pourrait instituer un contrôle des prix. Ceci a incité les parties à établir les grandes lignes d'un accord sur un certain nombre de problèmes d'interconnexion. Le temps qu'il a fallu pour parvenir à cet accord a suscité bien des préoccupations.

Le délégué japonais a déclaré que la politique d'interconnexion au Japon présente trois principaux aspects :

-- conclusion de divers accords d'interconnexion à l'initiative des transporteurs
-- mise en place de garde-fous dans les cas où les négociations sur l'interconnexion menées par les transporteurs n'ont pas abouti
-- garantie des conditions loyales en matière d'interconnexion.

NTT, le transporteur implanté, domine toujours le marché, de sorte qu'il est difficile aux nouveaux transporteurs de négocier avec lui dans des conditions d'égalité. Chaque transporteur peut demander au ministère des Postes et Télécommunications d'enjoindre à l'autre transporteur d'établir l'interconnexion. Chaque transporteur peut également demander au ministère d'arbitrer les litiges portant sur les modalités des conditions d'interconnexion. En troisième lieu, pour garantir l'égalité des conditions d'interconnexion et obtenir les avantages liés à une concurrence mondiale et effective, les frais d'interconnexion doivent être calculés sur les coûts et les conditions de l'interconnexion ne doivent pas faire l'objet d'une discrimination.

C'est dans le réseau local de *NTT*, où existe un quasi-monopole que se posent les problèmes d'interconnexion les plus importants. De ce fait, *NCC* ne peut fournir de services sans se raccorder au réseau local NTT. En février 1995, le ministère des Postes et des Télécommunications a pris des décisions pour faciliter cette interconnexion. Il s'agit notamment d'accroître la transparence du processus de négociation, de dissocier les coûts de l'interconnexion, de divulguer les accords, d'améliorer la divulgation des informations techniques nécessaires à l'interconnexion et de promouvoir l'interchangeabilité des numéros.

Les coûts d'interconnexion ont été dégroupés pour accroître la transparence des frais calculés sur les coûts et parce qu'il est de plus en plus nécessaire de connaître le coût des réseaux locaux de *NTT*. *NCC* doit connecter les réseaux de signalisation pour fournir certains services avancés. C'est la raison pour laquelle le ministère a favorisé leur interconnexion. Le ministère gère le dispositif de numérotation des services de téléphone fixe depuis la privatisation de *NTT* en avril 1985.

Le délégué de la France a demandé jusqu'à quel point la concurrence était possible et quel niveau de concurrence il y avait lieu de rechercher dans le secteur des télécommunications locales longue distance. Doit-on rechercher une concurrence plus intensive plutôt qu'un duopole plus ou moins coopératif pour chacun des divers services ?

En second lieu, à quoi donner la priorité ? Faut-il mieux garantir le développement rapide de la concurrence dans les services ou celui de la concurrence dans les infrastructures ? Est-il nécessaire de mettre en place sans tarder des opérateurs d'infrastructures compétitives là où l'opérateur en place conserve le monopole de l'infrastructure, pour que les marchés des services fonctionnent de façon suffisamment concurrentielle, ou, à l'inverse l'opérateur qui a toujours été implanté sur le réseau, crée-t-il lui-même des externalités positives, de sorte que plutôt que de tenter de doubler le réseau, on devrait s'efforcer de développer le d'accès au réseau, qui resterait pendant très longtemps un réseau essentiel ?

Dans quelles conditions le prix d'accès devrait-il être fixé par le régulateur (instance publique) et dans quelles conditions devrait-il l'être par voie de négociations commerciales entre les parties ? Dans le premier cas, quels devraient être les objectifs ? L'objectif est-il de rendre contestable le marché des infrastructures ? Est-il de faciliter l'accès aux prestataires de services ?

En troisième lieu, pourquoi faudrait-il à moyen terme informer le public sur le prix d'accès ? Le niveau du prix d'accès est-il plus important pour les prestataires de services que le fait pour le public de connaître ce niveau ? Comment peut-on garantir aux prestataires de services et aux opérateurs du réseau un prix d'accès suffisamment stable pour qu'ils réalisent leurs propres investissements ?

