ANNEX 3

EFFECTIVE APPLICATION - ANALYSIS BY MEMBER STATE

Annex 3 Effective application – analysis by Member State

3.1 National regulatory authorities (NRAs)

Belgium

Competition on the Belgian telecommunications market has increased over the past year. There are now 25 licensed market players operating public networks and 23 licensed to offer public services. Even though important elements of legislation are still outstanding, developments have been speeded up recently. The adoption of a significant number of decrees has been announced for 1999, as well as plans to review parts of the legislation that are considered to be barriers to competition. The NRA has also been active in preparing measures, and has initiated discussions and worked closely with market operators in preparing for implementation. Moreover, it has launched a number of (public) consultations in the past year, including one on third generation mobile telephony.

The national regulatory authority, *l'Institut belge des services postaux et des télécommunications*/*Belgisch Instituut voor Postdiensten en Telecommunicatie* (IBPT/BIPT), is a semi-autonomous administrative body headed by the Minister for Telecommunications, who at the same time is responsible for the State's shareholding in the incumbent operator, Belgacom (50% plus one share). In that capacity, the Minister also represents the Belgian State at the general meeting of Belgacom shareholders. In addition, following the formation of a new Government in June 1999, the new Minister is responsible for the privatisation of public enterprises.

The new entrants have expressed fears that the concentration in the same hands of ministerial, regulatory and shareholder functions may lead to conflicts of interest, and they question the extent to which these tasks are being exercised independently of each other. Whereas the Minister has delegated daily regulatory tasks to the IBPT/BIPT, he retains important decision-making powers such as the granting of individual licences or approval of Belgacom's Reference Interconnection Offer (BRIO). On the other hand, the Belgian authorities have indicated that fears of a conflict of interests are not justified, and that there is no evidence of lack of independence. They stressed in particular that sufficient firewalls are in place to guarantee the separation of tasks connected with the shareholder and the regulatory functions of the Minister.

In the opinion of new entrants, the legal powers vested in IBPT/BIPT are fairly limited and it has insufficient powers to take binding decisions. For most issues it has merely an advisory role. IBPT/BIPT therefore has less scope to take action than its counterparts in most other Member States. For instance, in the new Decree on general principles for interconnection agreements, the powers of the NRA are still limited to intervening only when the parties fail to reach agreement; there is no provision for intervention by the NRA on its own initiative in this respect. The Belgian authorities have indicated that most of the problems will be solved and that market players will have recourse to a binding procedure for their disputes when the "Interconnection Chamber" (Chamber for interconnection, special access, shared use and leased lines) becomes operational. A Royal Decree on the rules and procedures before the "Interconnection Chamber" has been signed and will enter into force soon.

New entrants regret that it can take many months, sometimes up to a year, for legislation that has already been adopted to be published and actually enter into force. This has led to unnecessary delays in the past.

New entrants have indicated that, in their view, the IBPT/BIPT is understaffed, given the amount and complexity of regulation in the sector. Nevertheless, operators have found its staff to be highly competent and consider that the IBPT/BIPT performs its tasks well in view of the limited resources available. Its role as coordinator in the telecommunications sector (for instance in number portability) and in preparing legislation is very much appreciated by the market. However, not all issues are dealt with on schedule, such as the drafting of overdue legislation. Taking a long-term perspective, however, the IBPT/BIPT does not consider itself to be understaffed, although it recognises that additional staff on short-term contracts would be useful to draft the outstanding legislation. It has indicated that procedures to enable additional staff to be recruited have been set in train.

Denmark

The Danish telecommunications market operates within a lightly regulated environment and is subject to increasing competition, as can be seen from the fact that the incumbent Tele Danmark's share of the market for outgoing international calls on the fixed network was 64.1% at the end of 1998, down from 82% at the end of 1997.

The Danish mobile penetration rate is estimated to have reached 46%, the third highest in the EU.

Following a detailed review of the regulation of the Danish telecommunications sector in the first half of 1999, the Minister of Research and Information Technology, who has responsibility for regulatory policy in the sector, issued a report entitled "*Status og visioner for telepolitikken: Sund konkurrence og ægte valgfrihed – Danskernes adgangsbillet til netværksamfundet*" (Status and Visions for Telecom Policy: Healthy Competition and Real Freedom of Choice – The Danes' Admission Ticket to the Information Society). This report contained a number of recommendations as to the future revision of the legislation, with a view to ensuring a modern, effective and simplified regulatory framework for the Danish telecommunications sector. This was followed by an "Agreement in Principle on Telecommunications Policy Aims" reached by the Danish political parties in September 1999, governing the future development of regulation.

The political agreement identifies as a long term objective the gradual phasing out of sector-specific regulation as effective competition develops in the market, ultimately leaving regulation to safeguard only universal service and access to scarce resources. However, it recognises the need for sector-specific regulation in the meantime, strengthened where appropriate, particularly in the area of interconnection on the fixed network.

The National Telecom Agency (*Telestyrelsen)* (NTA) is the national regulatory authority charged with supervising and enforcing compliance with the telecommunications legislation in Denmark, while application of the competition rules is entrusted to the Competition Authority. Operators consider that coordination between the two authorities works well, providing an effective "one-stop-shop". The Competition Authority has been given an increasing role in matters of pricing regulation. For example the NTA is required to obtain a binding opinion from the Competition Authority on whether any violation of the rules on

cross-subsidisation has occurred in the accounting of operators with significant market power, on whether terms included in interconnection agreements constitute a violation of the Competition Act, and on whether the maximum prices proposed by the operator charged with the provision of universal service are in accordance with the Competition Act.

While the independence of the national regulatory authorities from operators has not been questioned, there is a perception among operators that the NTA has taken a cautious approach towards enforcement, reacting to complaints rather than initiating action on its own initiative. These concerns may be partially attributable to a lack of resources in the NTA, in terms of staffing levels and expertise, exacerbated by the high turnover of staff.

Concern has also been expressed at the length of time taken to resolve disputes before the NTA, due to the time allowed for mediation and the right of parties to appeal NTA decisions to the Telecommunications Complaints Board. Decisions on appeal may require the matter to be referred back to the NTA for further consideration. The fact that in the past the NTA has suspended the entry into force of its decisions pending recourse to the Complaints Board has contributed to these delays. On balance such delays are likely to benefit the incumbent. Some operators have argued for strengthened powers for the NTA to make and enforce interim measures pending definitive resolution of a case.

A number of these concerns have been taken into account in the political agreement of September 1999, which envisages legislative action to reduce delays, a clearer definition of the jurisdiction of the Complaints Board, and closer involvement of the NTA in ensuring that industry agreements do not in practice frustrate the aims of regulation, and increased recruitment of specialised staff by the NTA in preparation for the development of the Danish LRAIC accounting model for interconnection.

The future legislative changes envisaged by the political agreement are also intended to increase the flexibility and adaptability of the regulatory regime to changing market conditions, by shifting the balance away from primary legislation towards secondary legislation such as Executive Orders.

Although the Danish State no longer holds any shares in the incumbent Tele Danmark, it does wholly own *Banestyrelsen*, the entity which runs Denmark's railway infrastructure and owns an alternative telecommunications infrastructure, and which in turn has a shareholding in the mobile operator Mobilix A/S.

Germany

The German telecommunications services and infrastructure market has undergone rapid expansion since liberalisation on 1 January 1998. The new entrants have created a strong competitive pressure which has brought down prices in almost all market segments and contributed to creation of a wide range of new products. There are now 47 operators (including Deutsche Telekom AG (DT)) licensed to offer voice telephony nationwide and 100 operators with a geographically limited voice telephony licence. 179 operators have a network licence. Of those, 10 have a national and 169 a geographically limited licence. 111 of the total number of network operators have started activity in the city (local) zone and 9 at national and international level. There are 86 interconnection agreements in place and 52 agreements for access to the local network. A series of further agreements is currently under negotiation. Consumer satisfaction as a result of liberalisation is reported to be high. In particular,

consumers appreciate the large choice of operators offered via the call-by-call mechanism. There is an increasing tendency among consumers to conclude stable agreements with new entrants and to rely on pre-selection.

In Germany, all regulatory tasks in the telecommunications sector are assigned to the "*Regulierungsbehörde für Post und Telekommunikation* (RegTP)".

RegTP has been established as an agency under the supervision of the Minister of Economic Affairs. The State's 65.3% shareholding in Deutsche Telekom is managed by the Ministry of Finance, thereby ensuring separation from the regulatory function.

RegTP's decisions are taken by its Ruling Chambers, which are organised in a similar manner to those of the Office of Competition, thus ensuring a high degree of independence tantamount to judicial autonomy. The presidency of RegTP can only issue general political guidelines to be applied by the Ruling Chambers.

In practice, and as a result of the independence of its Ruling Chambers, RegTP has taken strong and independent action and has in particular adopted key decisions on interconnection pricing (May 1999), leased lines (September 1999), pre-selection (June 1998) and number portability (April 1998) that have been decisive in creating favourable market entry conditions.

New entrants have claimed that RegTP does not have a forward-looking policy. They lack a stable basis for market entry due to frequent delays in decision-making by RegTP and postponement of final decisions by more than a year in certain cases, such as the authorisation of tariffs for the unbundled local access network. Furthermore, they consider that RegTP does not use its powers to enforce substantial obligations of the incumbent such as the submission of cost-accounting data, in particular under the authorisation procedures for the interconnection tariffs. The outcome of the public hearing on the setting of regulatory principles for interconnection was not communicated until seven months after the launch of the hearing and virtually a year after interconnection problems were encountered. In their view RegTP thereby created a general lack of certainty for the new market entrants with regard to essential current and future market entry conditions, so creating a substantial barrier to market entry. However, it should be taken into account that a methodology to allow fully objective and timely decision-making, in particular as regards the assessment of the incumbent operator's cost-accounting system, is in preparation. Moreover, in its decision of 8 September 1999 on pricing of leased lines, RegTP has shown its determination to finally enforce a cost-accounting system for leased lines which would reflect costs.

RegTP is responsible for granting licences, regulating leased lines and tariff principles, and frequency assignment. It is empowered to order, at the request of an interconnecting party, public telecommunications network operators to interconnect and to define the conditions of interconnection, and sets the deadlines for implementation of the decision.

RegTP does not have the necessary powers to intervene on its own initiative in interconnection negotiations, nor can it set deadlines for the conclusion of negotiations. This has only created a temporary market entry barrier, however, as new entrants frequently resort to the dispute settlement procedure, which ensures that interconnection agreements are concluded within a reasonable period (10 weeks with limited extension possibilities for the

decision plus 3 months for enforcement) of the request for dispute settlement being filed with RegTP.

The regulatory framework empowers RegTP to publish those parts of concluded interconnection agreements that are expected to be part of the reference interconnection offer (RIO). In practice, the conditions of the RIO have been progressively established on the basis of decisions of the Ruling Chambers on tariff authorisation and dispute settlement, which have then been published by RegTP as part of the RIO (*Grundangebot).* The current framework does not empower the regulatory authority to set, on its own initiative, the conditions of the RIO. In particular, it does not allow RegTP to influence the timing of the establishment of the RIO: it is dependent for this on the incumbent or new entrants initiating action. New entrants have the impression that RegTP has been insufficiently pro-active and has failed to take the initiative in establishing the RIO in good time.

Greece

Delays in adopting national measures for transposing key directives have been the major concern of new entrants since the Fourth Report on the Implementation of the Telecommunications Regulatory Package. These delays had adverse effects on the promotion of competition in those segments of the market which are already liberalised. Greece recently notified new legislation (transposing key directives) to the Commission, as discussed in this section on the NRA and elsewhere in this Report. The Commission is currently examining the conformity of this legislation with the Directives. Competition in the mobile and satellite (S-PCS) markets has been advanced, with the fixed market particularly lagging behind since no relevant licence has yet been granted. Tariffs in the leased lines market have fallen and some progress has been made in rebalancing the incumbent's tariffs. Practical implementation of the transposed directives will be the biggest challenge for Greece in the near future.

The Ministry of Transport and Communications ('the Ministry') and EETT *(Εθνική Επιτροπή Τηλεπικοινωνιών και Ταχυδρομείων)* share regulatory tasks. The Ministry, which is primarily responsible for establishing telecommunications policy, has made significant progress (through its General Secretariat) towards transposing key directives including the Interconnection (97/33/EC), Licensing (97/13/EC), New Leased Lines (97/51/EC), Numbering (98/61/EC) and New Voice Telephony (98/10/EC) Directives.

EETT's efforts so far have been well received by the market, although concerns have been expressed by certain operators that it has not been as proactive as it should be in certain areas (such as dispute resolution). In addition, some delays have been experienced under EETT's decision-making process. New entrants suggested that speedier decision-making procedures for dispute resolution need to be established. EETT does not accept this criticism, pointing out that decisions are made in accordance with the applicable regulations. However, it expects response times to improve now that the Directives have been transposed. In one specific case, EETT is reported to have failed to take a position despite being informed of cross-subsidisation between the incumbent and its subsidiary. No official complaint was ever filed with the EETT in this matter. On the other hand, the judiciary has the power to rule on relevant issues, but this cannot be seen as an alternative way of addressing the problem - due to the lack of relevant expertise and the sometimes lengthy procedures.

EETT advises the Minister and also has a number of market supervision and enforcement powers. According to some operators, however, the boundaries between its powers and those

of the Ministry are not always clearly defined. The Ministry rejects these allegations (which are based on extreme cases). Issues of division of powers will be addressed through the new Framework Law, expected by the Ministry to be adopted soon.

Some operators expressed the view that EETT's role should be reinforced by transferring more powers to it from the Ministry. They also considered that EETT's insufficient powers and limited number of personnel make it appear weak. Although the Ministry maintains that EETT has already been given all the powers it needs to exercise its responsibilities, some operators suggested that wider powers should be granted in the areas of licensing, management of frequency spectrum and numbering policy. Some operators reported that employees of the incumbent are still seconded to EETT and the Ministry, jeopardising the independence of both bodies. EETT rejects this allegation stating that only three OTE employees are currently seconded to it, and that they do not participate in regulatory matters. EETT therefore claims that those secondments have not undermined its impartiality. No secondments exist in the Ministry. At present, EETT does not employ any permanent staff and it is assisted in its work by external experts. Lengthy bureaucratic procedures have been the major reason for EETT's understaffing. EETT expects to have its full staff complement by the end of this year.

Spain

The Spanish telecommunications market has expanded rapidly since liberalisation on 31 December 1998. The national regulatory authority has issued a large number of licences (some 60 licences for the voice telephony service and for telecommunications infrastructures) and intervened to solve conflicts between operators. The authorities have taken important measures to ensure greater competition in the various segments of the telecommunications market.

The tasks of the national regulatory authority in Spain are divided between the *Ministerio de Fomento* and the CMT (*Comisión del Mercado de las Telecomunicaciones*). Their respective powers are defined in the Telecommunications Liberalisation Act No 12/1997, the General Telecommunications Act No 11/1998 and in various provisions of secondary legislation.

The Directorate-General for Competition and the Competition Court are competent for general competition matters, while the Economic Affairs Committee (*Comisión Delegada del Gobierno para Asuntos Económicos)* has some powers in respect of prices (prices to end-users for voice telephony and leased lines).

Most operators consider that the division of powers between several different bodies and the large number of provisions (laws and secondary legislation) describing the specific powers in question create considerable confusion. In particular, they complained about the division of responsibility between the CMT and the Ministry concerning the establishment of interconnection tariffs. In actual fact, however, competence for modifying interconnection tariffs lies with CMT.

Indeed, the Spanish legislation provides that, in general, the Ministry is responsible for drafting regulations, frequency management, the numbering plan and certain aspects of public service. The CMT implements the legislation, supervises operators and competition issues and deals with disputes between operators (e.g. CMT designates operators as having

significant market power). Resolution of disputes between subscribers and operators is a matter for the Ministry, as it concerns public service and protection of citizens' rights.

Coordination between the Ministry and the CMT is ensured through the participation of each in the decisions of the other in the form of mandatory delivery of an opinion, which in some cases is binding on the decision-maker.

With regard to coordination between the CMT and the competition authorities mentioned above, CMT is responsible for specific competition issues in the telecommunications sector, and it always has the right to intervene in competition cases brought by operators (through a complaint, request for intervention, etc). Although there are no legislative rules governing coordination between these bodies, in practice the decision-maker frequently consults the others. The opinions given in these cases are always non-binding.

France

The French telecommunications services and infrastructure market has expanded steadily and progressively since liberalisation on 1 January 1998. The new entrants have created strong competitive pressures that have brought down prices in almost all market segments. At the end of July 1999, 74 licences had been issued for the establishment of public networks and/or provision of voice telephony, including 8 licences for satellite. Of these 74 licences, 37 were for voice telephony and network combined, 16 for network and 21 for voice telephony services. 85 fixed-to-fixed interconnection agreements have been concluded, 10 mobile-to-fixed, and no mobile-to-mobile. The regulatory authority has acted strenuously to allow competition to take off, and new entrants appreciate in particular the planning security which is created by the regulatory framework.

Regulatory tasks have been split between the Ministry of Economic Affairs, Finance and Industry (the Ministry) and the *Autorité de Régulation des Télécommunications* (ART). The essential regulatory tasks, in particular concerning interconnection and dispute settlement, are delegated to ART. The Ministry has retained certain powers, in particular as regards the award of individual licences, approval of the incumbent's tariffs and approval of universal service costs.

The ART has been set up as an autonomous authority. The procedures to designate the President and members of ART, on the basis of a decree and parliamentary decisions, ensure a high degree of independence and continuity. ART has been assigned the powers necessary to regulate interconnection, with the exception of the power to intervene on its own initiative during on-going interconnection negotiations. However, this is not reported to have led to any problems in practice, as operators tend to request ART to act in dispute settlement. ART appears to be proactive and to ensure as high a degree of transparency as possible about its political objectives and about decisions taken.

As of the end of August 1999, the State held a share of approximately 62% in the incumbent operator, France Télécom (FT). The management of the State's shareholding in FT is exercised by the Economic Affairs section of the Ministry, and by the Treasury department. At the same time, the Ministry has been assigned powers related to telecommunications, which are delegated to the Secretary of State for Industry. While it is not clear whether the Minister for Economic Affairs, Finance and Industry is legally or constitutionally entitled to intervene in the exercise of delegated powers exercised by the Secretary of State for Industry,

in practice this does not appear to be the case. However, as the Secretary of State for Industry is part of the Ministry which supervises the State's shareholding in the incumbent, new entrants are concerned about the independence of some regulatory decisions and about possible conflicts of interests in certain instances.

In particular, new entrants feel a substantial lack of transparency and, in certain cases, suspect a certain lack of impartiality in the exercise of regulatory powers by the Ministry. Furthermore, they are critical that the sharing of responsibility in the granting of individual licences leads in certain cases to unnecessary delay in decisions. Their concerns mentioned above about political independence relate more particularly to the approval of the incumbent's tariffs. The Ministry may take, and has done so in practice in a few cases, a view which differs from the recommendations and proposals made by the ART. In 1998, the ART gave its advice to the Secretary of State on 100 tariff proposals, including advice which was negative or conditional in 16 cases, and the Secretary of State took a different view from the ART in only 5 of the final decisions.

New entrants also have concerns as regards the exercise of legislative competencies by the Ministry. They claim that certain positions of the Secretary of State for Industry, in particular as regards the extension of universal service, the timing of the introduction of ADSL and the arrangements for introducing pre-selection, tend to favour the competitive situation of the incumbent operator. However, the recent change of viewpoint of the Minister regarding the granting of partial access to the incumbent's ADSL facilities ("ADSL unbundling") for new entrants, and an apparent determination to put in place pre-selection as of 15 January 2000, tend to dismiss these doubts.

New entrants strongly advocate the delegation of all regulatory issues to ART (in particular tariff regulation) in order to dismiss their doubts related to the impartiality and transparency of regulatory decisions and to improve the efficiency of the institutional regulatory framework. New entrants also advocate that the ART should be given more freedom on a number of topics such as establishing the cost accounting methodology for calculation of universal service costs, as they feel that the prevailing regulatory framework is too binding on the ART. An analysis of the possibilities to improve the current situation, in particular as regards tariff authorisation, has been communicated by the ART in its annual report 1998.

Ireland

The Irish Government decided to complete the abolition of exclusive rights and liberalise the provision of voice telephony and the establishment and provision of public voice telephony networks on 1 December 1998, earlier than originally laid down by the Commission. This early liberalisation imposed a heavy burden on the National Regulatory Authority (NRA), which had to address a large number of important issues at short notice. At present, serious efforts are being made by the NRA to address certain outstanding issues. Competition is now developing in all markets - with the mobile penetration rate reaching around 30% of the population. In the provision of Internet services, high penetration rates have been observed – at around 12.8% of the population, well above the EU average. A large number of licences to provide a wide range of services, such as public fixed network and voice telephony services, on a national and/or international level, have been granted. Some of these licensees have not yet actually started to offer the services provided in their licences.

The National Regulatory Authority in Ireland is the Director of Telecommunications Regulation and Head of the ODTR (Office of the Director of Telecommunications Regulation). The Minister for Public Enterprise is responsible for defining telecommunications policy. The independence of the Director is expressly guaranteed by statute and the ODTR is generally considered by operators to be completely independent and impartial in the exercise of its duties. The concerns about the ODTR's independence (referred to in the Fourth Report on the Implementation of the Telecommunications Regulatory Package) have now been addressed following the full privatisation of Eircom (formerly Telecom Eireann). In particular, under an initial public share offer completed in July 1999, the Government disposed of its majority shareholding in the company, retaining only a minority shareholding of 2.8% to meet certain obligations. Furthermore, the Government did not retain a "golden share". As an increasing number of previously governmental functions are being transferred to independent regulatory bodies, the Minister is planning to launch a consultation procedure to discuss the issue of the accountability of the regulators.

On the whole, many operators feel that the ODTR is performing satisfactorily. They also think that the ODTR has made considerable progress and recognise that it has been efficient in dealing with licensing and interconnection issues. It has tackled many important issues related to the development of the Irish telecommunications market, making extensive use of public consultation procedures. However, some concerns were expressed about ODTR's performance regarding the actual operation of the market. According to the ODTR the market is still in a state of rapid development. The Director has expressed interest in focusing further on these developments as operators become more active and competition develops. Some operators consider that although ODTR's practice of hiring external experts to draft consultative documents greatly facilitates the consultation procedure for the ODTR, it is not always the most advisable method of addressing regulatory issues. The latter considers that the use of external consultants is unavoidable given the pace of change required and the huge amount of issues to be addressed in a relatively short time. The Director is currently assisted in her work by 65 full-time employees, 50 of them on secondment from the Department of Public Enterprise. The ODTR has initiated a recruitment campaign to build up its in-house team, but will continue to make appropriate use of external experts during the recruitment process. A number of seconded staff are returning to the Department of Public Enterprise.

According to the Department of Public Enterprise, the responsibility for handling the licensing of third generation mobile operators rests with the Director - subject both to any policy directions regarding spectrum management, and to any public service requirements that may be laid down by the Minister. The legislation stipulates that, subject to the Minister for Finance's approval, the Director is responsible for setting the charges to be paid for licences. However, some operators felt that it is not always clear which authority is responsible for setting the price and taking the relevant decisions. Additionally, those operators suggest that the Ministry's involvement in addressing issues related to third generation mobile licensing should be more substantial.

New entrants expressed concerns about ODTR's handling of complaints, particularly due to the limited expertise of some of its personnel. The ODTR questions the grounds for that concern. Delays in dispute resolution have also been reported by new entrants. In one case, an operator filed a complaint with the ODTR six months ago, and the latter had still not taken a position at the time of the drafting this Report. The ODTR considers this case as exceptional. In another case, an operator is currently awaiting decisions on approximately 19 issues

submitted to the ODTR. The ODTR has stated that these issues were only referred to it in mid-August 1999 and as of the time of the drafting of this Report, 14 of them had been dealt with. After consultation, new procedures with shorter time-frames have been adopted so as to facilitate the effective resolution of disputes between operators.

Several operators have expressed concerns about recent developments in relation to the Reference Interconnection Offer (RIO). When the ODTR's recent decision on the RIO was challenged legally, its application was suspended, which is the standard procedure pending a full appeal.

Some operators consider that the procedures for appealing an ODTR decision are unsatisfactory. In particular, they are concerned about the appellate review procedure, since the national court will not examine the substance of the case, but refers the decision back to ODTR for re-evaluation. The Department of Public Enterprise is planning new legislation to reform the appeals procedures for ODTR decisions, with the aim of ensuring the efficient operation of the regulatory framework while concurrently recognising the legal rights of interested parties.

Italy

The Italian telecommunications market has developed very quickly with the advent of liberalisation in 1998, reaching a double-digit growth rate in 1998 and again, according to recent estimates, in 1999. About 60 licences have been granted in total and several new entrants have started to offer commercial service in the long-distance and the international voice market, reducing the incumbent's market share by a few points already. The mobile market has reported exceptionally high growth rates and is the largest in Europe by subscribers and by value.

The *Autorità per le Garanzie nelle Comunicazioni*, the national regulatory authority (NRA), started its operational activities at the end of July 1998, and has therefore just completed its first year of activity. Despite difficulties in the transfer of tasks from the Ministry of Communications, the NRA has an approach which is supportive of competition and encourages players to invest in the country. The NRA has absorbed the functions of the former Authority on Publishing and Press, and as a consequence is also responsible for regulatory affairs in those sectors, with broad responsibilities in supervising and enforcing compliance with legislation in the telecommunications, media and press-publishing sectors. The internal organisation of the NRA is based on the convergence of these related sectors, and its departments and services are therefore integrated to cover both audio-visual and telecommunications. The NRA's operating expenditure is covered by a 0.35 per thousand levy on revenues of national operators (except new entrants operating for less than two years) in the sectors under its responsibility (telecommunications, TV, press and publishing) as well as licence fees.

In its first year of activity the NRA has acted independently of the incumbent in which the State retains a limited share (Telecom Italia, 3.46% owned by the Treasury) and of the other operators in which the State has an indirect holding. No staff members are on secondment from the incumbent or from any other telecommunications operator.

The NRA has been entrusted with most of the powers in the regulatory domain, with the Ministry keeping a role in policy making as well as direct responsibility for frequency

assignment and for non-public telecommunications services. In this initial phase, the NRA carried out a number of tasks jointly with the Ministry on the basis of a bilateral agreement aiming to support the start up of the NRA, which expires in December 1999. The NRA, as provided for by the Italian regulatory framework, has to consult the National Competition Authority on a number of issues, such as the Reference Interconnection Offer and the determination of organisations with significant market power.

Although their respective responsibilities are defined by the Law establishing the NRA, concerns have been expressed by market players about the fact that the NRA is not yet fully operational, and that it still relies partly on the Ministry's structure. In the light of this transitional sharing of responsibility between the Ministry and the NRA, operators have reported a degree of confusion as regards some specific areas (licensing, numbering and frequency). With regard to licensing, concerns can be attributed to the fact that applications were still being processed by Ministry personnel, since the NRA has not yet completely taken over this function. In relation to frequencies, while the NRA is responsible for frequency allocation and planning, the Ministry has retained responsibility for frequency assignment. In relation to numbering, the activities of the NRA have being carried out with the support of the Numbering Technical Committee of the Ministry.

The concerns expressed, as well as procedural delays and a lack of transparency in the decision-making process, arise mainly from a lack of human resources in the NRA, according to market players. Recruitment is ongoing and fewer than half of the total staff have been hired so far (113 out of 260). However, about half of the existing staff are involved in regulatory work (50 people) and, according to the NRA, the majority of its future staff should also be assigned to regulatory issues. The major difficulty with regard to recruitment concerns the selection of personnel who have been working for the Ministry (approximately 1500 applications for about 100 jobs), which is expected to be completed by December 1999. The NRA plans to complete recruiting by the beginning of 2000, by which time it is expected to have 320 staff members - including both permanent and temporary contracts - and should be sufficiently resourced.

On balance, the NRA has issued a number of important decisions in both the audio-visual sector (a new frequency plan, which has been pending for about 20 years) and the telecommunications sector (changes to the 1998 reference interconnection offer, two steps in the rebalancing of tariffs and the setting of a price-cap, an interim decision on fixed-to-mobile tariffs, universal service, requirement to unbundle the local loop, determination of organisations with significant market power, new numbering plan), contributing to the effective implementation of the regulatory framework.

Luxembourg

Luxembourg has now taken decisive steps to allow competition to take off and put in place the necessary framework. There have been improvements on several issues, in particular concerning the impartial exercise of functions by the regulator at the level of the Ministry, the timely award of licences and a series of issues relating to numbering and interconnection. Given the size of the country, a large number of licences have been granted (9 licences for fixed and services combined, 6 for fixed network, 2 for voice telephony and 2 for mobile). Three interconnection agreements have been concluded and a series of further agreements (11) are currently being negotiated. However, the market is still fully dominated by the incumbent operator P&T Luxembourg and new entrants are just starting to enter the market.

Regulatory tasks have been split between the ILT (*Institut Luxembourgeois des Télécommunications*) and the Minister in charge of Communications *(Ministre délégué aux Communications).*

Previous concern about the independence of the regulatory authority at the level of the Ministry of Communications, which was responsible both for supervising the State shareholding in the State-owned incumbent operator P&T Luxembourg and for regulatory tasks, has been addressed by a Government reorganisation which took effect on 11 August 1999 and resulted in the regulatory tasks being assigned to the Ministry of State, and responsibility for supervising the incumbent operator to the Ministry of Economic Affairs. Under the current law, the Government can nominate as Chairman of the incumbent's Board of Directors an official who is at the same time involved in regulation, and indeed has done so.

New entrants have expressed concern regarding the confidentiality of information submitted in connection with licence applications. In particular, they have to submit their business plans to the official at the Ministry of State who is both regulator and Chairman of the incumbent's Board of Directors. Some new entrants expressed fears that the incumbent could thereby obtain competitors' sensitive commercial information. The Ministry does not consider this to be a realistic scenario, however, as information relating to business plans is not part of the licences and is communicated to ILT subject to strict confidentiality. A change to the incumbent's statutes is currently being examined by the authorities and corresponding studies will be launched. In order to ensure the independence of the regulatory authority, operators consider that this exercise must include changes to the procedure for nominating the incumbent's chairman so to exclude the nomination of officials responsible for regulation.

In practice, according to new entrants, both the former Ministry of Communications and the new Ministry of State and ILT have adopted a non-discriminatory and impartial approach. New entrants have reported that the former Ministry of Communications, despite its dual function, appeared to act impartially as regards the regulatory issues and no cases of conflict of interest have so far been reported.

ILT has been set up as an autonomous authority**.** New entrants welcome the very constructive and proactive approach by ILT, which uses its power to the full in order to implement the regulatory framework. Initial concerns on the part of new entrants that ILT did not have the necessary qualified staff have been largely met, although ILT still has a very limited staff of only 19.

With regard to interconnection, ILT has been given the power to set the conditions of the reference interconnection offer (RIO) and it set general conditions for P&T Luxembourg's forthcoming Reference Interconnection Offer in March 1999. However, new entrants have expressed concern that ILT lacks certain essential powers, so that not all the conditions necessary to enable new entrants to enter the market are met. In particular**,** while ILT has the power to fix the general conditions of interconnection, it is not competent to make binding decisions on interconnection within the dispute settlement procedure. For this reason, dispute settlement is not regarded as a viable means of enforcing new entrants' right to interconnect. In addition, new entrants consider that ILT does not have sufficient power to intervene, on its own initiative, in interconnection negotiations. Although ILT also lacks the power to control tariffs for the provision of leased lines, new entrants report that its mediation on leased lines issues has played a decisive and constructive role in the past.

The Netherlands

Competition in the Netherlands telecommunications market is highly developed, particularly in the mobile market, in which five players are present. As of August 1999, there were 34 mobile subscribers per 100 inhabitants, reaching a total of 5.5 million people. The mobile market grew by more than 100% between August 1998 and August 1999, making it one of the fastest growing mobile markets in the EU. Some 82 operators and service providers are registered in The Netherlands and authorised to offer public fixed networks and/or public telecommunications services. Prices, especially in the international voice telephony market, have decreased significantly over the last year. The interconnection charges are below the EU average.

The Netherlands' national regulatory authority, the *Onafhankelijke Post en Telecom Autoriteit* (OPTA), has been fully operational since the entry into force on 15 December 1998 of the Telecommunications Act (*Wet van 19 oktober 1998, houdende regels inzake de telecommunicatie, Telecommunicatiewet)*. It has demonstrated its independence by its actions, according to the market, and operators have welcomed a number of OPTA's decisions, especially in the areas of interconnection and special access. But some new entrants and the incumbent operator consider OPTA to be too pro-active, especially in markets where they consider there is already sufficient competition, such as the mobile sector. Cable operators consider OPTA to be too pro-active regarding the unbundling of the local loop, whereas OPTA considers that competition in this segment is underdeveloped.

New entrants have a general perception that OPTA focuses too often on short-term interests, pleasing the consumer, without properly considering the economic impact of their decisions in the long run.

OPTA and the national competition authority (*Nederlandse Mededingings Autoriteit, NMa*) have signed a cooperation protocol, in which the relevant competences are set out and advisory procedures established between the two regulators.

The number of staff has increased in the course of the year, with 87 full-time staff currently in place (110 planned), of whom approximately 55 are involved in regulatory work. According to market players, however, there is a lack of qualified human resources, which in some cases has led to delays in the decision-making process. Nevertheless, they appreciate OPTA's cooperative approach and expertise and have reported considerable improvements recently in the speed of decision-making in particular.

Austria

The pace of liberalisation of telecommunications in Austria is evidenced inter alia by the fact that revenues in 1999 are expected to grow by more than 15% in the mobile services market and more than 12% for public network services; the number of mobile subscribers has nearly doubled over the last year, bringing the mobile penetration rate up to 41% by August 1999; the number of Internet hosts per 1000 inhabitants has also increased dramatically. At the same time, tariffs for end-users have fallen significantly and all sectors (fixed network services, mobile services, equipment industry and value added services) recorded a net increase in employment.

Since the last report, important decisions have been taken by the National Regulatory Authority (NRA) concerning the incumbent's general terms and tariffs (for leased lines, ISDN, fixed voice telephony), the definition of significant market power (SMP) operators, interconnection, the allocation of additional frequencies and unbundled access to the local loop. About 900 disputes on consumer affairs have been dealt with by the NRA since its establishment in late 1997. Following a ruling by the Austrian Constitutional Court in February 1999, recognising the precedence of the ONP Framework Directive over the Austrian constitution, all decisions by the NRA may now be challenged before the Austrian Administrative Court.

Both bodies of the NRA, the *Telekom-Control GesmbH* (TKC) and the *Telekom-Control-Kommission* (TKK), are reported by all market players to be proactive, aiming to endorse and enforce the effective application of the national transposition measures in compliance with the provisions of the EC regulatory framework. Different views exist, however, with regard to the NRA's future application policy: while new entrants are concerned and stress the need for asymmetric regulation, consumer organisations complain about the negative effect of the strict asymmetric approach of the NRA.

The NRA appears to be sufficiently independent and also well staffed both in terms of human resources and expertise. There are, however, three cases pending before the Austrian Constitutional Court relating to the constitutionality of the TKC's organisation.

By an amendment to the Telecommunications Act in early 1999, clarification of the NRA's division of powers has been achieved with regard to licensing, interconnection dispute settlement and site-sharing. However, market players are still calling for further clarification and/or concentration of the tasks of the different bodies of the NRA and other authorities (e.g. in the field of rights of way). The Austrian authorities, however, do not share their view.

Generally, market players are concerned that the NRA's powers might be insufficient in certain areas (e.g. quality of universal service). Specifically with regard to interconnection, new entrants propose that the NRA should have the power to act on its own initiative in order to decide speedily on matters of general interest even though not mandated by the regulatory framework ("ex ante regulation").

Market players also question the NRA's ability to execute its decisions effectively in practice, particularly in the context of measures taken by the TKC against discrimination of operators by the incumbent.

Finally, as confirmed by the Austrian Constitutional Court in February this year, there is still a gap in transposition with regard to an appropriate procedure for appeals against decisions of the NRA. Both the incumbent and new entrants doubt that the Administrative Court with its lengthy procedures can provide a suitable appeals mechanism and stress the need for a maximum time limit for the appeals decision.

A revision of the Telecommunications Act is envisaged for early 2000 in order to fill in some remaining gaps in transposition and take account of some of the concerns mentioned above.

Portugal

The Portuguese authorities have made very considerable efforts over the past year to put in place the necessary legislative and administrative instruments for full liberalisation by

1 January 2000. In this context, the national regulatory authority has already granted seven licences for the voice telephony service (October 1999). At the same time, the authorities have taken significant measures to ensure full competition in the Portuguese market: adoption of the reference interconnection offer (RIO) for the year 2000, assignment of codes for carrier selection, granting of licences for wireless local access.

In line with the 1997 Telecommunications Act, the Ministry of Infrastructure, Planning and Territorial Administration is charged with responsibility for defining general telecommunications policy, approving sectoral legislation and supervising the sector. These powers are exercised by the State Secretary for Housing and Communications. The Ministry is assisted by the *Instituto de Comunicações de Portugal* (ICP), which is responsible for advising the Government on policy measures and for preparing legislation and technical opinions. Regulatory tasks are the responsibility of ICP.

ICP also has a market regulation function, particularly regarding licences, price agreements and frequencies, as well as more technical tasks concerning spectrum management and type approvals. Competition tasks in the telecommunications sector are shared with DGCC (Directorate-General for Trade and Competition) in accordance with Portuguese law.

Certain new entrants question whether regulatory and operational functions are truly separate, as the Ministry of Infrastructure, Planning and Territorial Administration has the power to propose to the Council of Ministers the appointment of members of the ICP Board while at the same time being jointly responsible, with the Finance Ministry, for proposing the appointment of members of the Board of Portugal Telecom (PT) representing the State holding in the incumbent. ICP, on the other hand, considers that its independence from the incumbent is assured by virtue of the guarantees in the national legislation and the fact that it has the staff (currently 336) it requires to perform its tasks. For its part, PT stresses that the only difference between itself and other operators is the 10.5% State holding in the company, which has been reduced significantly.

Concerns have also been expressed by some operators that ICP showed a reluctance in the past to act vigorously and independently on market regulation issues, and that it had a tendency to concentrate on radio regulation and spectrum matters. However, given the delays in implementing the Interconnection and Licensing Directives, there are encouraging signs that ICP intends to play a more active role in the market, for example in producing the reference interconnection offer for 2000 in time for full liberalisation.

Finland

The Finnish telecommunications market is characterised by its high mobile penetration rate, which at over 60% is the highest in the EU and has overtaken the number of fixed line subscriptions, as well as by its high proportion of Internet users. Charges for national calls, whether local, regional or long distance, are well below the EU average.

The sector can also be characterised as operating within a comparatively deregulated legal environment, due in part to the historical structure of the market (in which local network infrastructure was provided by a large number of locally based companies) and to the early liberalisation of a number of market segments. This has led to a light regulatory framework which tends to favour the exercise of commercial freedom and market forces over the imposition of detailed sector-specific rules as a means of ensuring an efficient and

competitive market. The growth in competition, most pronounced in international and long distance services, has inevitably drawn attention to remaining bottlenecks, particularly in the local and to some extent the mobile markets.

Regulatory responsibilities for the Finnish telecommunications sector are shared between the Ministry of Transport and Communications (*Liikenneministeriö-Trafikministeriet)* (the "Ministry") and the Telecommunications Administration Centre (*Telehallintokeskus-Teleförvaltningscentralen*) (TAC). While responsibility for monitoring compliance with the 1997 Telecommunications Market Act lies with the TAC, the Ministry remains in charge of policy development and of the licensing of mobile networks and the registration of other telecommunications operators. In addition the Office of Free Competition (*Kilpailuvirasto-Konkurrensverket)* (OFC) and the Competition Council are responsible for the application of competition law to the telecommunications sector.

There is a perception among some operators that the TAC is inclined to limit itself to a relatively strict interpretation of the legislation for which it is responsible, rather than addressing wider competition issues when exercising its powers, particularly in connection with disputes relating to interconnection and access to the local loop. This may be due to the fact that the TAC and OFC have parallel powers in relation to certain issues affecting the telecommunications market, depending on the different legislation applicable. Although it appears that there is no formal consultation requirement, co-operation and discussion between the authorities on areas of mutual interest takes place on an ongoing basis.

The possibility of swift and effective enforcement action by the TAC is also seen by some new entrants to be hampered by a lack of detailed rules in certain areas, particularly in relation to issues of access pricing and the implementation of cost-orientation principles. However, the Ministry and the TAC are of the opinion that current legislation is sufficient and that enforcement action by the TAC is not hampered by a lack of detailed rules.

While the TAC is generally satisfied with the current level of its resources, it does recognise the difficulties, inherent in regulation of the telecommunications sector in many Member States, which can be caused by the high turnover of staff with valuable technical and regulatory expertise.

Although the OFC has a reputation for effective enforcement of the competition rules in Finland, the small number of staff working on telecommunications and the recent increase in the number of competition-related disputes is seen as giving rise to some delays in the decision-making and enforcement process.

The ownership functions in relation to the Finnish State's majority shareholding in Sonera Oy continue to be exercised within a department of the Ministry which is administratively separate from the department responsible for regulation of the telecommunications market, rather than within a separate ministry. Most regulatory decisions within the Ministry are taken at the level of officials rather than by the Minister personally. Nevertheless, the sensitivity surrounding the location within the same ministry of ownership and regulatory functions was highlighted at the time of the Ministry's decision in September 1998 not to make national roaming obligatory for mobile operators. In September 1999 the Government announced its intention to reduce its 77.8% stake in the company through the offering of a further tranche of shares and to seek parliamentary authorisation to reduce the State's minimum ownership requirement from the present 50.1% to 34.0%.

Sweden

The Swedish market has developed rapidly, with a very high percentage of the population as subscribers. The mobile penetration rate is one of the highest in the EU (53% including analogue mobile telephony) and the fixed penetration rate stands at 68.5%, which is well above the EU average. The number of operators present on the market has also increased, with the result that there are now 51 notified operators and 8 licensees for public networks; and 50 notified operators and 13 licensees for voice telephony. There are also four mobile operators in the market (including the incumbent), although only three have actually started operations. The number of Internet subscriptions has also increased to some 16% of the population, which is high by EU standards.

The National Regulatory Authority (*Post- och Telestyrelsen* (PTS)) is a government agency under the Ministry of Industry, Employment and Communications. Some new entrants have expressed concerns that PTS is not sufficiently independent from either Telia and other operators, or from the Ministry. The Ministry is responsible for the 100% State holding in Telia, but is not directly involved in Telia's management. That same Ministry is also responsible for regulatory affairs, although the two tasks are performed by two different Ministers. In any event, there are legal guarantees preventing interference by Ministers in the activities of PTS (including provisions in the Constitution stating that government agencies such as PTS are independent of their respective Ministry). Although there are no plans to separate the ownership and regulatory functions, it would appear that PTS' autonomy is in fact safeguarded.

PTS is perceived by some new entrants to be both inactive and slow to take decisions - despite the fact that it has all the requisite powers under the EU directives and can engage in mediation, take binding decisions, issue non-binding opinions and impose fines. This perceived failure to make full use of its powers might be partly due to the fact that it was not vested with the power to take binding decisions until 1997. Operators complain, for instance, that PTS failed to use its powers under the Telecommunications Act to intervene in extensive interconnection negotiations. PTS' basic philosophy (as enshrined in the Act) is that the parties should, where possible, reach agreement without regulatory intervention - and that PTS should intervene only if discussions fail. In PTS' view, it is because regulatory intervention tends to be self-perpetuating that it should only be used as a last resort.PTS points out that it does not hesitate to act where necessary, but that defining what is 'necessary' is not always easy - implementation of carrier pre-selection (CPS) being a case in point. For example, it actively intervened in the case of a proposed tariff scheme which it regarded as being in violation of the Interconnection Directive, since prices were discriminatory. Moreover, PTS has the power to issue secondary legislation: it recently submitted legislative proposals intended to enhance competition in both the mobile sector and the access network. That legislation will, if accepted by the Government and Parliament, enter into force next year. As for its power to take binding decisions, PTS points out that it did not acquire that power until July 1997 in respect of interconnection, and July 1999 with regard to number portability and CPS, whereupon it immediately took steps to enforce the legislation in question. In the case of CPS, PTS claims that it did not delay offering its services as a mediator - with the result that operators were able to reach agreement. Furthermore, PTS feels that it continues to facilitate (making, where necessary, binding decisions at the request of a party) closer co-operation between operators on issues of interconnection, number portability

and CPS. In conclusion, the perceived weakness of PTS appears to have been resolved by the current legislation.

Operators also criticised PTS for its failure both to set proper guidelines and to intervene in the process of implementing CPS in Sweden - resulting in a lack of clear rules for implementation right up to the day when CPS entered into force. PTS admits that the scale of the problem was underestimated and that more detailed guidance should have been given for CPS implementation. However, it points out that the end result was positive, with some 700 000 customers having selected another operator (equivalent to 12% of the customer base). PTS also stresses the importance of both having a sound legal base and carrying out its own analysis before taking action. However, it underestimated the time necessary to accomplish this in the case of CPS.