Est-il nécessaire de distinguer le propriétaire du réseau de télévision câblée de celui qui le gère ? Aux termes d'un programme public, *France Telecom* a installé les réseaux des câbles dans les quarante principales villes de France et en est devenu propriétaire. Les réseaux câblés sont entre les mains des trois principaux gestionnaires ; *France Telecom* n'en gère qu'une petite partie. Si les réseaux câblés peuvent offrir des services de télécommunications en concurrence avec *France Telecom* à partir du 1er janvier 1998, un problème se posera. A l'évidence, on espère que les réseaux existants pourront offrir des services de télécommunications à un prix reflétant les synergies avec les autres services, si ce n'est au coût marginal. Mais dans le même temps, la condition essentielle sera que *France Telecom* perde le droit qu'elle exerce actuellement sur le contrôle et l'agrément des services fournis sur ses réseaux câblés. Il est de nécessaire de déterminer qui sont les propriétaires des réseaux et de les réorganiser complètement, en séparant les actifs du réseau de ceux de la gestion du réseau des services de télévision, puis de répartir les actifs entre les différents opérateurs. C'est là une opération difficile.

Le délégué des Etats-Unis a observé qu'aux Etats-Unis, l'infrastructure de l'information s'appuie essentiellement sur le principe de la concurrence. La prestation des services vocaux, des services vidéo et des services d'information résulte de la convergence croissante des technologies et de plus en plus, elle s'exerce de deux façons. Grâce à la mise en place de conditions de concurrence, c'est le marché, et non les régulateurs, qui élabore l'infrastructure des informations telle qu'elle sera dans l'avenir. L'infrastructure de l'information globale sera construite de la même façon. L'investissement privé est le meilleur moyen d'obtenir l'infrastructure de l'information optimale et les Etats-Unis souhaiteraient que dans le monde entier, les investissements soient le fait du secteur privé.

Dans l'affaire *AT&T*, la théorie était que le réseau de distribution constituait le monopole qui donnait à la compagnie de télécommunications intégrée le pouvoir de procéder à une discrimination et de recourir à la péréquation des tarifs pour les services longue distance et la fabrication. Lors du démantèlement d'*AT&T*, les monopoles qui créaient des goulets d'étranglement ont été dissociés des marchés potentiellement compétitifs des services longue distance et de fabrication. (Lorsque la FCC a tenté d'introduire la concurrence dans le secteur de la fabrication, la compagnie a soutenu que pour assurer la protection du réseau, il fallait instaurer des couplages protecteurs entre les produits des autres entreprises et le réseau. Ces allégations n'ont pas été retenues). Actuellement, quatre réseaux de fibres optiques mis en place par des capitaux privés couvrent le pays et constituent la colonne vertébrale d'Internet. Les prix réels appliqués aux usagers résidentiels sont de plus de 50 pour cent inférieurs à ceux qu'ils étaient avant le démantèlement. De nouveaux services sont proposés. En 1994, plus de 25 millions d'usagers ont changé de prestataire de services longue distance, ce qui prouve qu'il existe des possibilités réelles de choix.

La concurrence locale commence à peine. A Rochester, New York, la compagnie de câble propose des services de télécommunications sur son réseau, après quelques améliorations. Lorsque la concurrence locale pourra s'exercer, les prestataires pourraient choisir entre divers moyens d'atteindre leur clientèle.

La question s'est posée de savoir si l'on a besoin d'une infrastructure alternative ou si l'on doit recourir à la revente ? La réponse est à la fois oui et non. Par exemple, aux Etats-Unis, les compagnies longue distance qui ont construit les réseaux de fibres optiques ont d'abord accédé au marché par le biais de la revente. Cela leur a permis de mettre en place leur base de clientèle, et en définitive ils ont pu construire leurs propres réseaux de façon économique.

Isolée, la revente est dangereuse. A Rochester, New York, quelques compagnies ont accédé au marché local en revendant des services dégroupés à partir du monopole de téléphone local. Ces compagnies courent toujours le risque de se voir couper de tous leurs clients par le monopoleur, autrement dit, ils restent dépendants de celui-ci. Il est donc indispensable d'encourager une infrastructure concurrente, avec des compagnies de télévision câblée, des compagnies sans fil, des compagnies de satellite et des compagnies de télécommunications traditionnelles opérant en concurrence.

Les compagnies de télévision câblée locales, déjà sur le marché, vont être très fortement incitées à améliorer leur réseau et à se porter concurrentes sur les marchés des téléphones locaux. Certaines utilisent une technologie sans fil en attendant de disposer des techniques et des capitaux nécessaires pour procéder à cette amélioration et être en mesure de concurrencer les services vidéo. C'est la raison pour laquelle le ministère de la Justice s'efforce actuellement d'empêcher la fusion des compagnies de télécommunications locales et des compagnies de câble opérant dans les mêmes secteurs de services.