PTS considers that priority should be given to furthering consumer interests, rather than promoting competition for its own sake. The secondary legislation stipulates that PTS must both cooperate with the Consumer and Competition Authorities on consumer affairs and competition matters, and initiate a reciprocal and regular exchange of information. Hence, PTS coordinates cooperation between the three bodies - this involves, inter alia, regular meetings where they also discuss the allocation of tasks. The Competition Authority (applying EC and national competition law) is considered by new entrants to be fairly knowledgeable but very slow to make decisions - new entrants allege that most cases run for two years or longer. It follows that some new entrants hesitate over making complaints to the Competition Authority.

PTS has 158 employees, 123 of whom are involved in regulatory work. It views this as insufficient, and there are currently a number of vacancies in key areas. PTS maintains that it is difficult to recruit and retain qualified personnel. Steps are being taken to solve this problem.

Some new entrants feel that PTS is over-concerned with applying the letter of the law and should focus more on its wider goals and the market. PTS feels that it does not always exclusively take account of legislative objectives, and that it has a wide-ranging competence to intervene in the market. Its actions include enacting secondary legislation of great economic importance to companies and individuals; making decisions on clauses featuring in interconnection, pre-selection and other agreements involving market players; issuing injunctions and determining fines. It also issues licences and assigns frequencies. All of this introduces rights and imposes obligations on legal and physical entities - PTS therefore has to apply legislation in a fair and reasoned way, i.e. in a manner consistent with legal certainty and, more generally, the legitimacy and credibility of the constitutional system. If PTS' measures were not subject to the rule of law, its ability to intervene in the market would be undermined. PTS feels that legal certainty through careful drafting is both the medium for taking due account of legislative objectives, and enhances the scope for 'flexibility'.

PTS is criticised by some new entrants for its excessive reliance on the expertise provided by Telia and for not always properly verifying the information thereby provided (in particular, accounting information). PTS affirms that it verifies this information both in-house and with external consultants.

United Kingdom

Competition in the UK market has continued to develop over the last two years. The incumbent's market share has decreased in all telephony markets except for the mobile market where the market share of its majority-owned subsidiary has increased slightly. Thus the incumbents' share of the local telephony market currently stands at some 82% compared to 87% in 1997. The development of the UK market is reflected in the relatively high number of fixed and mobile subscribers as a percentage of the population (55.5% for fixed line subscribers – equivalent to 94% of households - and 30% by value for mobile telephony if analogue is included, which roughly correspond to the EU average),. A large number of operators are present in the UK, with 3 major cable TV network operators also offering local telephony to more than 50% of households - between one quarter and one third of which take up that service. There are also 158 network operators licensed to offer national voice telephony in the national market, over 40 active indirect access operators and 4 national mobile operators. In addition there are 15 satellite operators. The number of Internet subscribers is also very high by EU standards, and now corresponds to 17.8% of the population.

The Office of Telecommunications (OFTEL), established under the Telecommunications Act of 1984, is widely respected as an experienced and independent regulator. Nonetheless, many new entrants claim that OFTEL is inadequately resourced, both in terms of manpower and access to expertise. Of particular concern to new entrants is OFTEL's ability to recruit and retain high quality staff. OFTEL has 190 full-time staff, 143 of whom are involved in regulatory work. Of those, 36 hold permanent contracts, the rest being either employed on fixed-term contracts or seconded from ministries and other Government bodies (usually the DTI). Conversely, OFTEL considers itself to have adequate resources. Staff turnover is indeed high, but it is seeking to increase the number of permanent staff and to extend contract periods. Many members of staff are lost to the industry itself, which values their regulatory experience and is able to offer attractive salaries. However, according to OFTEL it has had no difficulty in recruiting high-quality staff, since it is seen as an important place to work. Equally OFTEL does not consider that it has difficulty obtaining expert advice. It has in-house professionals and uses consultants extensively for market research, specialised modelling and detailed investigations, and to offer independent views (for example, on cost-benefit analyses).

OFTEL is seen by some new entrants as relying too heavily on BT to provide it with the necessary data on, inter alia, market conditions and the pricing of new products or interconnect services. Furthermore, the validity of that data cannot be challenged by other operators for confidentiality reasons. New entrants also criticise a perceived over-reliance by OFTEL on expert technical and financial information provided by the operator to whom the complaint is addressed. However, OFTEL has internal mechanisms for validating data provided by BT and other operators. BT's regulatory accounts are independently audited and published annually. It is for BT to demonstrate both that interconnection charges are cost-oriented, and that regulatory accounts include detailed cost information. Those accounts are supported by publicly available policy, procedure and methodology documents. Independent verification of the regulatory accounts is provided by an external auditor's opinion. There are also a number of industry fora organised by OFTEL, within which operators can make their views known.

OFTEL also consults widely on market developments and their implications for regulation, and fully involves industry and other stakeholders in developing its forward work programme through a published annual Management Plan. OFTEL has transparent processes for consultation on all its work and a wide range of standing working groups involving industry, service providers and consumer groups - to ensure that those parties are kept fully in touch with OFTEL's work and can provide inputs into it.

OFTEL currently has the powers prescribed under the EC Telecommunications Directives. However, although many new entrants consider that OFTEL has sufficient powers, they allege that it does not always use those powers in full. According to OFTEL this is in fact a matter of acting proportionately: they focus on solving the more important problems, and so do not always apply their full powers to every matter that comes to their attention. Moreover, the mere fact of having strong powers can act as a deterrent to abuses by market players. Furthermore, from March 2000 (when new competition legislation comes into force) it will have even more far reaching powers in the competition field. OFTEL will then be the competition authority for telecommunications, concurrently with the Office of Fair Trading (OFT). Coordination on competition issues with the OFT is ensured primarily through the Concurrency Working Group (comprising the OFT and all sectoral regulatory authorities in the UK). The group has procedures for the exchange of information, and it ensures consistency in the approach to and application of competition law.

OFTEL's decisions under the Competition Act 1998 are subject to an appeal to the Competition Commission (formerly the Mergers and Monopolies Commission). A decision of the Competition Commission may further be appealed, on a point of law to the Court of Appeal, and from there to the House of Lords. Other decisions of OFTEL (that is, outside the scope of the Competition Act) are subject to judicial review on usual UK administrative law grounds (that is, misuse of power, unreasonableness, proportionality, breach of natural justice and procedural irregularity). Further, the Government is proposing to introduce a wider form of judicial review for matters covered by the Licensing Directive (broadly, the decisions under the Telecommunications Act 1984 and the Wireless Telegraphy Act 1949) and the Interconnection Directive. This wider appeals mechanism, it is proposed, would allow appeals against the procedure by which, and the findings of fact on which, the decision was based (as well as the grounds of judicial review mentioned above).

3.2 Licensing

Belgium

Despite delays in transposing the Licensing Directive and the detailed nature of the regulation in place, the Belgian authorities have reported that considerable progress has been made in developing competition. By September 1999, there were 23 voice telephony licensees and 25 public network operators present in the market.

The market players have no major problems with the licensing procedures for public infrastructure and telecommunications services, although they are considered to be somewhat cumbersome by new entrants. A large amount of very detailed information has to be submitted when applying for a licence, for example, and the requirement to provide a fifteen-year forecast/outlook in the business plan is uncommon in the telecommunications business. The justification for some of the requirements is questioned by the market players.

The process of converting provisional licences into definitive licences has been completed, although market players criticise IBPT/BIPT for having taken the maximum possible time to convert them, after applications for new licences had been made. The time limit in the national procedures for the granting of individual licences (Decree of June 1998) is not in conformity with the 6 weeks prescribed as a general rule in the Licensing Directive. Market players have indicated that the time limit in the Belgian legislation for granting licence requests has nevertheless been respected in practice.

Where an operator wants to extend its network and/or services to another region (extension to national coverage), it has to apply for a new licence. This is considered by new entrants to be unduly onerous.

The provision in the Belgian legislation requiring licensees to contribute to research and development in the area of telecommunications and development of the market is not considered by new entrants to be a deterrent or a barrier to market entry. They do feel that it is an artificial provision, however. .

The requirement to make certain investments or to roll out 500 km of infrastructure in order to obtain a public infrastructure licence is not considered to be a problem by the larger new entrants already operating on the Belgian market, but they have indicated that it does deter smaller operators from entering the market and thus constitutes a barrier to market entry. According to the Ministry, the procedure for applying for an extension to national coverage, the requirements for R&D investment, the 500 kilometre roll-out and the time within which a licence is granted, will all be reconsidered before the end of 1999 and, where necessary, changes will be proposed. A draft Decree dealing inter alia with the R&D requirement is under preparation.

According to new entrants, transparency has greatly improved now that information on licensing can be accessed via the IBPT/BIPT website.

New entrants regret the lengthy processes for the introduction of new licences, for example the wireless local loop (WLL) licences, the draft legislation for which is currently before the Council of State (*Conseil d'Etat*).

Denmark

As referred to in the Fourth Report, there is a very light licensing regime in Denmark, which applies the model of class licences, combined with general obligations under sector-specific legislation, for fixed network operators and service providers and which requires individual licences only for mobile network operators and service providers. There is no notification requirement for operators who do not require an individual licence.

Consequently few problems have been identified in the Danish licensing regime. Some concern has been expressed over the length of time it has taken for the decision to proceed with the granting of licences for the operation of frequencies in the local loop. It is expected that the legislation needed to enable tenders for these licences to proceed will be adopted by 1 January 2000.

One operator referred to the fact that the conditions of mobile licences are not publicly available, and suggested that this lack of transparency potentially reduced the efficient

operation of the market. However, the minimum requirements for the licences are published as part of the terms on which operators are invited to tender for them.

Germany

A light declaration procedure has been established, covering services other than operation of transmission lines and public voice telephony, which are subject to an individual licensing procedure. Telecommunications services not requiring a licence can be provided freely, subject to a written notification to the NRA within one month of start-up.

The general licensing procedure is perceived in practice to be fully objective, non-discriminatory, transparent and proportionate. In addition to the licensing procedure under the Telecommunications Act, detailed administrative rules have been issued specifying the documents to be filed.

RegTP has announced on its website that operators providing S-PCS (satellite personal communications systems) need a specific licence combining the satellite and mobile licence. In addition, a licence for voice telephony on a self-operated transmission line is required in order to offer voice telephony. New entrants have expressed concern that the combined satellite-mobile licence can be granted only to **one** operator, and that the operator providing the gateway has to have the combined licence. As a result, this requirement precludes operation of the S-PCS and the gateway by different operators. New entrants consider that this creates an unnecessary burden on operators, i.e. they have to establish a joint company to obtain the licence. They also point out that separate licensing of S-PCS and gateway is possible as the practice in all other EU countries shows.

The regulation on licence fees provides that the fee for a national licence for voice telephony is DM 3 million (EUR 1.52 million) and DM 10.6 million (EUR 5.39 million) for operating transmission lines. New entrants consider that those fees do not reflect administrative costs. At any rate, these amounts are not being charged at present following a provisional decision of the Administrative Court of Cologne of 25 March 1999. As a result, RegTP currently does not specify the amount of the licence fee when licences are granted. Licences for voice telephony and operation of transmission lines are granted with the proviso that the licence fee will be set following the outcome of the court action, with the result that there is some uncertainty regarding the amount of the future licence fee. In addition, according to RegTP's Communication No 160/1999 of 28 April 1999, operators offering voice telephony nationwide on a self-operated network must be granted a national licence for voice telephony. Under the previous system, all operators could interconnect at a national level in order to provide national voice telephony on the basis of a geographically limited licence for services and network. It is not clear whether the Communication will be applicable to the forthcoming regulation on licence fees. No concerns have been raised with regard to satellite licence fees.

Greece

The Licensing Directive has been transposed recently. Delays in transposition have restricted the development of new services to boost the market - with the exception of the provision of voice telephony and public networks providing voice telephony, both of which remain reserved to the incumbent until 31 December 2000. It is reported by some new entrants that licensing procedures are lengthy and not well defined. However, the Ministry believes that these matters will finally be settled following the transposition of the Licensing Directive.

The provision of packet-switched data radio services in particular has been delayed although a corresponding application was submitted to EETT in May 1998 and investments had already been made. The regulation setting out the procedures for granting such licences is not yet in place but is due to be adopted soon, according to the Ministry. In addition (according to the Ministry), the Amended Table showing the Allocation of Frequencies for certain uses is finalised and is expected to be published shortly before such licences are granted.

In the mobile sector, concerns were also expressed that the Ministry might be discriminating over applications for approvals to activate base stations in favour of the incumbent's (OTE's) mobile subsidiary (Cosmote) - to the detriment of the two other GSM operators. The focus of these concerns was that Cosmote obtained approvals to activate its base stations more quickly than the other operators (for whom approval procedures might take a year). The operators in question consider that this gives Cosmote a competitive advantage in rolling out its network in urban areas and also causes technical problems for other operators, thereby affecting the quality of their services. The Ministry denies that such discrimination is taking place. It attributes the delays to the transfer of relevant powers to the local authorities, and believes that obstacles will be overcome after it regains those powers. The law transferring these powers back to the Ministry has now been adopted. In addition, the Ministry points out that Cosmote launched the development of its network long before it began offering services.

The procedures used to grant a DCS 1800 licence to Cosmote have been the subject of controversy between mobile operators and the NRA. The Ministry has expressed interest in both granting further frequencies to established mobile operators for the provision of DCS 1800 services, and possibly also granting a fourth mobile licence. Despite the fact that there are frequencies available for the provision of mobile services, none have yet been allocated. However, the Ministry confirmed that it is negotiating with mobile operators to extend their licences. According to the Commission's information, the failure to reach agreement is reported to be due to the absence of appropriate regulations setting out the procedures for granting licences in the mobile sector, as well as the reluctance of mobile operators to pay for additional frequencies. The Ministry rejects the suggestion that regulations were not properly in place, claiming that no relevant regulation existed when the first two mobile licences were granted. The two mobile operators claim that Cosmote's licence fee was lower than theirs. However, the Ministry maintains that the licence fees paid by the two GSM operators reflected the value of their licences, which were granted to operate under a duopoly regime excluding at the same time the incumbent from applying for a mobile licence.

Certain operators consider that the difficulty of fulfilling some of the requirements (including obtaining numbers and frequencies) of the law controlling the provision of alternative networks makes that law's application problematic. The Ministry disputes the allegation by stating that - despite the lack of a National Numbering Plan - numbers have been available to all requesting parties. Hence, no application for a licence is rejected due to unavailability of numbers. New entrants have also reported difficulties over authorisations to establish satellite transmitter antennae. The Ministry recognises that difficulties similar to those for the granting of approvals of base stations have been experienced. Different areas of the public service are involved in the establishment of receive-only satellite antennae, resulting in delays. In some cases (for example, the allocation of numbers and frequencies) the difficulties encountered are the product of the lack of a national numbering plan and the need to manage the frequency spectrum more efficiently so as to eliminate unauthorised use in certain frequency bands. In others, the exercise of rights of way on public land and colocation rights has not been easy.

The remaining legal restrictions on the provision of alternative networks were lifted by a new regulation adopted in December 1998. However, no licence has yet been granted. According to the Ministry, a number of applications to provide alternative networks have been filed with it - the first licence is expected to be granted soon. Other applications are under examination.

Concerns about the licensing of Satellite Personal Communications (raised in the Fourth Implementation Report) have been addressed. The enabling legislation is finally in place and a licence to provide Satellite-Personal Communications Services has been granted. The Ministry has informed the Commission that five applications to provide fixed-satellite services have been filed so far, and are currently under examination by the EETT.

The incumbent is the only operator authorised to provide DECT services. However, it has not provided this category of service so far. Another operator's expressed interest in obtaining a licence to provide such services does not appear to have been encouraged by the Ministry – in particular, the Ministry has yet to reply to a 1995 request for information. However, it is not clear whether a licence could in any case be granted, given that the regulation setting out the licensing procedure is yet to be adopted. The Ministry states that an application for a licence was filed in mid-1996, but could not be granted following the failure of the applicant to submit all the prescribed information.

Spain

The General Telecommunications Act and two Ministerial Orders of 22 September 1998 constitute the basic legislative framework for licensing. There are three types of licences: for provision of voice telephony but not including the establishment of infrastructure (type A), for provision of voice telephony including establishment of the necessary infrastructure (type B), and for provision of services other than voice telephony, including establishment of public telecommunications infrastructure (type C).

Licences are granted by the CMT, with the exception of licences for systems using scarce frequencies, which are issued by the *Ministerio de Fomento*. In the case of type B licences, the national legislation lays down specific conditions for the deployment of infrastructure and points of interconnection for public service reasons.

Operators have to pay a fee equivalent to a certain percentage of their revenue for the holding of licences and authorisations. The figure is set every year in the national budget, but may not exceed 0.2% of operators' revenue. The current figure is 0.15%. Although the amount of the fee is not very large in the case of small businesses, according to new entrants, they consider that the substantial sums involved in the case of large undertakings might go beyond the objective of the Licensing Directive that fees should cover only the administrative costs involved in management, control and enforcement of the authorisation scheme concerned. The NRA considers it justified that large undertakings should pay a higher fee as they also have a greater share of the national market. Large undertakings also supplying services other than telecommunications only have to pay the percentage on the part of their revenue derived from telecommunications and not on their total earnings. In this context, the authorities consider it essential for these undertakings to keep separate accounts for their telecommunications activities.

New entrants believe that Telefónica might exploit the fact that its subsidiaries are applying for separate licences for voice telephony and public networks in order to avoid its obligations

as dominant operator. According to the NRA, however, the organisation notified as having SMP (significant market power) cannot avoid its inherent obligations and CMT can intervene if it believes that the SMP operator and its subsidiaries are engaging in anti-competitive practices.

The incumbent, for its part, reports long delays on the part of the administration in transforming its existing licences into licences in conformity with the new scheme introduced by the General Telecommunications Act. In principle, this process should be completed by 31 December 1999.

The NRA aims to abide by the time limit set in the national legislation and the Licensing Directive (36 days as a general time limit and four months if frequencies have to be assigned). In certain cases this time limit is exceeded, however. On average, it takes one week longer than these time limits to issues licences in Spain.

France

The French licensing system requires an individual licence for public network provision and/or voice telephony, for mobile telephony and for independent networks that require frequencies, while all other services can be provided under the general authorisation scheme. Individual licence conditions are fully published in the Official Journal, thereby ensuring a high degree of transparency. Large new entrant operators do not in general have substantial concerns about the licence obligation to spend at least 5% of capital investment on R&D, but note that such a condition is not provided for under the Licensing Directive, and is therefore not necessary. It appears however to represent a burden, and thus a market entry barrier, for smaller operators.

Licence requests are first dealt with by the ART, which drafts an initial proposal and then hands over the file to the Secretary of State. The Decree of 13 January 1999 has set out a framework for time limits for the delivery of individual licences, and represents a substantial improvement on the previous situation, although concern remains about the deadline for the issue of network licences. It appears that, since the adoption of the Decree, time limits are respected in practice in a great majority of cases. In cases where the total time limit is more than 4 months, it appears that this is due to the time needed by new entrants to complete the dossier. Furthermore, on the basis of the Decree, the ART can make only one single request to operators to complete the dossier.

Concern persists as to whether the licence fees cover only the administrative costs of issuing and monitoring the licence concerned, in conformity with the Licensing Directive. In particular, small operators perceive the level of these fees as barriers to entry. According to the French authorities, however, the new Finance Law will provide for much lower annual licence fees.

As referred to in the Fourth Report, certain operators perceive it as a market barrier that for the provision of telecommunications services to other operators/service providers (not for end users directly) in a limited region, a national licence is required under certain circumstances (if the operators connected have national coverage). As a consequence, licence fees for national network authorisations are charged, which are higher.

Ireland

On 1 December 1998 the Irish telecommunications market was fully liberalised, and on that date 20 general telecommunications licences ('General Licences') were granted to new operators. An additional 8 basic telecommunications licences ('Basic Licences') were issued on that date. A general telecommunications licence permits the licensee to provide telecommunications networks and services (including voice telephony) to the general public, where these require the allocation to users of numbers from the national numbering scheme. A basic telecommunications licence covers other licensable telecommunications networks and services. Thirty eight General and 20 Basic licences have been granted to date.

In general, operators consider that the ODTR has dealt satisfactorily with licensing issues. They believe it has tried to anticipate and respond efficiently to the rapid changes in the market and to place users' needs at the centre of its concerns. The ODTR is in favour of adopting Service Level Agreements (SLA) to address a number of difficulties experienced in licensing so far. The first SLA is expected to be introduced in December 1999.

According to the ODTR, an application for a General Licence is processed within six weeks of the date that the ODTR is satisfied that it has received all the information necessary for considering the application. Unless rejected, a Basic Licence declaration form will be processed and enter into effect within four weeks of the date of its submission providing no more information is required. In some cases, Basic Licences have been processed within seven days. Additional periods of time might be required where insufficient information is supplied by an applicant or there is a delay in the payment of a licence fee. However, new entrants expressed concerns about the licensing process for fixed operators - in particular, the processing of licence applications could be problematic due to the lengthy turn-around period involved. They feel that applicants are entitled to the licence they apply for. However, some operators believe that the ODTR may require applicants to have a very good business case to qualify for a licence. The ODTR's reply is that it is merely assessing whether an applicant is able to meet basic financial, managerial and technical competence criteria. New entrants also felt that the ODTR deliberately prolongs the licensing application process through numerous requests for further information. ODTR rejects this allegation.

New entrants have also reported that a number of applicants, mostly Internet Service Providers (ISPs), surrendered their licences to the ODTR on 30 July 1999. However, these ISPs are now operating without licences because the ODTR has not yet issued new ones. This could raise serious financial problems for the companies involved, because by not having a licence, they are probably in breach of financing or banking covenants. In one case, an ISP submitted an application in May 1999 and did not receive notice that it was being granted a licence until 16 September 1999. The ODTR stated that these ISPs operated under licences granted before the full liberalisation date, and that the ODTR had informed the ISPs that unless they relinquished those licences in favour of General or Basic Licences, they would expire. The ODTR adds that a significant number of ISPs have applied for and obtained licences (although in some cases providers were late in filing their applications). In the case of the application filed in May 1999 (supra), the ODTR stated that the processing delay was due to factors within the control of the applicant. Finally, since liberalisation there is no licence requirement for the provision of certain value added services.

Meanwhile, the incumbent, Eircom [the only operator notified as having significant market power (SMP)] is concerned about licensing conditions imposing duties on SMPs alone -

leaving other operators in the same markets without any obligations. This could be particularly burdensome, given that General Licences are easily granted.

In the mobile sector, Eircell (Eircom's subsidiary) and Esat Digifone are operating on old licences currently under review by the ODTR. The ODTR has recently published a draft pro-forma mobile licence to replace the licences of the two mobile operators and to ensure compliance with the Licensing Directive. The ODTR has recently started a consultation on a new licensing regime for mobile operators. The third mobile licence was challenged in Court - the subsequent ruling (finally delivered in October 1999) referred the case back to ODTR for reconsideration. The ODTR is planning to appeal the decision. Some operators have been concerned at ODTR's almost exclusive allocation of its resources to this case. The ODTR rejects the implication that it has not assigned resources to other regulatory matters.