La façon dont s'enchaîne la déréglementation est cruciale pour déterminer si elle va ou non profiter aux consommateurs. La déréglementation doit apparaître dans le sillage de la concurrence.

Le délégué canadien a fait remarquer qu'au Canada, la libéralisation des télécommunications en 1979 a commencé par l'équipement des terminaux, suivie par les décisions prises en ce qui concerne les lignes privées et la revente. En 1991 et 1992, le régulateur a permis à la concurrence appuyée sur les installations de commencer à s'exercer. En 1985, le Conseil de la radiotélévision et des télécommunications canadiennes (CRTC) a rejeté une demande d'interconnexion dont il avait été saisi. En 1991, la demande d'interconnexion a de nouveau été introduite. Cette demande a entraîné une procédure publique importante à laquelle a participé le Bureau de la concurrence. La question posée au CRTC était la suivante : la concurrence dans le service des télécommunications longue distance est-elle d'intérêt public, compromettrait-elle le service universel et d'autres objectifs de la politique des pouvoirs publics ? Lors de la procédure, des informations substantielles ont été fournies sur les coûts de l'interconnexion, ce qui a permis au CRTC d'établir une base pour calculer le régime des coûts d'interconnexion dans la branche d'activité.

Le délégué canadien a convenu qu'il était difficile, compte tenu des coûts communs élevés dans la branche d'activité, de savoir avec certitude combien coûte la prestation de service individuelle. Néanmoins, le CRTC a formulé des conclusions et ordonné l'interconnexion sur la base du coût de fourniture de cet accès, des coûts communs et des dépenses engagées par la compagnie de téléphone pour faciliter l'interconnexion. De plus, le CRTC a conclu que les nouveaux entrants auraient à verser une contribution pour subventionner le service de téléphone local. Le CRTC a eu du mal à régler cette question.

Plusieurs problèmes importants se sont posés au Canada après que la concurrence ait été introduite en 1992 dans les télécommunications longue distance.

-- L'industrie des télécommunications était réglementée selon un système de taux de bas/taux de rendement, incompatible avec un système fondé sur la concurrence. Le CRTC a organisé une procédure et décidé de recourir au système de plafonnement des prix. Celui-ci devait être le principal garde-fou contre la péréquation des tarifs.

-- Il était nécessaire de rééquilibrer les taux. (Le déficit oscillait entre 15 et 25 dollars canadiens par ligne d'abonné). Les télécommunications locales avaient reçu des subventions de plusieurs façons : service urbain contre service rural, service des entreprises contre service résidentiel et, surtout, service longue distance contre service local.

-- Les litiges opposant les nouveaux entrants et les compagnies de télécommunications implantées, qui sont arbitrés par le CRTC, ne portent pas tant sur le coût ou les conditions de l'interconnexion, problèmes qui ont été assez bien réglés que sur le montant de la "contribution" que doivent verser les nouveaux entrants pour subventionner le service local. Cette situation exige un rééquilibrage des tarifs mais sur le plan politique, cette question est difficile à régler. Le Conseil augmente actuellement progressivement la redevance mensuelle payée par les usagers.

De nombreux entrants ont accédé au marché longue distance. Actuellement, deux transporteurs nationaux sont en concurrence avec *Sprint Canada* (associé à *Sprint US*) et *Unitel* (associé à *AT&T*),

transporteurs déjà implantés sur le marché. Les tarifs canadiens longue distance ont sensiblement diminué. Les transporteurs implantés ont perdu 20 à 25 pour cent de leur marché, selon le type de service ou selon la province. Le Conseil s'oriente actuellement vers une solution consistant à assurer l'équilibre de son cadre de réglementation grâce au plafonnement des prix et en s'abstenant de recourir à une réglementation là où la concurrence est suffisante.

En ce qui concerne la concurrence locale, le CRTC est engagé dans une procédure concernant l'interconnexion, le dégroupage des tarifs, la transférabilité des numéros et autres questions. La concurrence locale est cruciale si l'on veut déréglementer entièrement la branche d'activité. On s'attend un débat important sur la question de savoir exactement quelles sont les installations essentielles ou les goulots d'étranglement et s'il existe, dans la boucle locale, des éléments qui ne soient pas en fait des installations essentielles mais auxquelles l'accès serait néanmoins rendu obligatoire.

Le délégué de l'Australie a déclaré que lorsque la concurrence a été introduite en 1992, le nouvel entrant *Optus* avait obtenu un droit d'accès au réseau de *Telecom*, le monopoleur en place. Sur avis du régulateur *Austel*, le Ministre a fixé les prix d'accès initial. A cette époque, *Optus* établissait ses propres câbles dans les villes australiennes, les usagers ont été appelés plusieurs fois à voter pour choisir soit *Telecom*, soit *Optus* pour leurs services interurbain, intérieur et international. Les votes ont accordé à *Optus* environ 15 pour cent du marché, avec quelques écarts selon les segments du marché. Depuis ce vote, le prix d'accès est fixé par voie de négociations commerciales entre *Optus* et *Telecom*.

Au début, *Optus* a décidé de ne pas concurrencer directement *Telecom* sur les marchés de télécommunications locaux, sauf dans les villes. Compte tenu des modifications techniques grâce auxquelles les câbles peuvent transporter la téléphonie, payer les services de télévision et les services à large bande, *Optus* a décidé ensuite de déployer ses propres boucles locales. A présent, *Telecom* déploie lui aussi des câbles coaxiaux à fibres optiques. D'ici deux ans, 50 pour cent des habitations australiennes seront câblées par les services *Telecom* et *Optus*. *Optus* propose déjà la télévision câblée et envisage d'offrir début 1996 ses premiers services locaux de télécommunications.

Dès le début, la télécommunication mobile a été très compétitive. On compte en Australie trois opérateurs de téléphone mobile, *Telecom*, *Optus* et *Vodafone*. Environ 13 pour cent de la population utilise des téléphones mobiles. Pour le moment, *Optus* a le droit d'accès et d'utilisation du réseau de téléphone mobile *Telecom*. *Optus* et *Vodafone* mettent en place leur réseau numérique et leur réseau analogique devrait disparaître progressivement d'ici 1999. Chacun de ces trois opérateurs, plus les nouveaux entrants qui accéderaient au marché après 1997, exploiteront leur propre réseau numérique en appliquant toutefois des droits d'accès.

L'un des enseignements que l'on peut tirer de l'expérience australienne, c'est qu'il ne suffit pas de s'appuyer sur les droits d'accès et de revente. Pour une véritable concurrence, il est nécessaire que la concurrence s'appuie sur les installations, en même temps que sur les droits d'accès et les droits de revente.

Quatre opérateurs se partagent en Australie les marchés de la télévision câblée : *Telecom*, *Optus*, une compagnie utilisant les satellites, une compagnie utilisant à la fois satellites et faisceaux hertziens. La quatrième compagnie a pratiquement disparu à l'occasion d'une fusion. Jusqu'en 1997, le nombre de compagnies de télécommunications est limité (deux fixes, trois mobiles) de sorte que, pour le moment, aucune nouvelle compagnie de télévision câblée ne peut accéder au marché de la téléphonie.

Le délégué du BIAC a déclaré qu'il ne pouvait exposer un point de vue consensuel sur les questions. Aux Etats-Unis, l'avenir de l'industrie de la télécommunication fait actuellement l'objet d'un très vif débat. C'est la raison pour laquelle il a présenté un point de vue commercial juridique à caractère plus général à partir des entretiens qu'il a eus avec les usagers de divers pays. En général, mieux vaut avoir plus de concurrence que pas assez. Les interdictions absolues d'accès au marché général ont des effets indésirables. Il est peut-être, et probablement, nécessaire, de recourir provisoirement à une réglementation,

au moins lorsqu'il existe un monopole et que l'on a observé une monopolisation. Il s'agit d'assurer la transition entre les moments où les entreprises ont et n'ont pas accès au marché, ainsi qu'une transition entre la propriété publique et la propriété privée. A cet égard, il peut être inévitable d'avoir une double réglementation, au moins pendant une période transitoire. Les principes antitrust et la politique de la concurrence devraient être pleinement applicables avant et après la période de transition.

L'expérience des Etats-Unis est unique en ce sens que les compagnies locales de télécommunications ont interdiction d'accéder au marché de la téléphonie longue distance. Cette interdiction résulte pour une large part de la décision "Modification of Final Judgement" qui a démantelé le système *Bell*.