A call for tender to grant eight fixed-wireless licences to provide narrow and broadband services on a national basis was recently finalised under the supervision of the ODTR.

There is a general perception on the part of some operators that competition in the mobile sector is suffering further delays. The expertise of certain ODTR personnel dealing with DCS 1800 issues has been questioned – the ODTR both rejects this insinuation as unsubstantiated and adds that it was not, in any case, the cause of delays. Both the procedures established by ODTR for radio microwave link licensing and the way in which they are handled, are considered satisfactory by the market.

According to new entrants, enforcement of licensing conditions is not always easy. In the leased lines market there is one infrastructure owner competing with Eircom. A large number of re-sellers are active in the voice telephony market. Licence fees are so far considered to be reasonable by market players. The licence fees for both types of licence (General and Basic) consist of a one-off payment ranging from EUR 2,500 to EUR 12,500 depending on the type of licence, plus an additional annual fee of 0.2% of the operator's turnover.

Italy

Although there are still a number of difficulties with regard to the transposition and application of the licensing regime, 61 licences have been granted in total (including national, regional, voice telephony and infrastructure). Some difficulties still persist regarding procedures for the issue of licences which, according to new entrants, are still onerous and lengthy.

Until recently, the Italian regulations created an obligation to provide investment targets as regards R&D financing and to lodge a performance bond linked to the targets contained in the business plan provided by the applicant, which represented an unnecessary burden and a barrier to entry in the market. The regulations have now been amended to remove these obligations.

There are still gaps in the transposition of the applicable Community legislation into national law. These relate to the conditions attached to general authorisations and to the licensing regime for non-public services. The regulatory framework for satellites needs to be brought into conformity with the new licensing regime, in line with the provisions of the Licensing Directive. This concerns the concessions formerly held by the incumbent and by the two main mobile operators. Finally, although switchless reselling activities are allowed in general

terms, a clear set of rules has not been established. However, the NRA has started reviewing the overall licensing regime. This should include a simplification of the licensing procedures (an electronic template has already been drafted) and a review of the regime for satellites.

Although all responsibility in the field of licences was transferred to the NRA in June 1999, new entrants have expressed concerns with regard to the effective distribution of tasks between the Ministry and the NRA. At present the NRA has almost completed the take-over of the procedure from the Ministry of Communications, although it is still using Ministry personnel for processing the applications.

Delays have been reported by new entrants with regard to the issuing of licences, which took more than three months on average, and to the conversion of a regional licence into a national one. However, the NRA has started work to ensure compliance with the provisions of the national legislation (6 weeks). New entrants have pointed out that licence conditions are still not accessible to interested parties and that, in general, the whole process lacks transparency.

Licensing fees appear to be around average; however, market players have argued that other elements extraneous to the licensing framework – such as the telecommunications tax and the levy for the functioning of the NRA - introduce additional costs for market operators, to the detriment of an efficient development of the market.

Operators have noted long delays in obtaining licences or authorisations for satellite communications (notably SNG and VSAT) and the application of onerous conditions. Delays are partly attributable to the difficult transfer of responsibility for issuing licences from the Ministry to the NRA. However, the NRA considers that its planned review of the licensing regime should solve problems regarding satellites.

Luxembourg

Either an individual licence or a declaration is required for all services. The current legal framework for attribution of licences to provide network and voice telephony (general procedure) seems to be objective and non-discriminatory, although it gives the Ministry of Communications certain powers with regard to possible limitation of the number of licences, which, if extensively used, could create barriers to entry. The procedure covers fixed networks, mobile networks, voice telephony and fixed networks combined, and voice telephony. The framework for attribution of licences has still to be put in place for the provision of mobile satellite telecommunications services and radio paging. All other services are subject to the declaration procedure.

New entrants state that licence conditions on quality criteria and targets to be met are excessive. However, only the incumbent operator, under its obligation to ensure universal service, has been required to comply with the quality criteria and targets specified in the regulation on universal service. The incumbent regards these criteria and targets as stringent but feasible. The framework provides that the other operators can opt in their licence to meet lower or, indeed, higher quality targets for the various quality criteria measured. However, in practice, operators had the impression that the quality targets for the criteria set out in Annex III to the Voice Telephony Directive or even more stringent targets were imposed by ILT in their licences. The extent to which Member States may make mandatory in their licences more stringent quality targets than provided for under the Voice Telephony Directive,

irrespective of whether the quality targets have been set on the basis of a voluntary commitment by the operator or imposed by the legislator, is questioned by new entrants.

New entrants feel that the rights associated with the grant of their licences are not sufficiently specified and would like their licences to be more explicit in this respect.

As mentioned in the Fourth Implementation Report, the delay of one year in establishing the procedures for granting licences created a major market entry barrier. The time limits provided for by the framework now in place do not correspond to the limits provided for in the Licensing Directive. However, in practice, licences are granted in good time and the shortcomings in transposition do not appear to pose a barrier to market entry.

ILT has published information on licences for certain networks and services, thereby increasing transparency, although not yet for mobile, satellite or radio paging licences. The corresponding decrees for satellite and radio paging have still to be adopted and published.

New entrants consider that the licence fees for fixed operators and telephony are reasonable, but they question whether the fees cover exclusively administrative costs. They also consider declaration fees to be reasonable.

Moreover, several operators noted that, in comparison with other Member States (even in absolute terms) the level of licensing fees appeared reasonable. Compared to the population of Luxembourg and the geographic coverage of the licences, the level of fees was considered high by operators. Fees requested for satellite services are higher than in most other Member States. As calculation parameters differ very widely from one Member State to another, a proper analysis and comparison will be undertaken once comparable parameters have been established.

The Netherlands

Since the entry into force of the new Telecommunications Act, a licence is only needed when scarce resources are involved. For all other categories, registration is sufficient. The system works smoothly, with no problems reported by market players. The NRA has indicated that the low threshold for registration plus a low entrance fee has led to the large number of market players.

A final decision regarding the wireless local loop (WLL) licences will be taken by the Ministry in November 1999. The start of the auction procedure is planned for December/January 2000. The procedure has been the subject of public consultation.

An auction is also being considered for the coming third generation mobile licences, as was the case with the DCS 1800 licences in February 1998. A policy paper has been issued by the Ministry. The auction option is considered when frequencies are scarce. The feeling amongst market players is that, even though it is an objective method, an auction is not good for the development of the industry, as it takes a long time for the operators to recover their costs. The Government is at the moment investigating the possibility of five licences instead of the four that were originally planned, because of market pressure. Where only a year ago the market urged the Government to proceed quickly with the issuing of third generation mobile licences, operators are now requesting the Ministry to slow down the procedure. Market players note that large investments have to be made at a time when not all details have been

finalised. The Ministry has indicated that the existing operators will not be excluded from any of the licences.

Austria

Licensing procedures seem to be relatively light and licence fees do not constitute a barrier to market entry. Although transposition of some maximum time limits relating to the licensing procedure is still incomplete, no major application problems have been reported in this respect.

Nearly 100 licences (for 69 licensees) had been issued for the provision of public fixed voice telephony and/or public network services by the end of September 1999. However, fewer than half of the licensees are already operational and actually offer services.

A first auction carried out by the NRA has led to the issue of the licence for a fourth mobile operator (DCS 1800) in May this year.

The NRA launched a public consultation on licensing of third generation mobile communications services, which ended on 13 September 1999. Depending on the outcome of the consultation, the present licensing regime might be modified for third generation mobiles in order to allow simultaneous bidding for a combination of frequency packages. Existing mobile operators, however, reject any auctioning for such licences. Results are expected for mid-October 1999.

Portugal

In transposing the Licensing Directive, Portugal has taken the option available to Member States to require separate licences for public voice telephony services, the establishment and operation of public networks, and the provision of services using radio frequencies. With the deadline for full implementation approaching, the Portuguese authorities had, as of October 1998, already issued seven voice telephony licences for use from the deadline of 1 January 2000, as well as access codes for carrier selection in conformity with the new numbering plan.

New operators acknowledge that progress has been made in the licensing process, but are nevertheless critical of delays on essential matters relating to interconnection and unbundling, which will undermine the effective use of these licences. However, the recent approval of economic and technical conditions governing Portugal Telecom's RIO for the year 2000 (see section on interconnection below) represented an important step forward.

PT considers that the fees operators pay for licences and authorisations are very low, with the exception of the charge for the granting of frequencies. It considers that its State concession contract does not give it sufficient flexibility in providing services.

Call-back services have not yet been liberalised as the authorities classify them as voice telephony services, contrary to the provisions of Community law.

Finland

Licensing issues are not a major concern for operators in the Finnish market, in view of the very light licensing regime, which requires individual licences only for the provision of

telecommunications network services in the public mobile network. Other public telecommunications services are generally subject to a notification requirement.

Transmission of international telecommunications to Finland by an operator entitled to carry out international telecommunications in another EU Member State or in a State complying with the WTO General Telecommunications Agreement has been exempted from the duty to notify, subject to providing the TAC with a contact point and a description of its arrangements for transmission of the traffic to the national network.

Internet service providers (ISPs) are not required to notify their activities, but are permitted to do so if they wish to benefit from the rights granted to notified operators under the telecommunications legislation, for example in relation to interconnection.

Licences for the operation of mobile networks in Finland do not contain any requirements concerning the geographical coverage of the network. This was argued by one of the incumbents to have been a relevant factor in the Government's decision in September 1998 not to impose a national roaming obligation between GSM 900 and DCS 1800 networks.

Finland was the first country in the world to grant licences for the third generation mobile networks. On 18 March 1999 the Council of State granted third generation licences to the following 4 companies: Radiolinja Oy, Sonera Oy, Suomen Kolmegee Oy and Telia Mobile Ab's Finnish branch. The licences were granted on the basis of the applicants' financial resources, reliability and safety of operation, quality and technological development of services, and competitive framework. In addition, four licences were granted on 1 September 1999 in relation to the Åland Islands. These licences were issued free of any licensing fee or auction process. However, some uncertainty remains as to the conditions of operation of the licences, due to the fact that some of the rights and obligations of the licensees, particularly as regards national roaming, remain to be determined by the Ministry. These issues are currently under consideration by the Ministry.

Sweden

Sweden's licensing scheme is restrained and appears to comply fully with the spirit of the Licensing Directive, priority being given to general authorisations (declarations or notifications), individual licences being required only in certain specific cases. Thus in most cases operators do not require an individual licence: a declaration (notification) is sufficient. Companies can start operating as soon as they have filed their declaration with PTS.

A *declaration* is made for: 1) fixed telephony; 2) mobile services; 3) any other telecommunications service which requires allocation of capacity from a telephony numbering plan; 4) network capacity (including leased lines).

An *individual licence* is required for fixed voice telephony, mobile telecommunications services and network capacity, and then only where the activities are of considerable scope (which corresponds roughly to a market share of 10-15% in the relevant market). A licence must be granted unless the applicant is obviously incapable of conducting the activity on a permanent basis and/or of providing adequate capacity and quality.

Licence fees, calculated at 0.85% of annual turnover, are not currently seen as a deterrent by new entrants, who are aware that the licensing department of PTS (which is financed by

licensing fees) is not allowed to make a profit. Licensing fees are reviewed annually and have decreased in the last few years (down from 1.52% in 1994). However this trend might well be reversed if PTS should assume additional functions.

Some operators have in the past pointed to the potential uncertainty created by the fact that if their businesses grow, the notification requirement to which they are subject may, without their knowledge, transmute into the requirement for an individual licence. However, it is possible to apply for an advance ruling as to whether a notification is sufficient or a licence is needed (which may take up to six weeks under the national legislation). PTS has pointed out that it would be inconceivable for an undertaking to exceed the threshold between the requirement for a declaration (notification) and an individual licence requirement without becoming aware of it at least six weeks in advance. Where a violation of the requirement for an individual licence has been established, PTS' first action is to invite an application for a licence. Hence, new entrants no longer perceive uncertainty as to the licensing requirement. In addition to the advance ruling, PTS uses its annual inspection to establish whether an operator's business had reached the size where a licence becomes necessary.

The licence conditions imposed are still relatively few in number and an exhaustive list of these conditions is set out in both the Telecommunications Act and in each individual licence (itself a public document). All operators under the same licence-type continue to be subject to the same licence conditions, whatever their Member State of establishment.

Some new entrants have pointed out that certain smaller operators (normally only required to make a declaration under the current licensing regime) wish to avoid revocation of their existing licences, which they consider validates their status abroad.

United Kingdom

The manner in which the UK has transposed EU legislation (using secondary legislation to add or amend licence conditions) is considered by many new entrants to have complicated the licensing regime - operators believe that it would have been preferable to amend the primary legislation instead. OFTEL has explained that the UK already had a mature and sophisticated regulatory framework within which the large number of licensees enjoyed many substantive rights and were subject to extensive and often reciprocal obligations. A satisfactory means had to be found to preserve those rights and obligations while simultaneously fully implementing the various directives. The modified licensing regime, far from being simpler to apply (as was originally intended), has actually made the system more complex according to many new operators, - in particular, class licences now contain more conditions than before. OFTEL's justification is that the non-discrimination obligations in the Licensing Directive have necessitated adding some conditions to all licences. Furthermore, the most important class licences, such as the Telecommunications Services Licence and the Self-Provision Licence, have a set of guidance notes.

Many new entrants view the sheer length of licences as substantially reducing their comprehensibility and transparency while increasing the regulatory burden, in particular on small operators. Operators are confused as to which licence conditions apply to whom. This is a consequence of the relevant UK secondary legislation incorporating EC Directives verbatim - leaving their interpretation ultimately to the European Court of Justice. According to OFTEL the wording of the licences has been improved in the modified licences, and it is stated in each licence exactly what conditions apply to which operator. OFTEL has been

consulting extensively on the revised PTO licences - the consultation documents explaining in considerable detail exactly what OFTEL believes individual conditions to mean. OFTEL has also issued a "map" with the consultation documents, showing both the individual conditions and the UK or EU obligation that each condition was designed to address.

The UK has longer-term plans for the creation of a licence-free regime, relying instead on general authorisations. However, this would require primary legislation. In the very short term, OFTEL is hopeful that a large number of the non-PTO individual licences can be translated to class licences, thereby significantly reducing the number of existing licences (making it simpler for operators to carry out telecommunications activities, in many cases without individual licences). As authorisations are increasingly drafted as class licences, more operators can utilise them, avoiding the need to apply for an individual licence. With few exceptions, OFTEL is unaware of the details of class licensees (who do not even have to register before commencing operations).

The licensing regime in the wireless telegraphy sector is considered by some new entrants to be particularly lacking in transparency, which is of particular concern to new entrants in view of the introduction of spectrum pricing. Some new entrants consider that none of the fundamental principles of the Licensing Directive appear to apply to the licences issued by the Radiocommunications Agency (RA) under the Wireless Telegraphy Act, and there is considerable confusion about licensing procedures and licence fees. Some new entrants claim that the RA will not disclose information on RA licences to third parties and that it is not possible to obtain "template" licences from the RA so as to ascertain the licence conditions common to all relevant licences.

However, the manner in which the RA manages spectrum (including the licensing regime) is transparent. The RA regularly publishes its Spectrum Strategy, consults on all major proposals for new or changed spectrum use and holds regular dialogues with users through meetings of its consultative committees and its public "roadshow" meetings (held throughout the UK on an annual basis). Extensive information is also available on the RA's website. Specific licensing proposals, including the various phases of spectrum pricing, have been the subject of detailed and comprehensive consultation. While it is often true that the RA does not disclose information about licences to third parties, this is because much of that information is commercially sensitive. Furthermore, the business of some licensees is security-related so that disclosure of their licence details could be compromising. For the vast majority of RA's types of licence, however, it is happy to provide a sample of the licence terms and conditions (including technical provisions) on request, and it is planned that this information will also be available on its website.

The recent DTI proposal to modify section 12 of the Telecommunications Act and to introduce a licence modification procedure by which the Director-General of Telecommunications could modify licences without reference to the Competition Commission - unless opposed by a "significant minority" of the relevant licensees - causes many new operators great concern (especially since "significant minority" is as yet undefined in the secondary legislation). However the intention is to bring about a smoother modification procedure, given that there are so many licences in the UK and to take into account the principle of non-discrimination set out in the Licensing Directive. At present, licences can be modified only with either the unanimous approval of licensees (allowing each operator an effective veto on changes), or with the consent of the Competition Commission, which

involves a protracted process. According to OFTEL, it is virtually impossible to modify all licences in a way that would not be discriminatory (thereby fulfilling the non-discrimination obligation under the Licensing Directive) since it would be very difficult to obtain the consent of all the licensees within a particular type of licence (for example, there are more than 300 PTO licences). Under the proposed procedure the consent of a substantial majority of the licensees would be sufficient, and a single operator could not block the modification unless that operator was of sufficient significance to constitute a "significant minority" by itself. The new procedure will also allow the Director-General to make deregulatory modifications without going to the Competition Commission. The intention is to link this new licence-modification process to the new appeals procedure described above, under which appeals would be possible on the grounds of fact, procedural errors, errors of law, and lack of reasonableness.

There are no fees for general authorisations and the licence fees for individual licences (based on costs) are not perceived by new entrants as an obstacle. However, although the level of fees is acceptable, the way in which the licence fees are calculated (based on turnover) is of concern to certain multinational operators for whom it is sometimes difficult to draw the line between UK and foreign turnover. Moreover, some operators have pointed out that while licence fees should recover only the administrative costs incurred in the issue, management and enforcement of those licences, OFTEL's current funding derives entirely from licence fees. However, OFTEL notes that no licence-renewal fees have yet been demanded for 1999/2000, and when demands are issued, a reduction in fees will be made, based on an estimate of those costs not recoverable under the Licensing Directive. OFTEL has sought additional funding from within Government to cover the estimated shortfall in revenue. In future, OFTEL will also be funded through fees for competition casework done under the Competition Act.

Some operators were of the opinion that certain new licence conditions were excessive, including, inter alia, a proposed mandatory national roaming condition for third generation mobile licences. OFTEL notes that the courts have ruled as illegal the mandatory imposition of such a requirement, but that, in any event, it is seeking the operators' consent for its inclusion in their licence. Some mobile operators claim that the UK would not apply conditions in a non-discriminatory way since it is possible that the national roaming condition will be imposed on mobile operators using the GSM standard but not on operators using, for example, TETRA technology. This they would consider to be discrimination between technologies**.** The rationale behind the proposal to mandate national roaming onto existing GSM networks by a new entrant, third generation operator was that the latter will have to compete with the existing mobile operators who have both GSM and third generation licences. The four existing mobile operators will, if they win third generation licences, offer consumers a variety of services over both networks and have a number of advantages over potential new entrants - including a national network covering over 97% of the UK population, high levels of consumer penetration and established brands. Allocating more spectrum and allowing the new entrant to roam onto one of the existing mobile networks would enable it to offer services over the same geographical areas as the existing operators. This would apply until such time as it has built up its own network.

Another matter of concern, in particular for certain mobile operators, is the introduction of a "market influence" trigger into all PTO licences (replacing the Well Established Operator (WEO) trigger). This would trigger extra obligations, including the separation of activities,

the preparation of accounts and the prohibition of undue preference or discrimination. Some new entrants feel that this would give OFTEL excessive discretion to deal with operators having "market power" falling short of competition law and SMP thresholds. It is not always clear what specific purpose this third category of asymmetric rules would serve (alongside the general prohibition of abuse of dominant position and the telecommunications-specific SMP), nor whether its perceived benefits are proportionate to the burden imposed on the companies involved. The main advantage cited by OFTEL is that the narrower market definition of "market influence" allows for more precisely targeted regulatory action than the SMP rules. However, the UK authorities stress the fact that the Licensing Directive gives Member States the power to impose conditions proscribing anti-competitive behaviour in telecommunications markets, including leverage of market power from the network level into the service-provision level. In any case, the procedure is regarded as being fully transparent, the criteria are published and operators also have the opportunity to challenge the decision. Indeed, the procedure for determining that a licensee has Market Influence is fully set out in the licence. It includes full consultation of all interested parties and a fully reasoned decision. Moreover, OFTEL has produced a set of guidelines intended to set out the detailed criteria that the Director General would normally expect to take into account when making any such decision. For these reasons the UK authorities believe that the Market Influence trigger and its pre-conditions are transparent since operators would be fully aware of the circumstances in which a determination of Market Influence would be likely to occur and the reasons for such a decision.

3.3 Interconnection/special access

Belgium

The transition from provisional interconnection agreements to definitive/standard interconnection agreements has proceeded under the auspices of Belgacom. Discussions on the subject of these agreements have taken place between the new entrants and the incumbent, cooperating in a "Joint Negotiations Team". New entrants would however have liked the NRA to play a more active role in those discussions.

The reference interconnection offer (BRIO 99) is not acceptable to most operators, who would have liked its scope to broaden in the course of the year. The BRIO 99 does not, for example, include non-geographic numbers and covers only a limited number of services. According to the new market players, Belgacom has been unwilling to broaden the scope.

Belgian law provides for the BRIO to be finalised one month before the beginning of the relevant year. This one-month period is considered to be too short by virtually all operators, given that the necessary changes have to be made, both of a technical nature and in business plans. The NRA has indicated that preparations for the BRIO 2000, on the other hand, have started quite early. It was the subject of consultations in September 1999, and was due to be finalised before the end of October, giving all operators two months to prepare.

According to new entrants, the 1999 interconnection prices are still too high. The reduction made was not sufficient to promote effective competition. Moreover, the prices are not in line with the reductions in other EU countries, resulting in high interconnection prices compared to the EU best current practice (15% higher for single transit, 10% higher for double transit). Belgacom has announced an acceptable level of interconnection pricing in the BRIO 2000, comparable with the EU average.

Operators call for greater transparency in the costing model used for interconnection pricing, as no rules regarding the cost-accounting system to be implemented by Belgacom had been published as of September 1999. However, the NRA has indicated that a cost accounting model for Belgacom is operational.

The “Chamber for interconnection, special access, shared use and leased lines” (the Interconnection Chamber), which deals with interconnection disputes, is not yet operational and thus does not have binding authority. Resolution of interconnection disputes that arise in the meantime is being postponed by the regulator. According to the authorities, many of the problems identified could be resolved when the Interconnection Chamber becomes fully operational, and a Royal Decree to this effect has been signed and will be published soon. The Decree concerns the rules and procedure before the “Interconnection Chamber”.

The differential treatment of network operators and service providers that exists in Belgium due to the approval of different tariffs for interconnection services is not considered problematic by market players, as it is linked to the investment obligations for obtaining a licence. However, with reference to the Interconnection Directive, differences in tariffs can only be justified on the basis of different national licensing conditions relating to the interconnection service provided or required and/or where justified by different underlying costs.