La question fondamentale est celle de l'interconnexion. Aux Etats-Unis, une seule compagnie reste le principal prestataire de services de télécommunications interurbains. Les transporteurs interurbains font observer que le transporteur local continue d'occuper une position dominante, sinon une position de monopole, et s'inquiètent des conditions, de la qualité et du prix d'accès à la boucle locale. La législation des Etats-Unis prévoit une période de transition pour permettre aux transporteurs locaux d'accéder au marché interurbain à condition que ceux-là accordent la connexion à des prix équitables et non discriminatoires, qu'ils pratiquent l'égalité d'accès, qu'ils dégroupent les services, qu'ils assurent une co-location sous une forme ou une autre et qu'ils prévoient des possibilités de revente.

Ces dispositions réglementaires applicables pendant la période de transition seraient déterminées par l'instance de réglementation. Il s'agit alors de savoir notamment, à quelle instance il incomberait de constater que ces conditions sont satisfaites, qu'elles sont appropriées, et quel devrait être, pendant la période de transition, le rôle du Ministère de la Justice à leur égard. De l'avis de le délégué du BIAC, il serait équitable de confier au régulateur le soin de déterminer si ces conditions, convenablement définies, sont satisfaites, et que le Ministère de la Justice, dans le cadre de ses fonctions de consultation et de détermination, ait tous pouvoirs pour continuer d'appliquer les lois antitrust sans que le secteur des télécommunications bénéficie d'une immunité.

Le délégué de la Commission des Communautés européennes a répondu à un point soulevé par la délégation française concernant le point de savoir s'il suffit de mettre l'accent sur la concurrence dans les services, en profitant des économies d'échelle qui peuvent exister au niveau des infrastructures, ou s'il conviendrait de favoriser la concurrence dans les infrastructures proprement dites. L'expérience acquise par la Commission au cours des quelques dernières années sur le marché des services à valeur ajoutée montre qu'il n'est malheureusement pas possible que la concurrence se développe convenablement dans les services où ne s'exerce pas une concurrence effective dans l'infrastructure sous-jacente. On peut observer plusieurs phénomènes, mais le plus important, c'est que les prix des lignes louées sont élevés, en particulier pour celles des services à valeur ajoutée. Les prix relativement élevés pratiqués en Europe tendent à prouver que, contrairement à ce qui a parfois été dit, le régulateur n'a pas un objectif unique, celui de favoriser la concurrence, mais plutôt un certain nombre d'autres objectifs économiques et sociaux légitimes. Il semble donc que si l'on souhaite obtenir dans les services un niveau de concurrence effective, il faille introduire progressivement un certain degré de concurrence dans l'infrastructure, pour parvenir enfin à la pleine concurrence.

La seconde possibilité consiste à séparer, comme l'ont fait les Etats-Unis, les opérateurs régionaux des opérateurs longue distance. Les opérateurs longue distance, ainsi que le régulateur, peuvent constituer un contrepoids aux monopoles locaux, pour leur propre avantage, mais aussi pour celui des usagers.

Pour créer une concurrence effective au niveau des infrastructures notamment dans l'accès à la boucle locale, on pourrait promouvoir de nouvelles technologies alternatives, et l'on peut imaginer que le régulateur puisse fixer les conditions d'accès permettant de favoriser ledit accès. Pour accroître artificiellement la rentabilité des opérateurs du réseau de télévision câblée, on a recouru à une méthode simple qui a consisté à leur accorder des territoires exclusifs pendant une période donnée.

Discussion générale

Le délégué de la Nouvelle-Zélande a rappelé que la délégation des Etats-Unis avait déclaré qu'il n'y avait aucun avantage à déréglementer avant d'être passé par le stade de la concurrence. C'est exactement ce qu'a fait la Nouvelle-Zélande. Le délégué des Etats-Unis a également déclaré que la FCC ne pouvait pas mettre en oeuvre ses initiatives en matière de concurrence, que les actions du monopoleur les avaient fait échouer. Ces deux déclarations sont inconciliables. Il arrive souvent que la réglementation ne fonctionne pas comme on le prévoyait et que souvent même elle échoue. L'on doit rester sceptique quant à la capacité des régulateurs à favoriser la concurrence, surtout s'il s'agit d'instances propres à la branche d'activité. Les régulateurs ont leurs incitations propres. Souvent, ils n'ont ni les pouvoirs ni les connaissances, ni les capacités nécessaires pour fonctionner comme on le prévoyait.

Le délégué japonais a demandé quels étaient les effets de la division horizontale de services de télécommunications locaux. Ce problème se pose dans le cas de *NTT*. Quel a été l'effet, sur la concurrence des services locaux, du démantèlement de Bell System en sept sociétés (les "baby bells") ? L'objectif était-il de favoriser la concurrence dans les services de télécommunications locaux ? Cette division a-t-elle influé sur l'accès des compagnies de téléphone locales à la R&D ?

Le délégué des Etats-Unis a répondu que l'effet sur la recherche et le développement dans les Laboratoires Bell n'avait pas été très important ; la R&D est restée intacte au sein de *AT&T*, la compagnie de télécommunications longue distance. Chacune des compagnies régionales Bell a entrepris d'ouvrir un secteur propre de R&D de sorte que globalement, il est probable que la R&D a augmenté. Cette question est importante pour le Japon. Il n'était pas envisagé de créer une concurrence locale en démantelant *AT&T*. Il n'y a pas eu d'effet sur la concurrence dans le secteur de la téléphonie locale et il reste encore à faire dans cette voie. Lorsque le démantèlement a été conçu et réalisé, on ignorait encore s'il pouvait y avoir une concurrence au plan local et quelle pourrait être son efficacité. On savait et l'on croyait que la concurrence dans les services d'information de fabrication et de téléphone longue distance était possible et qu'elle était en passe d'être compromise par un monopole intégré et unifié.

La concurrence est préférée à la réglementation, mais la question est différente s'il s'agit de choisir entre monopole déréglementé et réglementation. Le délégué de la Nouvelle-Zélande a indiqué que dans son pays, il existe une forme de réglementation des tarifs existant depuis le début, qu'il y avait un lien entre certains prix et l'inflation et que le service universel faisait l'objet de diverses dispositions. Ce qu'a fait la Nouvelle-Zélande a été extrêmement efficace et constitue un exemple important, mais à coup sûr, il serait extrêmement préjudiciable pour les usagers de supprimer la réglementation des tarifs et les obligations de service universel avant que la concurrence soit mise en place. Il faut favoriser la concurrence et seulement après déréglementer car la réglementation serait alors inutile et gênante.

Le Président a observé qu'il était nécessaire de préciser ce que l'on entend par réglementation ; s'agit-il par exemple de réglementer l'accès au marché ou les tarifs.

L'un des délégués des Etats-Unis a déclaré qu'organiser des négociations privées pour mettre en forme les accords d'interconnexion présentait des avantages potentiels. Pour la législation en cours d'adoption, c'est la méthode que l'on a adoptée, mais le régulateur peut éventuellement intervenir. Il ne faut pas confondre la négociation avec un monopoleur et la négociation entre intervenants égaux sur un marché.

Le délégué du Canada a déclaré que l'évolution de la technologie est un stimulant important pour l'évolution de la réglementation. Une fois numérisés, un signal radiodiffusé ou un signal vocal, ou encore un flot de données, sont tous les mêmes. Les gouvernements ont tous un dispositif réglementaire organisé autour d'un certain paysage technologique. Les compagnies du téléphone ont amélioré leurs capacités d'écoulement du trafic. Jusqu'à un certain point, la distinction entre local et international est sans objet car

la différence entre les coûts marginaux est insignifiante. Le régime de réglementation doit résoudre la question suivante : comment va-t-on payer les câbles mis sous terre ?

A mesure que la concurrence se fait plus pressante et que la technologie évolue, les subventions ancrées dans le système de réglementation sont de plus en plus contestées. Dans la mesure où un régime de réglementation persistera, il faut le concevoir différemment pour répondre aux objectifs spécifiques de la politique sociale.

En remodelant le régime de réglementation, l'instance chargée de la concurrence au Canada a constaté qu'elle avait obtenu un succès considérable en se faisant l'avocat de la concurrence plutôt qu'en remplissant son rôle d'exécution. Les interventions devant le législateur et le régulateur ont été très positives et ont fait progresser les questions à l'ordre du jour.

Le délégué canadien a évoqué la question des pays ayant une expérience en matière de concurrence locale. Convient-il de prendre pour critère, en vue de procéder à un dégroupage obligatoire, une norme antitrust d'une installation essentielle, ou faut-il recourir à quelque autre norme ? Ne risque-t-on pas de voir un régulateur aller trop loin dans la voie du dégroupage, décourageant ainsi la mise en place d'autres réseaux ?