The new entrants have expressed concerns regarding Belgacom's interconnection capacity. The incumbent has indicated that the increase of traffic in general is due to the increase in volume of Internet traffic in particular. The incumbent has generally been able to meet the minimum requirement of capacity to be delivered, but has had problems with additional capacity that is requested regularly. According to Belgacom, some new entrants have a clear tendency to exaggerate requests for capacity, leading to additional work and unnecessary costs, with the possibility that capacity which has been made available will not be used.

New entrants have noted changes to the structure of zones used for retail tariff structures in 1998, although the interconnection system is still based on the old system, which prevents transparency regarding possible price squeezes. In March of this year a new Internet access (numbering) scheme was announced by Belgacom. New entrants, backed by the Belgian association of Internet providers (ISPA), are of the opinion that the interconnection conditions for carrying Internet calls are unfair and that Belgacom unjustifiably discriminates between identical types of access. They have also indicated that Belgacom is charging excessive prices for Internet access services, which could force the new entrants out of the national Internet access market. The Brussels Commercial Court has ordered the incumbent operator to suspend the implementation of the Internet access numbering system, which Belgacom has appealed. The matter is also being pursued before Belgium’s competition authority.

Denmark

Since the legislative changes in July 1998 the interconnection obligation in Denmark covers switched interconnection, lease of infrastructure (including leased lines and unbundled access to the local loop and other infrastructure elements), and access by telecommunications service providers.

The legislation establishes as an objective that charges for switched interconnection and lease of infrastructure should be based on the LRAIC cost accounting method. However, due to

technical difficulties this requirement has not yet been implemented and the political agreement of 8 September 1999 states that implementation should be completed by the end of the year 2002. In the meantime interconnection costs are calculated on a historical cost basis, with the NTA entitled to reduce prices on the basis of a "best practice" assessment.

In September 1998 the NTA issued a decision requiring a reduction of between 10 and 30% in interconnection charges. However, this decision was appealed by Tele Danmark to the Complaints Board, which in February 1999 upheld the appeal in relation to certain costing elements in the decision. Following the Complaints Board ruling the NTA has reassessed interconnection tariffs and issued a new decision on 28 September 1999 on the basis of a three-country "best practice" assessment. This decision requires reductions in Tele Danmark's interconnection charges with effect from 1 October 1999 which, when compared with their charges in force on 31 July 1999, represent a reduction of 15% for local interconnection, of 35% for single transit interconnection and of 20% for double transit interconnection. The current three-country comparison being used to determine "best practice" is intended to be replaced by a one-country model by 1 July 2000, which should exert additional downwards pressure on interconnection prices.

New entrants have expressed particular concern at the delay that this process has entailed, resulting in the fact that there had been no reduction in Tele Danmark's interconnection charges for 2 years. They also expressed concern at the probable lack of retrospective effect of the NTA's decision and the valuable competitive advantage gained by Tele Danmark as a result of the protracted nature of the decision making process. New entrants also pointed to the price squeeze produced by reductions in Tele Danmark's retail prices in the meantime, without any corresponding reduction in interconnection charges.

New entrants also refer to Tele Danmark's refusal to include penalty clauses for late delivery in its interconnection agreements, and argue that this should be regulated by law, to remove the economic incentive for Tele Danmark to delay implementation, particularly in relation to granting access to the local loop.

Interconnection to the incumbent's network for service providers is governed by a formula based on the incumbent's end-user prices less a discount of 21%.

Tele Danmark's ISP is estimated to have approximately a 44% share of the Danish ISP market.

Tele Danmark's interconnection charges for local access and double transit are currently within the Commission's recommended "best practice", with single transit interconnection charges being 4.4% higher than "best practice".

The political agreement of September 1999 recognises the need for continued and strengthened asymmetrical regulation of interconnection on the fixed network, in order to guarantee access and allow for improved competitive margins for new entrants in a number of sub-markets. As a result it envisages further regulated reductions in interconnection prices for switched interconnection, local access and colocation. On the other hand it concludes that there is no need for price regulation of interconnection (or national roaming) in the mobile market, because of the high degree of existing competition.

The political agreement envisages that the LRAIC model should be applied to switched interconnection, access to the unbundled local loop and colocation; that for leased lines price regulation should be based on current costs; and that for service provision agreements the existing formula of end-user prices less 21% should be maintained. The objective is that the necessary legislation will be in place by 1 July 2000, so as to be able to start developing the LRAIC model from that date, and so that the NTA can set interconnection charges based on the model by the end of 2002. The NTA will be given authority to enforce this timetable, and issue deadlines for contributions from the companies involved.

The political agreement also envisages measures to reduce the incentives to delay implementation of NTA decisions, for example ensuring that decisions should come into effect from the date that they are made.

Germany

All public telecommunications network operators have a right and obligation to interconnect, but the definition of the former is not clear under the German legal framework. The NRA did not identify such providers in advance and not until 10 March 1999 did it publish its view in its Official Journal that a telecommunications network comprises at least one switch and three transmission lines. The scope of operators thereby identified as having the right to interconnect deprives certain operators of their interconnection right as provided for under the EU regulatory framework. The German authorities consider that the guidelines only apply to operators offering voice telephony on a self-operated network and would therefore not limit the right to interconnect. They also consider that the network definition does not create a market entry barrier as, in practice, virtually no market entrant would plan to enter the market without fulfilling the minimum requirements for a network. It is not possible to assess whether the restrictive network interpretation under the guidelines does indeed create a market barrier, as there are insufficient data available, in particular as regards the number of providers of only one national and international leased line or one switch that would enter the market but are prohibited from doing so. With regard to interconnection of providers of international leased lines, it is worth noting that, according to the German authorities, the network definition as set out in the German regulatory framework does not make any distinction as to the situation of the network (i.e. the operator qualifying for the network definition is granted interconnection irrespective of whether the network is situated in Germany or outside, even if there is only one leased line terminating on German territory).

At the end of June 1999, the German authorities notified to the Commission a list of operators with a right to interconnect which, according to the authorities, includes all operators with a licence for transmission lines (licence class 3) and provision of voice telephony on a self-operated network (licence class 4) and would cover all operators pursuant to the Interconnection Directive and even grant a right to interconnect going substantially beyond the EU regulatory framework. However, the Commission has not been informed of the manner in which this list has been brought to the attention of operators.

In August 1999 Germany notified the Commission that no mobile operator had significant market power.

New entrants consider that DT's delivery times for interconnection points, which can take up to 14 months in practice, are excessively long. According to DT, these delays are due to the fact that new entrants have ordered three times more capacity than they finally take over. DT

has proposed a method to improve delivery times which is currently being examined by RegTP. RegTP for its part proposed solutions based on alternative interconnection points and facility sharing. Furthermore, interconnection via third operators' networks (indirect interconnection) is currently considered a solution to the problem of capacity constraints. Where interconnection has been ordered by RegTP, implementation must take place within 3 months, subject to enforcement procedures under administrative law.

New entrants point out that a further problem arises from lack of co-ordination of orders for leased lines and interconnection, where the new carrier is often obliged to pay for interconnection or leased lines delivered without, however, being able to provide one of these services as the other service has not yet been delivered.

Previous concerns that DT did not negotiate or implement interconnection agreements with long-distance carriers (*Verbindungsnetzbetreiber* - VNBs) and operators with one/few switches should have been remedied following a series of decisions by RegTP within the dispute settlement procedures launched by certain new entrants and the subsequent applications of those decisions by DT to all contracts.

As regards the condition in DT's interconnection offer on additional costs due to network congestion created by the "atypical traffic" generated by operators with one/few switches, RegTP rejected DT's request to charge for atypical traffic on 25 May 1999 on the grounds that no evidence of costs arising from such traffic had been produced. New entrants have pointed out that the decision does not create the necessary clarity on the subject as they feel that, on the basis of the general guidelines of 10 March 1999, RegTP could still authorise DT to apply additional interconnection tariffs for certain operators. However, RegTP's decision of May 1999 made it clear that this would only be possible on the basis of concrete proof of the additional costs.

There is concern that RegTP, in its decision of 6 May 1999, has authorised DT to impose up to 23 further interconnection points once a certain capacity of traffic (48.8 Erlang)1 routed into a given interconnection point is exceeded ("*migration obligation*"). However, the justification that this requirement is necessary to avoid atypical traffic needs further examination in the light of the principle of the EU regulatory framework that concrete proof must be provided of the need for measures to protect network integrity.

The German interconnection tariffs are based on distance, while the EU benchmarking for interconnection tariffs is element-based. This makes it a complex exercise to compare the German interconnection tariffs with the tariffs as proposed under the EU best practice.

New entrants have expressed concern as to the level of the tariff for the most frequently requested type of interconnection, the Regio50 and the Regio200 tariff, as it substantially exceeds the benchmark for single transit, and the long-distance tariff substantially exceeds the benchmark for double transit. This is due to the fact that the regulatory authority set the price for two years, while the prices for long-distance transport have since fallen dramatically as a result of technological evolution, as reflected in the 70% drop in end-customer tariffs for long-distance calls. Consequently, the interconnection fees set would, in certain cases, be

1 Erlang: A measure of telecoms traffic. 1 Erlang corresponds to a circuit carrying one call for one hour.

close to the end-customer tariffs. An assessment of whether this development has created a price squeeze is currently being carried out.

The 1999 reference interconnection offer has been published but new entrants consider that it is incomplete. Call origination is only granted within the area of the carrier's services licence on the basis of RegTP's communication of 28 April 1999 on the determination of the licence area for charging licence fees. The RIO does not contain delivery dates and periods. Concerns raised by new entrants regarding interconnection for new services such as information services, payment services and economic magazines, (connections to the 0190 service) should now be met following a decision by RegTP in August 1999. As regards collection of payment, new entrants claim that amounts charged separately by DT for the collection service means that the call-by-call service is not economically viable.

New entrants have reported that the most serious market entry barrier is related to uncertainty about the principles of the new RIO and in particular the interconnection tariff. A cost-accounting model for pricing interconnection is currently being drawn up by RegTP following a consultation procedure. The current RIO expires at the end of 1999. However, new entrants expect DT to file its request for authorisation of the interconnection tariff 2000 ten weeks before the end of 1999, i.e. the time limit provided for under the tariff authorisation procedure. As this leaves very little time to decide on DT's application, they expect RegTP to take further provisional measures to prolong the current interconnection conditions despite the alleged current overcharging for interconnection. New entrants therefore consider that, should RegTP extend the current tariff without assessing cost orientation on the basis of cost-accounting data, the prolongation of the tariff should only be authorised on a transitional basis and under the reserve of a repayment mechanism for interconnection fees collected in excess of the cost-oriented tariff. The German authorities point out that no changes to the current regulatory framework are planned and that interconnection tariffs are expected to fall in the coming years.

An interconnection agreement was concluded with a new entrant in the course of September 1999 which might be indicative of the forthcoming interconnection offer. This agreement has been communicated to RegTP and can be consulted by interested parties. It provides for the current tariffs to be applied until the end of 29 February 2000. After this period, the current fees would be maintained until 1 February 2001, but with a modification of the peak hour, moving from 9 am – 9 pm to 9 am – 6 pm from 1 March 1999, thus creating the same peak hours as applicable to the end-customers tariffs. DT is of the view that the modification in peak hours leads to a de facto decrease of 15% in interconnection charges as from 1 March 1999. Furthermore, an agreement on the methodology (distance- or element-based) of charging for interconnection should be achieved by 1 March 2000.

There is however no certainty as to the forthcoming RIO, as no request for tariff authorisation has yet been filed by DT with RegTP. In the view of new entrants, the situation confirms the importance of giving RegTP the necessary powers to establish the interconnection offer in good time.

Greece

Greece has only recently transposed the Interconnection Directive. So far, operators have had to rely on the interconnection rules established under the Framework Law and secondary legislation (as well as on a case-by-case reference to various Articles in the Interconnection

Directive). Hence, it has not always been clear which rules applied. The Ministry considers that, following the transposition of the Directive, the applicable regulatory regime is now clear.

The Reference Interconnection Offer (RIO) for 1999 has not yet been published, but EETT expects to receive it by the end of October 1999. The RIO for 1998 was approved by EETT. EETT considers that the late approval and late submission of the RIO for 1999 is due to the delayed transposition of the Interconnection Directive. There has reportedly been disagreement between the incumbent and the mobile operators on pricing issues. Following the lack of an approved RIO, there are reports of difficulties regarding the availability and cost of services. Moreover, concerns were expressed over the EETT's supervision of such availability - especially in the provision of leased lines by the incumbent. OTE is reported not always to have given fair treatment to applications for the provision of loaded and unloaded circuits and ISDN. According to the EETT, the problems referred only to the provision of unloaded raw copper lines, which are now being replaced by optical fibre as a result of the digitalisation process. In any case, EETT instructed the incumbent to give all operators advance notice both of the availability of such lines and of the schedule of replacement. Regarding ISDN, the NRA has stated that problems are limited to availability, and that no concerns about fairness have been reported to the EETT. Some operators have suggested that the incumbent has in the past repeatedly refused to offer access to its PSTN for the provision of Internet services on the same terms as for its Internet Service Provider (ISP) subsidiary, OTENET (especially through the supply of a single national number at local rates). This strengthened OTENET's position in the relevant market, at the expense of new entrants. As a result, OTENET currently holds at least a 30% market share. The NRA informed the Commission that the incumbent did not refuse the provision of the single national number, but was late in providing it. Furthermore, OTENET continues to grow substantially, even after the provision of the single national number on the same terms.

Operators report the incumbent's refusal to provide additional interconnection points to other operators. In one particular case, the incumbent was asked to provide such points two years ago and has still not done so. These delays affect the quality of service of the requesting operators. EETT appears to reject these complaints, insisting that all the interconnection points requested have been granted, with a single exception of which EETT was notified only recently. EETT is mediating that dispute.

The Fourth Implementation Report raised concerns about cross-border interconnection. This issue is dealt with by the new law transposing the Interconnection Directive. It is to be expected that there will finally be settlement of conflicts involving the right of mobile operators to conclude interconnection agreements with operators established outside Greece.

Spain

The main provisions governing interconnection in Spain are the General Telecommunications Act, Royal Decree No 1651/1998 on interconnection and numbering and the Ministerial Orders of 22 September 1998 on individual licences and of 29 October 1999 adopting the Reference Interconnection Offer.

The Reference Interconnection Offer lays down the conditions that have to be negotiated by the incumbent operator and other operators. The CMT intervenes if they fail to reach agreement.

The CMT Board is due to adopt the new RIO for 2000 in October.

The interconnection tariffs for operators holding type B licences (telephony including establishment of a network) are within the Commission benchmarking. The tariffs for Type A operators (telephony not including establishment of a network) are 30% higher than the type B rates. By way of justification, this guarantees a balance between rights and obligations and type B operators have to make substantial investments (in interconnection points and access circuits) as well as having important obligations. The difference is based on Article 7(3) of the Interconnection Directive, which permits different tariffs for operators with different investment obligations.

Some "single transit" interconnection tariffs are within the benchmark, while some double transit tariffs are outside it. However, "single transit" interconnection is much more common.

New entrants reported that they have to deploy a large number of interconnection points to provide the voice telephony service. To avoid duplication of the incumbent operator's network, the CMT established on 9 June 1999 the concept of "real and efficient transport", which shows when the deployment of interconnection points is necessary.

The incumbent operator considers that interconnection tariffs in Spain are among the lowest of all Member States, with the exception of "double transit".

France

Under the French regulations, all operators with a network or a public telephony services licence have a right and obligation to interconnect. A list of operators has been notified to the Commission and published in the Commission Communication of 23 April 19992. Since then, the list has been regularly updated on the ART web site.

Operators with SMP in the national interconnection market and operators with SMP in the mobile market have been notified to the Commission.

There are two different reference interconnection offers, RIO 1 for operators with a network licence and RIO 2 for operators with a services licence, containing different conditions and a higher interconnection tariff for RIO 2 (approximately 30% higher). This difference seems to have been guided by the objective to promote investment in infrastructures and not by different underlying costs. Conditions attached to individual licences as regards the respective interconnection rights and obligations are identical for holders of a network licence. However, according to the French authorities, there is a more far-reaching obligation on operators with a network licence to interconnect other network operators, which is not required of operators with a service licence. In practice, differences in interconnection conditions would not appear to have given rise to concern among new entrants and, according to France Telecom no service provider has requested its interconnection services as provided for under RIO 2, given the existence of competing offers on the market.

Operators with SMP in the national interconnection market and those with SMP in the mobile market have been notified to the Commission. However, no decision has yet been taken by

2 OJ C 112/2

the ART to ensure that operators with SMP in the mobile market apply non-discriminatory tariffs for call termination, in particular as regards the apparent price discrimination against termination of national calls compared to international calls which prevails on the French market. This situation in France is the result of a dispute settlement procedure by ART's predecessor (*DGPT)* which fixed the amount to be paid by France Telecom to mobile operators for the termination of international calls on mobile networks and the fact that retail tariffs for fixed-mobile calls are determined by mobile operators under their licence terms. A further reason is the very high level of both domestic termination rates on mobile networks as well as the retail tariff for fixed-mobile calls. ART has taken action to make progress as regards the tariffs for termination on mobile networks in particular, by its decision that the two mobile operators (FT mobile and SFR) have significant market power, which puts these operators under an obligation to apply cost-oriented interconnection tariffs. The ART furthermore recommended, in June 1999, a gradual reduction of the tariffs for call termination on mobile. All three mobile operators have meanwhile announced a 20% reduction of retail fixed-to-mobile calls, and the ART intends to obtain further decreases next year. Although the ART recognises that tariffs for termination of international calls on mobile networks should be aligned on those for termination of national calls on mobile networks, no deadline has been set for remedying the problem completely.

New entrants have concerns about the scope of the RIO, which does not cover certain services. For instance, they complain that carrier selection for calls terminating on a mobile network is not covered by the RIO, and that as a consequence FT applies, for origination of calls terminating on mobile networks, interconnections tariffs which are 60% higher than the tariff of the RIO for call origination for calls terminating on its fixed network. However, the underlying costs for call origination do not appear to justify this differentiation. Furthermore, tariffs charged by FT internally for originating calls to its own mobile subsidiary *Itineris* are reported to be lower than those charged to competitors. Finally, by fixing quotas for interconnection of fixed-to-mobile calls routed internationally, FT has blocked any international re-routing since January 1999. New entrants consider that there is an urgent need to introduce non-discriminatory interconnection services for call-by-call and pre-selection for fixed-to-mobile calls. ART plans to make this facility part of the RIO 2000.

There is also concern that the 1999 RIO is incomplete insofar as it does not include the double tandem interconnection for call origination and thus does not allow new entrants to provide services in areas where they have not developed their own network. However, in practice, new entrants could, according to France Telecom and the ART, rely on the interconnection services of competitors.

The RIO does not include an offer for end-to-end interconnection of leased lines as requested by the market and the Interconnection Directive, and new entrants therefore have to complete interconnection via leased lines offered at retail tariffs. Furthermore, conditions for the provision of leased lines are not included in the RIO, but in another catalogue of public tariffs. No specific tariffs are offered to operators on a wholesale basis. They have to rely of the public retail offer for leased lines.

The RIO does not contain conditions for Internet access services, but ART intends to include this facility in the RIO 2000. The specific conditions for Internet access services were only set by ART under dispute settlement procedures. New entrants regret that within these procedures, ART will indirectly impose an obligation of cost orientation for new entrants.

Publication at the end of 1998 of the 1999 reference interconnection offer was considered late by new entrants. The RIO 2000 has been communicated by FT to ART and a timely approval by ART is expected in the course of autumn 1999. The publication of the RIO in good time is considered by new entrants to be an advantage for their business planning.

Taking into consideration the RIO 1 (for network providers), the level of the interconnection charges fixed by the ART falls within the benchmarking of the Commission's Recommendation. Interconnection charges in the RIO 2 for service providers are 30% higher than these benchmarking standards. It appears that ART is preparing the setting of the 2000 interconnection tariff and has already taken a decision, on 7 July 1999, reducing the rate of return on capital to 9.9%.

Ireland

No significant interconnection problems have been reported in the year since publication of the Fourth Report and, in general, ODTR is considered to have dealt satisfactorily with interconnection issues.

In September, ODTR concluded a review of Eircom's RIO, supplementing its pre-liberalisation investigation of RIO. It was carried out following the publication by Eircom of a consolidated RIO in March. ODTR has approved it as an interim RIO, pending further examination, but not in its entirety.

Eircom appears to disagree with the results of the review of its proposed RIO. This dissatisfaction led Eircom to initiate legal proceedings for the first time against ODTR in the courts. According to the information available to the Commission, the dispute mainly concerns the methods used to set interconnection charges. Compensation for colocation rights, billing costs for other operators and a four-week notice requirement for new services introduced by Eircom are also controversial. The RIO concerns mainly voice telephony and does not cover mobile telephony.

The interconnection tariffs are within the EU benchmarks and, according to the industry, are the third lowest in the EU. The rates for call origination and termination are considered low by the industry. Eircom offers interconnection to all licensed operators operating in the Irish market and to other EU licensed operators who present their traffic at an interconnection point.

According to some operators, Eircom has failed to deliver interconnect links to its competitors. In some cases, the time required by Eircom for such deliveries can be up to 12 months and the interconnecting parties consider this to be excessive. In addition, Eircom does not give any commitment concerning such deliveries. Despite the involvement of the ODTR in this case, Eircom still refuses to commit itself to delivery times and there are no performance indicators in place to monitor Eircom in this respect. The ODTR held a consultation procedure where the issue of measuring the SMP operator's performance was addressed. According to the information available to the Commission, the ODTR is planning to impose penalties for non-performance and failure to make timely delivery. Eircom has been given 3 months to remedy matters. Some problems are also experienced with the late delivery of standard leased lines. It usually takes between 4 and 6 months, which the market does not regard as timely delivery. The ODTR stated that the commitment of Eircom to delivery time is addressed in the context of the development of Service Level Agreements.

Eircom refutes these concerns, arguing that as a result of the early liberalisation of the Irish market, announced by the Government only in April 1998, no allowance was made, or could have been made, for transmission capacity or resources from fixed operators. However, even under these circumstances, Eircom alleges that its approach has always been one of facilitating to the maximum extent the implementation of a new interconnection agreement. In many cases this has involved Eircom providing interconnect infrastructure in the absence of commercial agreements and accepting orders for significant volumes of capacity with little or no advance notice in the form of a network plan. The lack of network plans from operators intending to interconnect had an adverse effect on Eircom's own switch development programme and the delivery times for later interconnect entrants who have sought to interconnect since 1 December 1998. In addition, the upsurge in requests for interconnect links had the effect of stretching the resources which are also dedicated to the delivery of leased lines. According to Eircom an interconnect link should be treated as a leased line, because in essence it is a 2 Mbit/s leased line. Nevertheless, despite the constraints experienced, Eircom processed orders for more than 1300 interconnect paths.

Eircom has expressed the concern that excessive capacity ordering affects the delivery to other operators. In some cases, the interconnect paths made available to interconnecting parties have been under-utilised to the detriment of both Eircom and the other requesting parties. Eircom is currently reviewing the manner in which it treats requests and could possibly change its overall approach.

In December 1998, Eircom introduced a new service whereby Internet calls with a 1891 prefix were carried to Eircom's local Points of Presence (POPs) for approximately half the standard local call rate. Call conveyance charges for the remainder of the call - from the POP to the ISP - are paid for by the ISP. This arrangement can only be used by ISPs who own or rent POPs and backhaul from local exchanges. Eircom does not yet have any arrangements in place whereby ISPs can colocate in an Eircom POP.

The ODTR has consulted widely on this topic and suggested a new interconnection framework for the provision of Internet services to ensure fair competition between Eircom and its competitors. Three different types of "dial-up" Internet access were suggested. More specifically, the customer has the choice either of paying for the telephone call but no subscription fees; or a flat rate for accessing the Internet and no call charges; or a combination of subscription fees and call charges.

Some interest has been expressed in the provision of colocation rights in Eircom's exchange. According to Eircom, it did not satisfy these requests in order to protect its network and personnel from being exposed to a number of risks such as network integrity, maintenance and health safety. Eircom is of the opinion that colocation space should be treated as a limited asset, that cannot easily be expanded.

Italy

The Italian interconnection regime is not restrictive, and interconnecting operators are free to set interconnection points independently from the network architecture of the incumbent. No minimum requirements are requested in relation to the number of interconnection points, nor on the basis of the licence coverage. The NRA's interventions with regard to the 1998 reference interconnection offer (RIO) reduced both the peak and off-peak interconnection

charges originally proposed by the incumbent, bringing peak charges into line with best current practice and completing in many respects the unbundling of the offer.

The incumbent published the 1999 RIO on 15 July 1999, which is currently being assessed by the NRA. The NRA is consulting new entrants and may impose changes to the RIO after completion of the assessment procedure. If the NRA decides to modify the RIO, changes to both the economic conditions and the technical offer can be made retroactively. Some new entrants have expressed concerns with regard to the unbundling of the offer and the transparency of the economic conditions for advanced services, as well as the cost justification for a number of items, such as non-geographic numbers. A clear indication of prices and conditions for interconnection is important in order to provide new entrants with the possibility to offer such services.

By July 1999, 33 interconnection agreements had been signed (over 20 for fixed-to-fixed interconnection, 8 in relation to the mobile-to-fixed market and 3 for the mobile operators already in the market).

The interconnection charges offered by the former monopolist in the 1999 RIO appear to be in line with the 'best current practice' at European level for the three levels of interconnection. However, certain new entrants have expressed concerns with regard to the margin between interconnection tariffs at local level and the retail prices of the incumbent operator, which in their view would not allow competition in the local market.

The NRA has notified the organisations with significant market power in the relevant markets, and in March 1999 took an interim decision on fixed-to-mobile tariffs, which sets retail prices for this kind of call. These two issues are closely linked, and the final decision by the NRA on fixed-to-mobile tariffs is currently pending. The high penetration of mobile subscriptions in Italy - in absolute terms and in comparison to fixed telephony penetration – has a significant impact on overall traffic distribution and on the pricing strategy of new entrants in the fixed market. Some new entrants have expressed concerns regarding the difference between certain fixed-to-mobile retail tariffs and the corresponding mobile termination rates, which would appear to be too low. The notification of the two largest mobile operators as having significant market power on the interconnection market could lead to a progressive reduction of mobile termination tariffs. The mobile operators complain about such a decision.

With regard to the cost-accounting system in relation to interconnection, the incumbent is moving from a model based on historical costs to one based on current costs. Although delays are reported in the adoption of a proper cost-accounting system, the NRA has launched a further study, due to be completed by the end of 1999, with a view to identifying the underlying interconnection costs of the incumbent.

Luxembourg

All public telecommunications network and services operators have a right to interconnect, while the operator with significant market power has the obligation to interconnect and to grant access. There is some uncertainty as to how to interpret the provisions of the law on the limitation of the right/obligation to interconnect on the basis of a similar licence. The incumbent operator does not consider the clause in question to be particularly relevant,

however, following ILT's opinion that the law should not be interpreted restrictively, including in respect of cross-border interconnection.

P&T Luxembourg has been notified as having significant market power on the various markets identified in the Interconnection Directive.

P&T Luxembourg uses the model contract of BT for interconnection negotiations, to the apparent satisfaction of new entrants. The latter appreciate the fact that delivery periods are included in the offer in a non-compulsory form for the new entrants and are negotiable. Moreover, P&T Luxembourg offers "halving" for leased lines at a level they consider satisfactory.

Concerns have been expressed by new entrants with regard to the scope of the RIO, however, which does not cover interconnection for new services. As a consequence, they have had to negotiate with P&T Luxembourg for these services and the negotiations are reported to be unreasonably slow. In addition, no time limits are set for the implementation of interconnection agreements, and some interconnection services, e.g. interconnection services for special numbers such as freephone numbers, calling cards, etc. are not included in the RIO. By Decision 98/15 of 31 March 1999, ILT set out general principles which would resolve these outstanding issues if implemented in the forthcoming reference interconnection offer 2000. The RIO 2000 recently presented to ILT includes new services, but does not specify prices.

Although the interconnection offer contains the necessary colocation elements, they are not offered in practice, with P&T Luxembourg arguing that there is no space available. The latter has reported that it is currently adapting its building in order to be able to offer proper colocation facilities.

The incumbent has concluded three interconnection agreements with new entrants, including mobile-to-mobile interconnection, and a series of further agreements (eleven) is currently being negotiated. All interconnection agreements concluded have been communicated to ILT.

As mentioned in the Fourth Implementation Report, the current legal framework does not enable ILT to intervene and set the interconnection conditions. In addition, ILT's decision of 3 June 1999 (99/21/ILT) on a conciliation procedure is likely to remain ineffective, as it is subject to the agreement of all parties on the procedure. Furthermore, ILT cannot take binding decisions to solve interconnection disputes, but only make proposals for conciliation.

New entrants have reported a virtually prohibitive barrier to entry into the voice telephony market relating to the level of interconnection charges for domestic calls. They view high interconnection tariffs as a disincentive to offering voice telephony to end-customers relying on interconnection provided by P&T Luxembourg. Interconnection in Luxembourg is provided via one single point of interconnection, with a second point as a backup facility, and only one single interconnection tariff is proposed for termination of all domestic calls. As most domestic traffic would consist in local calls, new entrants consider that the reference for comparing interconnection charges at a European level should therefore be the charge for local interconnection. New entrants have pointed out that the interconnection charge is close to the retail tariffs. The incumbent operator is of the view that, given the number of connections for the interconnection point (290 000), the P&T Luxembourg tariff for termination of domestic calls should be compared with the interconnection tariff

recommended by the EU best practice at the single tandem level. It also pointed out that the interconnection charge is levied per second, while the end-user tariff is levied per minute, thus increasing the margin left to competitors.

In its Decision 98/15 of 31 March 1999, ILT ruled that interconnection charges had to be reduced, but did not address the issue of call set-up charges. New entrants cannot submit the issue to any national authority or the courts for a decision, as the Competition Authority (*Autorité de Concurrence Luxembourgeois*) is not competent. A complaint on interconnection fees filed to ILT was not followed up, with ILT lacking the competence to decide.

The Netherlands

The NRA has indicated that one of the reasons for its pro-active stance, specifically on matters relating to interconnection and special access, is that the threshold for entering the Netherlands market is quite low. Any provider of public telecommunication networks and/or services that controls access to end-users has a legal right to interconnect and must register with OPTA. At the same time, the level of investment in (new) infrastructure is low.

KPN has for some time been having difficulties in providing transmission and interconnection capacity. This has caused problems for new entrants in building up a customer base and can be considered a barrier to market entry. Operators have considerable understanding for the capacity problem, as the number of capacity requests and the volumes concerned were not anticipated by the new entrants. OPTA has maintained that the incumbent was slow in investing and in responding to new circumstances. The capacity problems, which are linked to Internet developments, are primarily located in the most densely populated areas, and OPTA had given KPN Telecom until 1 July 1999 to resolve them. According to KPN, all of these problems have been resolved for the moment, and it has made provision for the future delivery of capacity. Both market players and the authorities suggest that some difficulties remain.

One of the proposals for the future delivery of capacity by KPN involves taking the Internet traffic out of the telephony network. OPTA is discussing these options with KPN and other market players. The NRA feels that KPN's competitors should not be put at a disadvantage because of any new solutions or initiatives introduced by the incumbent, while at the same time the incumbent's freedom to innovate must not be restricted. The principle of non-discrimination has to be applied. This is particularly important since the ISPs linked to KPN already have a 38% market share. The Ministry is, at the same time, consulting on a new numbering scheme for Internet traffic.

The interconnection rates in The Netherlands have decreased significantly, due both to actions by OPTA (resolving disputes) and to threats of legal proceedings against the incumbent.

On 22 September 1999, OPTA gave a ruling in a dispute regarding the justification of reciprocity of interconnection prices. KPN had pointed out that their prices had to be cost-oriented, whereas the interconnection prices of other operators - which do not have significant market power and therefore are not subject to the obligation of cost orientation - remain higher. KPN stated that this creates a distortion of the market, because of the variation in termination rates. Because new entrants have different cost and network structures, OPTA decided that KPN's interconnection tariffs could not be imposed on other operators.

According to market players, the interconnection negotiations in The Netherlands are relatively easy compared to those in other Member States. However, the incumbent has some problems managing the increasing number of interconnection agreements (66 at 31 July 1999). The problem has been discussed with market players at a national level and OPTA has taken the initiative to consult on a new reference interconnection offer (RIO).

The Netherlands is planning to notify to the Commission by October 1999 a list of mobile operators with significant market power (SMP) for the mobile market. A decision on designation of SMP operators on the national market for interconnection is planned at a later date. Many market players have problems with the long delay by OPTA in designating these operators. According to the European regulatory framework, the deadline for notification was 31 January 1997.

With regard to the imminent decision on SMP operators on the mobile market, market players likely to be designated expressed their view that such a decision is unnecessary in this market. With five mobile operators and three mobile service providers, they believe that there is already sufficient competition in this segment, with more players than in many other Member States. They regret that OPTA is only applying the letter of the law and does not sufficiently consider the economic considerations involved. These operators also feel that the ONP rules for fixed networks cannot be copied blindly in the mobile market, as the situation in these two markets in The Netherlands is very different.

The legal obligation to designate SMP operators, in accordance with the Interconnection Directive, has been transposed by The Netherlands, but not yet fully implemented in practice. Furthermore, according to the NRA, the fact that there are five active mobile operators does not necessarily indicate a level playing field because, firstly, the two initial operators did not have to enter an auction to obtain their licences, and thus the start-up costs vary. Secondly, at the moment, the three new operators have only a small percentage of the market and, finally, the NRA has indicated that there is insufficient transparency in fixed-to-mobile tariffs.

Austria

A total of 36 interconnection agreements (fixed-to-fixed: 33; mobile-to-fixed: 3; mobile-to-mobile: none) were in place at the end of July 1999. There is currently no interconnection at the local level.

The incumbent's interconnection charges for single and double transit fixed by decision of the NRA are slightly higher than the Commission's recommended "best practice". As a result of an NRA decision, the incumbent has been required since 1 January 1999 to provide in principle for interconnection at the local level. A decision on the fees for interconnection at the local level had not been taken for procedural reasons. A new application for dispute settlement on local interconnection tariffs was submitted to the NRA at the beginning of August 1999 and a decision is expected in October.

A fair number of the agreements in place are due to expire at the end of this year. Since interconnection at present is largely based on arrangements resulting from dispute settlement by the NRA, new entrants are concerned that the incumbent will continue to delay new negotiations scheduled to start in October 1999. Due to proceedings pending before the Courts, some legal uncertainty remains with regard to the definition of interconnection and the extent of interconnection obligations.

The incumbent's current Reference Interconnection Offer (RIO), valid from 1 January 1999, has been made available on the NRA's web site. Although the NRA has notified the Commission of its intention to examine the RIO, no decision has been taken so far on whether to approve, reject or modify it. There seems to be legal uncertainty about the exact powers of the NRA in order to ensure compliance of the RIO with the obligations of SMP operators in accordance with the Interconnection Directive.

New entrants complain that the current RIO in part contradicts certain decisions taken by the NRA and thus discriminates against operators and is also incomplete (e.g. with regard to unbundled local loop, online services, number portability and carrier pre-selection). Furthermore, they are concerned about the mandatory arbitration clause in the current RIO.

It is expected, however, that the incumbent will publish a new RIO by mid-October 1999 based on the decisions of the NRA on interconnection issues and taking partial account of the major concerns expressed.

Operators have also complained that the incumbent hindered market entry by not making enough POIs available and that an effective legal remedy to such an abuse of its SMP is lacking. According to the incumbent, there is no lack of capacity at the moment, given that it provided about 1000 new lines between June and August 1999.

Portugal

Interconnection between public telecommunications networks, the general principles applicable to the National Numbering Plan and ICP’s powers in respect of interconnection have been laid down in the recently notified legislation. This also contains provisions on operators’ interconnection obligations and the definition and publication of the reference interconnection offer (RIO).

ICP has notified PT as being an organisation with significant market power (SMP) in the fixed telephony market and the leased lines market. It should also be noted that two operators, TMN (subsidiary of PT) and Telecel, have been notified as SMP organisations in the mobile market. The ICP Board has also adopted the general terms and conditions for interconnection agreements for 1999.

With regard to the publication of the RIO for 2000, ICP recently adopted (September 1999) a decision on the maximum prices to be charged by PT and the minimum technical elements to be included in the RIO, such as geographical availability of the points of interconnection, quality of service, optional services, interconnection links, etc. The interconnection prices for the year 2000 determined by ICP, after appropriate public consultation, are close to the EC best current practice in accordance with the Commission Recommendation.

Interconnection prices in the 1999 RIO are well above the current best practice according to interconnected operators, who are demanding intervention by ICP to decide more competitive terms to apply with retrospective effect from January 1999.

The Portuguese authorities and the incumbent announced that PT already has a cost-accounting system (available on PT’s website).

Finland

Following the conclusion in September 1998 of the interconnection agreement between the incumbent operators, Sonera and the Finnet Group, negotiations for interconnection agreements with other operators have now also been concluded. Since the OFC has required that interconnection agreements be negotiated independently by all member companies of the Finnet Group, some two hundred agreements are now in place.

However, interconnection issues have come more to the fore in Finland as traffic volumes have grown and competition has developed. Although the operators with significant market power are obliged to offer cost-based interconnection prices, some new entrants have argued that insufficiently detailed rules relating to cost accounting and cost allocation methodologies and a lack of transparency have left scope to the economic bargaining power of the incumbents. This is partly attributed to an approach on the part of the Ministry which favours leaving the fixing of interconnection prices as far as possible to negotiation between the parties and the play of market forces. However, the Finnish authorities point out that very few complaints have been made to TAC in relation to the number of agreements made. In the event of a complaint the operator with significant market power has to prove that its prices are cost-oriented. The Finnish authorities consider that imposing further detailed regulation on cost accounting and pricing issues would be counter productive, given the level of competition that has already been achieved in the market.

There is also a perception among some new entrants that the TAC has taken a reactive rather than a pro-active stance on interconnection issues, investigating on the receipt of complaints rather than actively monitoring the implementation of the cost-orientation principle. It should be acknowledged, however, that the existence of over fifty local network companies deemed to have significant market power renders the task of accounting supervision significantly more complex for the TAC.

New entrants have also referred to the fact that in some instances the combined interconnection prices for originating and terminating calls are greater than the retail price charged to end-users as evidence that the cost orientation principle is not yet fully implemented in the interconnection market, although the Finnish authorities have suggested that in certain circumstances interconnection and retail prices may not always be directly comparable. New entrants also claim that in some cases the lack of margin between an incumbent's terminating interconnection prices and its end-user prices undermine the possibility of effective competition, particularly in the local loop.

The TAC is currently dealing with a dispute relating to the cost orientation of access and termination tariffs.

In February 1999 the Ministry's Decision on the Interconnection of Telecommunications Networks and Services was amended to require all telecommunications operators with significant market power to separately price the use of their network by outgoing and terminating traffic, but with certain exceptions, notably in relation to calls terminating on their mobile networks, where the charge for the mobile element of the call is considered as an end-user price. It is alleged by new fixed entrants that these limitations in the regulatory regime are holding back competition. On the other hand the Finnish authorities argue that it benefits competition in the mobile market that mobile operators set the price for calls from

the fixed network to the mobile network and that the result has been a low price level in comparison with other EU-countries.

In February 1999 the Ministry also issued a decision to the effect that end-user prices for communications originating on an operator's local telecommunications network and directed to another telecommunications area should not exceed 60% of the end-user price for a local call of the equivalent duration. This rule will remain in force until 30 June 2000.

As regards points of interconnection (POIs), new entrants report that difficulties have been encountered in obtaining interconnection at the local level from certain of the incumbents operating local fixed networks. The TAC has given a decision in one case. According to the law, interconnection shall be effected at the point indicated by the operator requesting interconnection.

It was also claimed that in one case an incumbent is offering access at discounted tariffs to internet service providers (ISPs) on terms which are bundled with elements of its own technology, thereby giving its own ISP a competitive advantage. A complaint has been made to the OFC on this issue, whose preliminary decision in September 1999 indicated that the operation of the discounted ISP tariff scheme constituted an abuse of the incumbent's dominant position. The provision of internet services falls outside the scope of the Telecommunications Market Act. Consequently it is not possible directly to impose cost-orientation requirements on the ISP subsidiary of a telecommunications operator with significant market power.

ISPs that notify themselves as telecommunications operators can avail themselves of the rights of operators under the interconnection regulations.

The ISP with the largest market share is that owned by the incumbent Sonera, which is estimated to have approximately 40% of the ISP market in Finland.

The regulatory authorities have not until now required local level interconnection rates to be published in the RIO.

Current interconnection charges for call termination in Finland are at the top end of the Commission's "best practice" range as regards single transit interconnection, and outside the range as regards local (not separately differentiated from single transit) and double transit interconnection.

Sweden

There are currently 28 interconnection agreements filed with PTS (most of them for fixed-to-fixed interconnection) and 15 more are under negotiation. Not every concluded interconnection agreement has been filed with PTS since, under the Telecommunications Act, only significant market power (SMP) operators (presently Telia alone) are obliged to submit interconnect agreements to PTS. However, PTS has the right under the Telecommunications Act to inspect any interconnection agreement in its entirety.

The reference interconnection offer was published in March 1999 and the latest update was in September 1999.

Some new entrants consider that, given Telia's dominance, PTS does not intervene sufficiently in interconnection negotiations and interconnection disputes. This, it is suggested, makes it difficult for new entrants to conclude interconnection agreements with Telia on reasonable terms.

According to some of the operators entering the market as early as 1993 they have been carrying out interconnection negotiations with Telia for several years, and yet have only managed to conclude agreements in 1998. Moreover, some new entrants have stated that Telia has only recently agreed to share costs equally, the previous practice being to require new entrants seeking interconnection to assume costs additional to the pure cost of interconnection. This is considered to be a problem directly related to interconnection negotiations with Telia. Furthermore, Telia is criticised by some new entrants for altering the preconditions for certain favourable interconnection rates, thereby forcing new entrants to undertake substantial investment, as well as creating uncertainty (by periodically varying the number of interconnection points to which new entrants are required to interconnect to get the lower rate). In this respect PTS is considered by some new entrants to have failed to intervene actively.

Given Telia's position as an SMP operator in the Swedish interconnection market, its interconnection charges should be cost-oriented. However, a 1996 market study shows that Telia's interconnection charges at the time were so high that they sometimes exceeded the final price to the customer. According to the study, this prevented competition, especially on the regional and local call market, which is the largest part of the telephony market. A number of disputes concerning Telia's interconnection charges have been brought before PTS and the Competition Authority in the past few years. In 1995 a new entrant complained to the Competition Authority that Telia's interconnection charges were so unreasonably high (higher than the end-user tariffs) that it could not compete on national calls. After finding that Telia was charging different rates for the same service, the Competition Authority made two interim decisions prohibiting Telia from demanding the disputed interconnection charges. Telia's interconnection charges were lowered in November 1998, and are now within the benchmark. The case was therefore closed in 1999.

PTS has intervened in at least one other dispute as to Telia's interconnection charges, and there is now competition in all sections of the Swedish national telephony market, although Telia's local market share remains very high. Despite this, some new entrants still believe that Telia's interconnection charges are not cost-oriented - some claiming that most interconnection charges are not based on actual costs but vary as the market situation changes. Some new entrants are also concerned at the lack of transparency of Telia's interconnection charges, and continue to call for Telia to publicise its cost allocation (allowing scrutiny as to whether interconnection charges are based on costs, or whether cross-subsidisation occurs). They are also calling for prices to be unbundled, and claim that Telia charges different interconnection charges to its own companies.

Telia's costs have recently been investigated by PTS, as a result of which, from 15 June 1999 Telia has had to lower its average mobile interconnection charge by approximately 20%. Further examination of costs will take place.

There appear to have been considerable difficulties in negotiating interconnection agreements with Telia at a local level. Certain aspects of local level interconnection (concerning, inter alia, local loop unbundling) continue to be disputed in the industry. Nonetheless, there are

some interconnection agreements that encompass local level interconnection. Furthermore, Telia's RIO includes terms and conditions for local level interconnection.

Telia's ISP has a market share of 32% (by subscribers), while its major rival currently has a market share of 33% (by subscribers), which share has substantially fallen over the last few years. The latter attributes its loss of market share to Telia's control of the access network. Since interconnection charges in Sweden remain reciprocal, their mutual costs for termination of the growing Internet traffic have been identified as the single most important driver in the recent reduction of interconnection charges.

United Kingdom

A large number of interconnection agreements are in place in the UK (269), most of them for fixed-to-fixed interconnection (256).

Many new operators consider the current interconnection regime to give OFTEL excessive discretion for interpreting the scope of interconnection, and consequently determiningwho has the right/obligation to interconnect. Of particular concern to certain new entrants is the interpretation of 'Special Network Access' and its pricing. OFTEL believes that the dispute resolution provisions of the Interconnection Directive apply to both interconnection and access disputes. However, OFTEL has not yet made any decisions in Special Network Access cases - although it has been approached on two occasions. The first case (notified May 1998) required OFTEL's consideration of Special Network Access obligations but was resolved through normal commercial negotiations between the parties involved. In the second case (notified June 1999) the service provider has yet to provide OFTEL with sufficient information for the determination of whether Special Network Access obligations apply.