Le délégué australien a déclaré qu'après 1997, il est question d'adopter pour les arrangements un régime neutre par rapport à la technologie. L'actuel régulateur des télécommunications, Austel, estime, au vu de son expérience acquise dans les années 90, que l'évolution de la technologie fait qu'en raison des évolutions de la technologie, toute décision qu'il prend est applicable pendant deux ans, voire moins. C'est pourquoi, il est recommandé d'adopter un système de réglementation ne tenant pas compte de la technologie.

Le Président a déclaré que l'on croit que la concurrence dans le secteur des télécommunications locales est le fait de ceux qui sont les propriétaires des fils. Mais dans certains pays, la radio fixe connaît des développements. Sa question est la suivante : peut-on considérer que la radio fixe peut concurrencer le réseau local ?

Le délégué de l'Espagne a souhaité formuler un commentaire sur les arguments échangés entre les Etats-Unis et la Nouvelle-Zélande en faveur ou contre la réglementation. Le système de réglementation ne constitue-t-il pas la véritable question ? En Nouvelle-Zélande, la réglementation a été l'oeuvre du système judiciaire. Avec les systèmes de réseau, il est difficile de ne pas recourir à une réglementation d'un type ou d'un autre puisqu'il n'existe pas de coût marginal auquel on puisse se référer. La réglementation est nécessaire en cas de défaillance du marché.

Le délégué du Canada a fait remarquer que l'on propose actuellement de donner des licences PCS, système sans fil en concurrence avec les télécommunications locales.

Le délégué des Etats-Unis fait écho au commentaire du délégué canadien. Le produit du futur sera l'appel téléphonique, non un appel téléphonique local ou longue distance. Les différences actuelles sont donc transitoires. Les communications sans fil représentent un gros potentiel mais on ne sait pas quel sera l'effet des PCS aux Etats-Unis. Les concessionnaires de licences PCS ont déboursé de grosses sommes pour obtenir leur licence et les conditions d'extension du système seront onéreuses. On pensait au début que les PCS constitueraient simplement un service mobile de plus, qui ferait concurrence aux autres services mobiles. Mais on considère à présent qu'ils peuvent être utilisés pour un usage fixe à la place de la boucle d'abonné. Or, la communication dans les deux sens nécessite un large spectre. C'est la raison pour laquelle on estime que les deux techniques câblées (télévision câblée et téléphone) représentent les meilleures perspectives à court terme, pour concurrencer le téléphone local. Le ministère de la Justice interdit donc la plupart des fusions de ce genre dans le même secteur de services. Cette interdiction sera peut-être levée

à mesure que le marché évoluera. Cette interdiction n'existe pas pour les zones rurales où le Ministère autoriserait l'utilisation partagée d'une bretelle commune.

Répondant à la délégation canadienne, le délégué de l'Australie a déclaré que les critères de l'installation essentielle sont plus rigoureux lorsqu'ils sont appliqués dans le secteur des télécommunications que dans d'autres industries du réseau, car les externalités du réseau sont différenciées, à savoir qu'un usager ne se soucie pas de savoir d'où provient l'électricité qu'il reçoit mais il tient à savoir quels appels téléphoniques il reçoit. Par conséquent, quiconque obtiendra une licence de transporteur après 1997, doit assurer l'accès aux autres transporteurs afin de garantir une connectivité générale, l'une des caractéristiques principales des communications.

Après le commentaire du délégué de l'Espagne, le délégué de la Nouvelle-Zélande a déclaré qu'il ne s'agit pas d'opposer "réglementation" à "non-réglementation", il s'agit plutôt d'intégrer le degré de réglementation et ce que fait réellement le régulateur. En Nouvelle-Zélande, le régulateur ne prend pas de décisions importantes pour le compte de l'industrie, pas plus qu'il ne prend de décisions commerciales. Il a fait remarquer que lorsque la High Court est saisie d'affaires intéressant la concurrence, ses membres non juristes se révèlent des économistes extrêmement compétentes.

Le délégué du Royaume-Uni, interrogé sur l'expérience de son pays en matière d'extensions de radio fixe du réseau de télécommunications, a déclaré que cette expérience était trop récente pour pouvoir être interprété utilement.

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