Interconnection charges for calls to Vodafone and BT Cellnet are now subject to price control in accordance with the findings of the Monopolies and Mergers Commission ('the MMC') (now the Competition Commission) that the charges were excessive and not subject to sufficient competitive constraint. Similarly, the MMC considered the level of BT's retention — added to termination charges in reaching the retail price — and found it excessive in relation to cost. OFTEL has required BT to reduce the retention to cost-oriented levels (in accordance with its SMP obligation under the Voice Telephony Directive).

In general, operators consider that BT's interconnection charges comply with the cost-orientation requirement and that BT's cost-accounting system is in accordance with Community law. All of BT's interconnection charges are within best practice. Reciprocal interconnection charges apply in the UK for call termination. There is no differentiation in pricing between Internet traffic and voice traffic, either for interconnection charges or for retail tariffs. This is currently the subject of an OFTEL inquiry.

Unlike the incumbents in most other Member States (where the market shares of ISPs affiliated to incumbents give rise to concerns over the scope for abuse of dominant position), the ISPs related to BT do not appear to have a particularly strong position, with some 20% market share.

3.4 Universal service and user/consumer protection

Belgium

Legislation on cost-accounting models has been published and a decision on a methodology for calculating the net cost of the universal service to be provided by Belgacom is in preparation. The possibility of a universal service fund becoming operational from 1 January 2000 is under consideration, but a formal decision has yet to be taken. The forthcoming adoption of the Royal Decree on a cost-accounting method for calculating the cost of universal service will allow the incumbent to evaluate the cost of the universal service it is currently providing, and enable the Belgian authorities to decide whether to set up a universal service fund. So far there have been no requests from the market for compensation, with the result that it is highly unlikely that a universal service fund will be created for the year 2000. The market players report that they have received no information about any action taken by the relevant authorities.

In addition, the scope of the universal service has not yet been brought into line with the EU framework, as it includes categories not covered by Community legislation**.**

The above Royal Decree on universal service was expected to be adopted in October 1999.

Denmark

As described in the Fourth Report, Tele Danmark has been designated as a USO provider until 31 December 2007 and maximum prices for USO services are set by the NTA, in consultation with the Competition Authority, based on a "best practice" assessment.

Services covered by the universal service obligation are ordinary telephony; an ISDN network and associated services; leased lines, except for broadband lines; certain special USO services for disabled persons or special terms or prices for these groups, public radio-based maritime distress and safety services; and directory enquiry services.

No significant pressure exists within Denmark for the establishment of a scheme for the common financing of the universal service.

A low-user scheme is in operation by Tele Danmark, which could cover a maximum of 15% of the population, although the take-up of the scheme appears to be low in practice.

Regulatory changes were effected in December 1998 to tighten the requirements on providers of public telecommunications networks and services so as to provide that consumers have a written contract for all customer relations and stipulate the minimum contents of those contracts, including terms for compensation and refund arrangements in case the contracted service is not met.

Consumer complaints can be addressed to the NTA and to the Consumer Complaints Board, which has powers to investigate complaints, particularly in relation to billing matters. A Consumer Ombudsman also exists with general responsibility for consumer complaints.

Two Executive Orders were adopted on 24 June and 6 July 1999 respectively to transpose the requirements of Directive 97/66/EC concerning the processing of personal data and the

protection of privacy in the telecommunications sector, except for the requirements of Article 5 of the Directive (for which the deadline for transposition is 24 October 2000) and of Article 12, which remains to be implemented by means of an amendment to the *Markedføringslov* (Act on Marketing).

Germany

Universal Service is provided in practice by the incumbent operator as specified in the regulation on universal service. All licensed operators must ensure the measurement of quality criteria as under ETSI ETR 138. RegTP has launched a public hearing in order to establish further specifications and has communicated preliminary results. A draft has been prepared and published on the website and in the Official Journal *Mitteilung Nr*. 413/1999, *Amtsblatt* 17/99) in order to settle the final details. However, the measurement results are not expected before the end of 2000.

Consumer satisfaction as a result of liberalisation is generally reported to be high. In particular the substantial decrease in prices is appreciated. The German authorities take the view that the general service obligations together with the dynamic market competition in the German market ensures the availability of affordable basic telecommunications services in Germany.

There is currently no system for financing universal service. Accordingly, there is no market entry barrier linked to universal service.

Greece

According to its licence, the incumbent is designated as the provider of universal service in Greece. No mechanism to finance universal service has been set up so far. A study has been launched to investigate the financing of universal service.

Spain

The General Telecommunications Act designates Telefónica as the universal service provider until 2005. The NRA has to determine, on the basis of information to be provided by the incumbent, whether provision of the universal service represents a net cost and a competitive disadvantage to the incumbent operator and hence whether the other operators should contribute to the financing of this service.

Some months ago, the *Ministerio de Fomento* launched a public consultation of consumers in order to establish the characteristics of the universal service, in particular the three aspects of the service of particular importance to consumers: accessibility, affordability and quality of service.

The financing mechanisms are set out in Royal Decree No 1736/1998 on universal service.

Consumers can address complaints to the Ministry, the Consumer Council, arbitration services, the Competition Court and the ombudsman (*Defensor del Pueblo*). These options are specified in the standard contract signed by the subscribers and operators and approved by the NRA.

France

New entrants claim that a substantial market entry barrier is likely to continue due to the obligation placed on them to contribute to the financing of the universal service. France has implemented a universal service financing mechanism which involves sharing among the different players on the French market a total estimated net cost, as evaluated by the French authorities, of approximately FRF 4.8 billion for 1997 and FRF 6 billion for 1998 (i.e. 5.5% and 7.3% respectively of FT's fixed telephony turnover for 1997 and 1998). New entrants criticise certain aspects of the methodology and calculations used to determine the net cost of universal service in France, in particular the fact that the market benefits which accrue to FT as the universal service operator are not taken into account.

In November 1998, ART estimated the provisional cost of USO for 1999 at FF 4.9 bn. The USO costs for serving the whole territory have been nearly halved following a change in the method of calculation used for the non-profitable areas, from a percentage method to a method using a detailed model. In March 1999 FT increased the monthly rental subscription which residential subscribers have to pay. As a result the ART adjusted the estimated cost of the USO related to tariff imbalances to a level close to zero, which reduced the estimate of the total costs of the USO for 1999 to FF 2.86 bn. In June 1999, ART proposed to the Minister that a new system of financing the USO, based on a universal service fund only and no longer relying partly on an additional levy on interconnection charges, should enter into force from 1 January 2000. The Minister followed the ART's advice and took the corresponding decision in September 1999.

There is concern about the absence of a universal directory despite the existing legal framework which is, however, not implemented in practice. New entrants are considering whether to provide the service, which appears to be economically viable.

Ireland

Eircom was designated the universal service provider with effect from 14 May 1999 by the ODTR for a defined number of essential telecommunications services. This designation replaced the previous obligations on Telecom Eireann, introduced in 1983 and revoked under the new Regulations.

As a result, Eircom is obliged to provide the designated services, on request, to all telephone users in the country at an affordable price and irrespective of their geographical location. These services are: connection to the fixed public telecommunications network and access to telecommunications services; the provision of public payphones; and the provision of directories and directory inquiry services.

No decision on the financing of USO has been taken. Current interconnect rates do not incorporate a universal service obligation component. Eircom has already submitted an estimate of the cost to provide USO to the ODTR. The ODTR is currently examining this estimate to decide whether it represents an unfair burden.

Italy

Telecom Italia currently has a universal service obligation under Italian legislation. It has estimated the cost of providing the universal service in 1998 at LIT 1.450 bn, corresponding to about EUR 750 m.

In August 1999, following the assessment provided by an independent auditor, the NRA decided that no sharing mechanism was to be implemented for the 1998 financial year, therefore no contribution is due in 1999. Its decision was mainly based on the fact that there was no substantial competition in the fixed telephony market in 1998. Moreover, the independent auditor commissioned by the NRA to verify the amount of the net cost estimated by the incumbent has highlighted significant methodological discrepancies between the assessment provided by Telecom Italia and its own calculation. The incumbent disagrees with the NRA on the estimate of unprofitable clients in profitable areas.

The NRA decision has removed the uncertainty for market operators regarding the net cost of the universal service for 1998. The same assessment procedure will be repeated yearly, in order to determine whether, as competition increases, the provision of universal service necessitates the setting up of a mechanism for sharing the net cost. The provision of an estimate of the cost one year in advance would, as some new entrants claim, give market players an idea of the scale of the costs. The NRA is nevertheless of the opinion that it might be difficult to provide a reliable estimate and such estimate might produce undesirable effects on share values of the interested parties.

The decree on Universal Service extends the sharing mechanism linked to the fund to mobile operators.

The Italian NRA has a wide range of responsibilities with regard to consumers and users, and in settling complaints and disputes. It can also issue decisions in relation to the quality of service, with a view to requiring the adoption by market players of a quality scoreboard setting minimum standards to be met. A Consumer Council has been established at the NRA in May 1999 (*"Consiglio Nazionale degli Utenti"*). This is made up of eleven members appointed by the NRA and selected among experts in the telecommunications and audio-visual sectors on the basis of lists drawn up by consumer associations. The Italian legislation provides for special tariffs for disabled people and people with special needs, as well as users on low incomes.

Luxembourg

The incumbent operator P&T Luxembourg ensures universal service as set out under the regulation on universal service. No universal service financing scheme has been set up.

Quality of service appears to be ensured, and indeed the quality criteria laid down in Annex III to the Voice Telephony Directive, or even more stringent criteria, are compulsory for all operators in their licences.

The Netherlands

No problems with the current universal service policies, conditions and procedures in The Netherlands have been reported by market players or the authorities. A few market players are

slightly worried about the future of the universal service, especially considering the discussion in some other Member States on including access to the Internet in the universal service. In The Netherlands, the universal service functions more or less as a safety net, the primary objective being the provision of the basic means of communication. The Ministry has no plans to increase the scope of the universal service at the moment.

KPN Telecom provides universal service in The Netherlands. Provisions for a procedure determining who should supply the universal service have been laid down in the Telecommunications Act, in case the availability, accessibility or quality of the designated services are no longer guaranteed under normal market conditions. This includes the determination of who should contribute to a universal service fund, but such a fund is not expected to be necessary in the near future.

All providers of fixed and mobile public telecommunication services (including ERMES and telex services) have to register with a public disputes committee, which focuses on the contracts between natural persons and the operator or service provider. The Netherlands consumer organisation, the *Consumentenbond*, has carried out market research on telecommunications issues. They have concluded that, in general, liberalisation has not resulted in (financial) benefits for the average consumer.

As a result of the problems encountered with the implementation of number portability, OPTA is considering guidelines to encourage market players to put proper administrative complaint procedures in place.

Austria

According to the Telecommunications Act, the incumbent currently has the obligation to provide universal service. There are no plans to set up a universal service fund to involve other operators in financing this obligation at the moment, as a request to that effect has not been made by the incumbent operator.

At the end of June 1999, an Ordinance of the Federal Minister of Science and Transport on Universal Services (*Universaldienstverordnung*) was published, the aim of which is to ensure a minimum standard of quality for universal service. Consumer organisations have concerns, however, about the enforcement of the quality standards due to insufficient powers of the NRA (e.g. to take corrective measures).

Consumer organisations also complain about the lack of a common directory service, while operators are concerned that directory services offered by the incumbent at the price of a regional call would not be cost-oriented.

According to the Telecommunications Act, customers or interested parties (including consumer organisations) may refer disputes or complaints, in particular complaints about the quality of service or payment disputes, to the NRA, which must endeavour to bring about an agreement within a reasonable period. Suppliers of telecommunications services are obliged to cooperate in such a procedure and submit any information that will assist the NRA in assessing the situation. The NRA has recently published two reports concerning about 900 such complaints since late 1997.

By Ordinance of the Federal Minister of Science and Transport of May 1999 (*Entgeltverordnung*), consumers of value added services have to be informed of the costs at the beginning of a call of this type.

An amendment to the Telecommunications Act in August 1999 has prohibited unsolicited commercial electronic mail. As pointed out by the Working Party on the Protection of Individuals with Regard to the Processing of Personal Data in its Recommendation 3/99 of 7 September 1999 on the preservation of traffic data by Internet Service Providers for law enforcement purposes, the Austrian Telecommunications Act does not fix a specific period during which traffic data may be stored for billing purposes, but limits it to the period during which the bill can be challenged or payment can be claimed, thereby referring to the limitation period under general civil law. New entrants are concerned about the costs of measures for law enforcement purposes.

Portugal

Portugal Telecom is responsible for providing universal service. The Telecommunications Act provides for the possibility of participation by other telecommunications operators in the funding of universal service.

New entrants consider that there is a lack of clarity regarding calculation of the cost of universal service by Portugal Telecom and that the incumbent is using its universal service obligation to justify high leased lines and interconnection tariffs.

The system of financing universal service has not yet been defined in the Portuguese legislation, although ICP has indicated that secondary legislation supplementing the provisions of the Act in respect of universal service (including the financing mechanisms) has been adopted very recently. However, it has not yet been published.

The national legislation also provides for the function of «*proveedor*» as a body responsible for defending consumers' interests. This body also has conciliation and mediation powers.

Finland

No common funding mechanism for universal service exists in Finland and there remain no plans to introduce such a mechanism. The provision of universal service is dealt with as part of the service obligations of telecommunications operators under the general law.

In April 1999 the Act on the Protection of Privacy and Data Security in Telecommunications was adopted, and amendments made to the Telecommunications Market Act, as measures of transposition of Directive 97/66/EC concerning the processing of personal data and the protection of privacy in the telecommunications sector. These measures came into force on 1 July 1999.

The Consumer Ombudsman and the TAC deal with complaints from consumers in relation to the provision of telecommunications services, most of which relate to billing matters.

Sweden

Telia does not currently receive any contributions from other operators towards the cost of providing universal service, due to the low cost of the universal service provision. Sweden

has no plans to introduce any financing scheme in the future. There is therefore no market entry barrier linked to universal service.

The quality of service of voice telephony is generally good, with 17 days supply time for initial connection and 160 faults per 1000 access lines. 55% of the faults have to be repaired within 8 hours, and all faults have to be repaired within 2 days. Consumers also have the possibility of complaining about, for example, telephone bills to the Consumer Authority (which they however perceive as lacking sufficient knowledge about the telecommunications sector in certain cases).

United Kingdom

BT and Kingston currently have a universal service obligation under the terms of their licences. OFTEL's position is that the costs and benefits of providing universal service are closely matched and that if there is a net cost, it is too insignificant to merit a universal service funding mechanism. Operators other than BT and Kingston are under no obligation to provide universal service or to contribute to its financing. A consultation on this matter is currently under way, but no significant changes are expected in the immediate future.

The quality of service in the UK is illustrated by the following data: 97-98% (for BT) and 99% (for Kingston) of all orders are completed on or before the date confirmed, and there are around 3 faults per 100 access lines per quarter. Around 80% of all faults are cleared within 9 hours for BT, and 98-99% of all faults are cleared by the end of the next working day for Kingston. There are only around 1-2 complaints per 1000 bills for Kingston, and 2 for BT.

The Director General has a statutory duty under section 49 of the Telecommunications Act 1984 to consider all representations (including consumer complaints about bills) that do not appear to be frivolous. OFTEL's Consumer Representation Section and the Advisory Committees on Telecommunications perform this duty on the Director General's behalf. OFTEL's policy is to ensure that a consumer first goes through all the complaints-handling procedures established by an operator, after which it will investigate the complaint itself. This does not stop a consumer seeking to resolve the matter through other means such as arbitration and Citizens' Advice Bureaux.

3.5 Tariffs/accounting systems

Belgium

Problems with leased lines are not new, both in relation to tariffs and to delivery. Belgacom's discounting policy, in particular, is still considered problematic by new entrants as it lacks transparency. The incumbent operator recognises that there are problems with the delivery of leased lines, which it attributes to a lack of appropriate personnel, following the current restructuring of the company. The ombudsman is dealing with many complaints concerning the delivery of leased lines.

The dispute resolution mechanism for leased lines is not yet in place in Belgium. According to the authorities, this will be solved when the Decree on the rules and procedure before the "Interconnection Chamber", which has been signed, enters into force. In the meantime disputes have to be resolved by other means, such as the courts, the ombudsman or the competition authority.

Belgacom has indicated that it is working on a cost-accounting system for leased lines. There is a system in place at the moment according to the authorities, and the Decree on cost-accounting methodology has been published, with the result that the NRA can now start to ascertain whether the cost-orientation principle is applied.

Denmark

The current maximum prices for USO services set by the NTA require price reductions in real terms of 4% in both 2000 and 2001 for normal subscribers. Maximum prices for the years 2002 and 2003 are due to be set by the NTA in 2000, after consultation with the Competition Authority.

Although there appears to be no significant pressure for further rebalancing of Tele Denmark's voice telephony tariffs, it is not clear that the detailed economic analysis has yet been made on which to conclude that the rebalancing process is complete.

In an interesting initiative on the part of the regulator, in May 1999 the NTA issued a pamphlet, for the benefit of both corporate and residential customers, containing a comparison between the pricing schemes of each operator. This was well received by consumers, but criticised by some operators in relation to the criteria and methodology used.

New entrants have expressed concern over the lack of transparency in the tariffs offered by Tele Danmark to its large users, claiming that additional facilities are included in the prices which are not separately costed, and which therefore make cost comparison difficult.

Some new entrants have suggested that the setting of interconnection charges for service providers according to the formula of "end-user prices minus 21%" is not based on a transparent or objectively justified analysis of the incumbent's costs.

New entrants also stated that in the negotiations with Tele Danmark on access to the local loop they were forced to accept the price of 72 DKK (the price for carrier pre-selection) because the NTA indicated that it could not act to set a price if negotiations broke down, which would indicate a lack of power on the part of the NTA to regulate local access pricing effectively.

The annual price for access to the raw copper has been set at 740 DKK. This compares to an annual subscription charge for end-users of 1360 DKK.

See also section 3 above for details of the recent developments concerning interconnection prices.

As regards Tele Danmark's cost accounting systems, the accounts for 1998 have been submitted to, and are currently under consideration by, the NTA.

Charges for leased lines in Denmark are low by comparative European standards.

Germany

Voice telephony tariffs are subject to approval by the Regulatory Authority if the licensee has a dominant position. The legal framework does not provide for basing the assessment on the cost of efficient service (cost orientation), as the applicable price-cap regulation only refers to

tariffs applied in 1997 and does not require the price to be examined on the basis of cost-accounting data. New entrants have expressed concern whether the subscriber tariff and the tariff/minute charged to customers is in fact cost-oriented.

New entrants have expressed concern that DT's monthly subscriber tariff for voice telephony (DM 21.39) is below cost. Indeed, cross-subsidisation of telecommunications services is prohibited for dominant providers under the TKG. According to new entrants, this rule is not applied in practice because of the incumbent's unwillingness to provide meaningful and correct documentation.

For long-distance calls, competition has led to a 70% reduction in tariffs for voice telephony and may have contributed to establishing cost orientation. However, new entrants reported that DT has been authorised to apply long-distance tariffs that are close to or even lower than interconnection tariffs, which indicates that they may be below the actual costs.

Under the German regulatory framework, tariffs for leased lines are fixed on the basis of individual tariff authorisation, which provides for examination of cost orientation (costs of the efficient provision of service), generally on the basis of cost-accounting data. In its decision of 8 September 1999, RegTP stated that the incumbent operator had still not submitted adequate cost-accounting data and failed to implement previous decisions of RegTP, in particular concerning the interest rate for capital. RegTP then extended the validity of the tariff for leased lines on a transitional basis until no later than 31 July 2000. The tariff will be subject to a further revision on the basis of cost-accounting data provided by DT. RegTP also indicated that repayment will be ordered should the forthcoming tariff be lower than the transitional figure. The decision shows RegTP's determination to finally enforce a cost-accounting system for leased lines which would reflect costs.

With regard to cost accounting, new entrants have pointed out that the lack of transparency of SMP operators' accounting data creates a substantial barrier to market entry. Reluctance of the incumbent to provide cost-accounting data and lack of initiative by RegTP to require its submission under the tariff authorisation procedure would also have led to delays in establishing a suitable cost-accounting system.

A cost-accounting model for interconnection pricing is currently being drawn up by DT (INTRA) and RegTP and, in the long term, interconnection pricing is expected to be subject to assessment on the basis of cost-accounting data. However, RegTP has just terminated the public consultation on the cost-accounting model and that it will not be in place in time to assess DT's expected application at the end of 1999 for approval of interconnection charges to apply from 1 January 2000.

Greece

Concerns were expressed about the level of tariffs for leased lines on 2 Mbit/s circuits. However, tariffs for the provision of low capacity leased lines have subsequently been reduced during 1999. In August, the incumbent decided to reduce these rates once again. According to the incumbent, its prices are now aligned with, or even lower than, the European average. In particular, there has been a reduction of 30% in the prices of 64 Kbit/s circuits and 8% for 2 Mbit/s lines. Before this reduction, the Commission was informed of mobile operators' concerns about the level of tariffs for the provision of international connectivity in particular which were said to be on a par with retail tariffs. It was also claimed

that the delay in adopting the Leased Lines Directive (97/51/EC) had a negative effect on the leased lines market.

In September 1999, EETT informed the Commission that a cost-accounting system for leased lines has been approved for the first time. Interconnection rates have been the subject of a legal dispute between the incumbent and two mobile operators which is currently before the national courts. Meanwhile, the mobile operators have not accepted the prices offered by the incumbent in the proposed RIO which were within the best current practice. They decided instead to maintain the level of rates which followed the substantial increase levied by the incumbent. These rates provided under the licences they were granted in 1992, according to EETT, were very low and not cost-oriented. Following the filing of a request by the incumbent, the EETT has undertaken to conduct a study towards defining cost-oriented rates. According to some operators, the incumbent pays substantially lower rates to the mobile operators for the routing of calls.

The incumbent has made some efforts to rebalance its tariffs. The most dramatic reductions have been in national long distance rates, and there has been a modest increase in the cost of local calls. Internet rates have fallen by 50%. The incumbent expects that its tariff rebalancing programme will be concluded before the full liberalisation date.

Spain

The Government, via the Economic Affairs Committee, sets the incumbent operator's tariffs.

The NRA announced that it is studying the establishment of a price cap mechanism.

According to the authorities, rebalancing of the dominant operator's tariffs has already been concluded. Telefónica does not agree and has filed a complaint with the Commission.

Telefónica considers that it still has an access deficit owing to the authorities' rejection of an increase in tariffs for local calls and the monthly line rental. In its view, a price cap mechanism cannot be applied until tariff rebalancing has been carried out. The NRA, for its part, does not regard Telefónica's cost-accounting system as sufficiently transparent in a competitive market and is asking the latter to submit a new cost-accounting system adjusted to the principles established by the CMT on 14 July 1999. In particular, it does not consider that Telefónica's cost-accounting system meets the criteria of cost separation, making verification impossible.

New entrants generally consider that the leased lines tariffs are too high. The NRA for its part has indicated that they will be reduced in the coming months.

France

FT raised the subscriber's monthly subscription from 1 March 1999. FT is of the view that the current subscription fee is still not high enough to cover costs. According to the French authorities, however, the Minister has formally confirmed, by means of a Decree ("*arrêté*") on 29 September 1999, that financing of unbalanced tariff structures is no longer necessary as tariff rebalancing has now been achieved.

Major concerns have been expressed by new entrants regarding the incumbent's tariff control procedures, which they feel does not safeguard their rights with regard to their competitive situation on the market. They regret that the intervention of the Competition Council is not sufficient as a means of ensuring fair competition for new entrants, as a final decision cannot be taken in time in all cases, particularly where the Competition Council has rejected a request for interim measures. In particular, the promotional long-distance tariff *Primaliste* has been applied since 15 January 1999 and will end in the autumn. ART adopted an opinion on the anti-competitive effects of the *Primaliste* offer, but the Competition Council did not consider the effect sufficiently substantial to order conservatory measures, and FT has put the tariffs on the market. New entrants also claim that ART does not sufficiently protect their rights in relation to legitimate business secrets in the course of the dispute settlement procedures.

They claim that the incumbent's tariffs are not transparent, and in particular end-user tariffs, as they are not published by FT and are only accessible in FT's sales points. Furthermore, new entrants argue that, with the exception of end-user tariffs which are covered by universal service, the scope of tariff authorisation is not clear as the tariffs which are subject to approval are for services in markets in which the Minister has decided that there is no competition. New entrants maintain that as a result of the lack of clarity on the scope of tariff control, certain new services have been marketed without tariff authorisation, and they regret that they are not consulted on whether the incumbent's tariffs should be subject to approval.

New entrants question whether tariffs for leased lines are cost-oriented, as tariffs have been approved by the Ministry despite ART's opinion that no evidence based on cost-accounting data had been produced to demonstrate that the tariff requested by FT was cost-oriented.

With regard to accounting systems/separation of accounts, new entrants criticise the lack of a transparent cost-accounting system and the failure to publicise the results of the cost-accounting model implemented by FT. According to new entrants, due to a lack of transparency of accounting information necessary to verify cost-orientation and accounting separation in FT, ART often uses the tariff charged to end-customers as a reference and only examines whether a price-squeeze would arise from the tariff subject to authorisation. New entrants also consider that the obligations placed on FT with regard to separate accounting are not sufficiently strict. According to FT the cost-accounting system is published and appropriate accounting information is communicated to competitors. However, the data relative to cost accounting are not published as they are considered to be business secrets, in compliance with the EU regulatory framework. France Telecom's costs for 1994, 1996 and 1997/98 have been audited, in accordance with the specifications imposed by the ART, whose annual report includes a statement of compliance of FT's cost-accounting system with the methodology and specifications for cost-accounting established by ART.

Ireland

A number of services are still subject to price regulation, although according to the Department of Public Enterprise, it is used only where there is no competition in the relevant market or the operator holds a dominant position in a certain market. ODTR considers that tariff rebalancing has not yet been completed. It is being accomplished through the application of price cap mechanisms. The existing price cap mechanism is provided for by the Telecommunications Tariff Regulation Order 1996 for the period from 1 January 1997. It applies to a basket of 10 services provided by Eircom. Following a review of the price cap on

Eircom, the ODTR is considering exercising such control on at least four of the retail services provided by Eircom for a period of three years, commencing on 1 January 2000. These services are the least open to competition and include the connection and provision of exchange lines, local calls and payphone services. ODTR's plan is to set the price cap control initially for three years. Its further extension to other services is also under consideration. ODTR attempts through price regulation to safeguard vulnerable users and promote competition.

In the years 1997-1998, Eircom reduced prices for the price cap basket of telecommunications services by CPI minus 18% and did not increase rental charges. It plans to continue to rebalance its tariffs through a combination of tariff changes within the price cap constraints and cost reductions. Eircom does not seem to favour the application of price caps and would prefer having more flexibility in setting rates. According to Eircom, ODTR favours price caps because it considers that the residential users' market is not competitive enough. However, Eircom is of the opinion that price caps discourage rate rebalancing.

Although Eircom has increased its line rental by 2% earlier this year, some operators believe that rebalancing of its rates for these services could have been more efficient. Rebalancing of rates is also significant for the provision of unbundled local loop. Some operators believe that the tariff rebalancing issue will be completely clarified as soon as the universal service obligation issue is resolved.

Market participants consider that the ODTR is addressing cost-accounting issues effectively. With regard to accounting separation, there is a provision in Irish law to protect certain information which, according to the Commission's information, is often being used by Eircom to consolidate its financial information. Telecom operators other than the incumbent consider that accounting separation is a major source of concern in Ireland. They have already tried to make the ODTR aware of its importance in securing transparency. They were also concerned about cross-subsidisation between Eircom and Eircell. To this end, the ODTR has developed new accounting procedures to prevent discriminatory charging and promote effective competition in the marketplace. With effect from 30 September 1999, Eircom, which is designated as having significant market power, would be obliged to disclose the accounting information of their main business areas and subsidiaries separately. Once this information has been disclosed, the ODTR will review the situation and might initiate a consultation procedure in this connection. This will help to ensure transparency of internal cost transfers and to discourage cross-subsidisation between activities. Eircom is currently completing the implementation of a cost-accounting system. It is expected that the audited accounts of September will be based on this. The cost-accounting system currently used by Eircom has not been approved by the ODTR.

Italy

After a long delay, the NRA has taken two decisions to allow tariff rebalancing (December 1998 and June 1999) and a further determination of 28 July 1999 introduced a price-cap system. Overall, the tariff rebalancing decisions included a significant decrease in international and long-distance tariffs. It also involved a modest increase in the line rental for residential users and, to a lesser extent, for business users, while local tariffs have remained unchanged. The price-cap mechanism (including caps for voice telephony, residential services, line rental and local telephony) covers the period from 1 August 1999 until 31 December 2002 and, for voice telephony services in general, is set at the inflation rate

minus 4.5 %. Other measures have also been designed to bring the incumbent's voice telephony tariffs into line with costs, the most significant of which are: the introduction of the 'proximity tariff' for intra-district calls, which will lead to a significant reduction in consumer tariffs for this kind of call; a new tariff system based on units per second of conversation ("Tariffa A Tempo"), both of them taking effect on 1 November 1999; and the introduction of carrier selection for local calls. The audit carried out by the independent auditor on behalf of the NRA confirmed the persistence of an access deficit of about EUR 2 bn. Market operators argue that the rebalancing process is not yet complete, and there is uncertainty as to the measures which Telecom Italia will be allowed to take to phase out this access deficit. In addition, market players complain about the lack of information concerning the discounts applied by Telecom Italia to large users and public bodies.

In August 1998 the NRA commissioned an external auditor to carry out a thorough analysis of the accounting data of Telecom Italia. The results of this analysis were made available to the NRA in May 1999, and have supported the regulator's decisions on tariff rebalancing and the introduction of the price cap. At present the incumbent is moving towards the adoption of a current cost model, while a long-run incremental cost model could be adopted in the future, for those areas where it is appropriate. A further investigation of TI's costs on the interconnection and leased lines market is under way. This will be based on data and separate accounts for local network, long-distance, international and interconnection services for the financial year 1998 and should be completed by 31 December 1999.

From the legal point of view, Italian law requires operators to keep separate accounts for their operations and to apply a structural separation model in the event that they have exclusive rights in a sector other than telecommunications.

Leased line tariffs continue to be high in Italy. With regard to 2 Mbit/s national circuits, figures show that in 1998 and 1999 the prices of a 50 km and 200 km circuit in Italy were still higher than the EU average, although decreasing significantly, especially for city-to-city circuits. Conversely, the connection charge for national 2 Mbit/s circuits is among the cheapest in the EU. In 1999 the figures for a 2 Mbit/s international half-circuit, although showing a decrease between 1998 and 1999 of between 10% and 12 % depending on destination, are the highest in Europe: the monthly rental charges for an international 2 Mbit/s half-circuit are double the EU average for near-EU lines, over 30 % above the EU average for lines to the USA and around 30 % above for far-EU lines. New entrants have complained about prices for short-distance leased lines, affecting large users such as Internet Service Providers. Figures confirm the high level of tariffs for circuits of less than 5 km length. Telecom Italia's retail prices are the highest in the EU for 64 Kbit/s for 2 km circuits, and significantly above the EU average for 2 Mbit/s circuits for the 2 km local end.

The NRA has launched an investigation in relation to leased lines costs, with a view to verifying the underlying costs. New entrants also stated that access to landing points is subject to unclear economic conditions, while quality and supply conditions are not defined in a service agreement.

Luxembourg

New entrants and the incumbent consider that the monthly subscription fee3 is obviously below costs. The subscriber tariff of LUF 480/month and retail domestic tariffs have not been assessed to ascertain whether they are rebalanced and cost-oriented. No timetable for completion of tariff rebalancing has been communicated to the Commission so far. The authorities have indicated informally that they consider rebalancing to be achieved, as any increase in the monthly subscription fee would encounter political problems.

New entrants are concerned that the incumbent's retail voice telephony tariffs are not subject to control by ILT. They also complain that there is insufficient control of P&T Luxembourg's tariff policy as regards misleading publication of voice telephony tariffs, concealing the real cost of communications. New entrants also claim that the incumbent's tariffs are non-transparent, because P&T Luxembourg grants special discounts to certain business customers which are not published and not monitored by the regulator.

New entrants are concerned about discounts for leased lines granted to certain big users, some of which result, in their view, in tariffs three times lower than the published standard tariffs for leased lines.

P&T Luxembourg has not yet established a cost-accounting method but the incumbent has begun work on establishing a cost-accounting system per service. The forthcoming interconnection tariffs in particular will be based on the cost-accounting method currently being elaborated. ILT is also currently working on the accounting methodology, but no details have been published yet. As the necessary regulatory framework is lacking, new entrants feel that the cost orientation of voice telephony and leased lines tariffs is not being adequately addressed. They are also concerned, as mentioned in the Fourth Implementation Report, that P&T Luxembourg's obligation to keep separate accounts is not being properly monitored by ILT.

Operators are concerned about the excessive extension to all players of the obligation to establish separate cost-accounting systems, including operators subject to the declaration procedure, as they consider this to be an example of over-regulation. The recently adopted amendment to the Telecommunications Act has given ILT the power to impose this obligation to keep separate accounts on operators subject to the declaration procedure. ILT has not yet used this power.

The Netherlands

On 23 November 1998, OPTA decided on the cost orientation of retail tariffs for voice telephony. The tariffs (based on a reasonable rate of return) entered into force on 1 January 1999 and were valid for the first six months of 1999. On the basis of the final and verified data for 1998, OPTA, by decision of 27 September 1999, introduced a price cap system. There will be a fixed annual decrease of the tariffs of 5.3% per year over the next three years, starting on 1 July 1999. The basket of tariffs consists of local calls, subscription fees, national calls and the fixed-to-mobile retention rate.

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3 LUF 480/month = EUR 11.89886.

With regard to local voice telephony tariffs, a study initiated by the NRA (also including voice over IP networks, VoIP) concluded that there is a clear lack of competition in this area, with only 25% of consumers having a choice as far as local telephony is concerned, a situation unlikely to change in the next few years. It was also considered that the lowering of local tariffs might have an adverse effect on investments in alternative infrastructure. OPTA has, however, concluded that this does not seem to be the case and that a majority of end-users are still confronted with lack of choice. For that reason, OPTA has decided that regulation of the local tariffs is still needed. Some market players feel that regulatory supervision is not necessary and new entrants in particular consider that the effect of a continuation of regulation on the introduction of converging (new) services is unclear. Local tariffs will be included in the price cap basket, although OPTA has decided not to introduce an additional one-off reduction in these local tariffs.

Market players have not reported any problems in relation to leased lines tariffs. There are however some scarcity problems (transmission capacity) and problems in obtaining leased lines, which could lead to delays. This is being monitored by the NRA.

Austria

Since the last report, the NRA has approved the incumbent's new general terms and conditions for leased lines, ISDN and voice telephony. The incumbent (*Telekom Austria*) has introduced a completely new and less complex tariff scheme with effect from 1 September 1999. Thus greater tariff transparency has been achieved.

Concerns have been expressed by the new entrants that the incumbent’s tariff and discount schemes would not be cost-oriented and would allow cross-subsidies. Doubts with regard to cost orientation in particular were related to the new business tariff 3 and the on-line tariff offered by the incumbent. After careful examination, the NRA has confirmed cost orientation and given its approval to the new tariffs.

Competition has led to a substantial decrease in all kinds of tariffs, with the exception of the incumbent's monthly basic rate. Comparative information on all operators' tariff schemes is offered on the NRA's internet site.

Current retail prices for several categories of leased lines in Austria are the third lowest in the European Union. New entrants complain, however, that *Datakom*, although 100% owned by the incumbent and virtually having SMP in the leased lines market, is not covered by the principle of cost orientation inasmuch as it is regarded as a re-seller only.

The NRA has so far failed to confirm that the incumbent's cost-accounting system complies with the ONP framework. A new cost-accounting system has still to be established by the incumbent and approval by the NRA is not expected before 2000.

Telekom Austria is currently compensated by the State for special exemptions from the monthly basic rate and for an hour of local calls for people on low incomes. Currently only *Telekom Austria* subscribers can benefit from such an exemption. A new system is under discussion in order to preclude discrimination against new operators.

Portugal

The tariffs for the monopoly services still provided by Portugal Telecom are established by agreement between the Directorate-General for Commerce and Competition, (DGCC), ICP and PT. The most recent price agreement was signed in September 1997 and is valid until 31 December 2000. This agreement includes a price-cap mechanism in order to guarantee affordable prices. Furthermore, the agreement stipulates that PT must rebalance its fixed telephony tariffs on the basis of the cost-orientation principle. It does not, however, stipulate a precise timetable for rebalancing although, according to the authorities, rebalancing will be completed during 2000 in any event and PT's cost-accounting data have already been published.

According to the authorities, the Regulation on the operation of public telecommunications networks recently notified (June 1999) fully transposes Directives 92/44/EEC and 97/51/EC with regard to leased lines. With regard to voice telephony, Decree No 240/97 and the *Aviso no Diario da Republica no. 278/98, III Serie* have been notified as national measures implementing Directive 98/10/EC. The Portuguese authorities recently announced the adoption of two decrees on universal service and voice telephony respectively, which in their view transpose Directive 98/10/EC in full.

The increase in voice telephony tariffs carried out, according to the authorities, in the framework of tariff rebalancing, has resulted in the filing of a complaint to the European Parliament by a Portuguese consumer association (DECO) at the end of 1998. The complaint was based on the increase by Portugal Telecom in the cost of the call set-up charge as part of its tariffs for all national calls.

Finland

A Ministry of Transport and Communications decision in December 1998 introduced the right for service providers to purchase invoice services or the necessary information for invoicing from the operator holding the end-user subscription.

Some new entrants have argued that there is insufficiently close scrutiny of the cost accounting and accounting separation practices of operators with significant market power, and that a lack of transparency remains as regards the extent to which the cost orientation principle is applied. However, the Finnish authorities point out that the Commission's recommendation of 8 April 1998 on accounting separation and cost accounting for interconnection in a liberalised telecommunications market is being followed in Finland, that 1998 was the first year in which accounting separation was applied and that the experience gained will be taken into account when reassessing the relevant national regulations.

National leased line tariffs in Finland are generally low by comparative European standards, and therefore represent less of an issue than interconnection prices. However, an investigation is currently under way within the TAC and the OFC on the pricing methodology for leased lines, following a complaint.

Sweden

Tariff rebalancing appears to have been concluded, although Telia is prevented (by the price cap regime) from raising fixed fees such as installation and line rental charges.

Some new entrants are still concerned about the lack of transparency for accounting information (required for verifying accounting separation, cost orientation of end-user tariffs and non-discriminatory pricing), which they consider makes it difficult to assess the cost structure and the degree to which end-user tariffs are rebalanced.

In relation to non-discriminatory pricing, many operators are still calling for Telia to be required to provide and publish relevant accounting information using incremental costing, in order to demonstrate that its retail operations pay the same price for the use of the network as do its competitors. Some operators have also insisted that Telia should publicise its cost allocation to show that cross-subsidisation does not occur. Once a year, PTS asks Telia to provide relevant economic information for this purpose, which it then uses for its own ongoing surveillance duties. PTS is satisfied on the basis of the figures available to it that there is no cross-subsidisation. Some new entrants are concerned at PTS' decision not to issue secondary legislation on accounting separation (on the basis that it would be disproportionate to the benefits likely to be achieved).

Leased lines tariffs are generally low compared to other EU countries, both for national analogue and digital leased lines, and for international leased lines (half-circuits). Delivery time for national leased lines is also relatively short. However, there is a slight concern among some new entrants about the high price of 'Digital X-line' (a high-capacity end line out to the customers) which is leased out by Telia. Some new entrants also claim that different prices for the X-line are offered to different operators, despite the service being identical. Telia's position is that the Digital X-Line is an end-user product, which therefore has an end-user price. PTS is looking into the issue, although no formal complaints have been lodged in this context.

United Kingdom

OFTEL considers that tariff rebalancing has been concluded in the UK. In accordance with the obligation under EC law not to promote or impose terms or agreements that infringe EC competition rules, OFTEL reviews interconnection charges and end-user tariffs.

BT's cost-accounting system is generally seen as complying with Community law, and no major concerns have been reported. BT has implemented accounting separation (between interconnection and other activities) as required in the Interconnection Directive. Those accounts are subject to an independent auditor's opinion and are published in accordance with accounting policies and procedures agreed with OFTEL.

However, some operators consider that current cost-accounting systems are no longer adequate in new service areas, especially data and Internet interconnect - although no formal complaints have been made about this. OFTEL has explained that BT's regulatory accounts are based on past data and may not include relevant cost data for new services. If it is necessary to examine the costs of a new service, OFTEL would typically require a business plan and cash-flow forecast to assess for anti-competitive behaviour. New network services are deemed competitive in principle (and therefore not requiring regulatory intervention) unless they are governed by the general provisions on interoperability. However, other operators can appeal against this classification if they can make a case to OFTEL that the services are not, in fact, competitive.

Some mobile service providers feel that there are cross-subsidies between network-owned service providers and the parent mobile company which are, inter alia, used to finance substantial handset subsidies for customers newly joining the network. Corresponding complaints were made to OFTEL in 1992. They were upheld by OFTEL in 1994, following which it introduced a formula to measure cross-subsidies. However, operators complained that cross-subsidies reappeared in 1995. This was denied by OFTEL, although it subsequently published a consultation document in 1997 which some new entrants consider to confirm the existence of cross-subsidies. OFTEL currently has a major investigation looking at these issues.

According to some new operators there is a clear need and demand for short-distance leased lines to be provided at cost-oriented prices equivalent to those paid internally by the incumbent. Some new entrants claim that BT currently has access to lower prices than those provided to other licensed operators for short-distance leased lines (defined as up to 50 km). OFTEL is concerned that the pricing of these "last-mile circuits" may hinder the development of effective competition in the provision of leased-line services - it is currently reviewing its existing policy in its Price Control Review.

3.6 Numbering

Belgium

Number portability is considered to be a very important element of the liberalisation package by new entrants in particular, and they expect it to result in a substantial increase in the number of customers. A significant amount of preparatory work on implementation has been done in the Number Portability Task Force (NPTF, created and chaired by the IBPT/BIPT). Belgium had requested the Commission to agree a four-month deferment from the obligation to implement number portability by 1 January 2000, but on 17 September 1999 a Decree was approved by the Council of Ministers incorporating the deadline of 1 January 2000. According to new entrants, testing of carrier pre-selection (CPS) has not yet been carried out and they are worried about its timely implementation for 1 January 2000. IBPT/BIPT has given no indication so far about possible regulations regarding CPS. The market has not yet been consulted, even though Belgacom has started discussions on CPS within the context of the BRIO. According to the NRA, CPS will be incorporated in the BRIO 2000. The obligation to implement CPS concerns only Belgacom, but there are other operators on the market wishing to offer this service who have indicated that they lack the necessary information to plan their operations.

New entrants regret that carrier selection is only available for long-distance and international calls and that it is not yet possible for carrier selection codes to terminate intra-zonal traffic or on mobile phones.

The BIPT has held consultations during 1999 on the implementation of a new numbering plan as of 1 January 2000.

Denmark

Call-by-call carrier selection has been available in Denmark since 1996, while the obligation to offer carrier pre-selection came into effect on 1 January 1999, subject to the possibility of

extension in cases where it was not possible to meet this deadline for technical reasons. Carrier pre-selection is available for international calls, national calls and local calls.

Concerns have been expressed by some new entrants over the number of applications for carrier pre-selection which are rejected by Tele Danmark on technical grounds related to the type of subscription in place with the end-user concerned. For example carrier pre-selection is not available for customers who are members of the low-user scheme operated by Tele Danmark. This could constitute a barrier to competition if user levels were significant.

Number portability between fixed networks (including ISDN) within the same geographical area was originally due to be introduced from 1 July 1999, but this has been postponed to 15 October 1999 for technical reasons. Full portability (including portability between fixed and mobile) is due to be introduced from 1 January 2001.

The four biggest operators in the Danish market agreed to set up a "clearing house" for number portability, but the technical specifications of the system were agreed before issues of pricing. This has led to complaints from new entrants that the price is excessive and that the incumbent has no incentive to find the most cost-effective method of achieving it. New entrants argue that this puts in doubt the economic case for number portability and local loop unbundling.

Some complaints have been made by new entrants over the high price charged by Tele Danmark for connection to its "112" emergency number system.

Germany

Sufficient numbers are available and allocation is non-discriminatory. A regulation on fees for the allocation of numbers was adopted in August 1999, which should remove new entrants' uncertainty about their possible burden. It has not yet been possible to carry out an assessment of the level of fees.

Geographic and non-geographic number portability for all geographic numbers within the same area of a trunk code and non-geographic number portability for non-geographic numbers must be provided by all carriers. Currently no fee can be charged to the user or to the new carrier. However, new entrants reported that they have no basis on which to proceed in the event of technical problems, as the interconnection contract does not include provisions on portability.

Under the legal framework, all network providers must ensure call-by-call carrier selection and carrier pre-selection. This obligation goes beyond the EU regulatory framework in the case of operators without significant market power. Carrier selection is ensured in the case of fixed networks and the NRA has set the amount which the incumbent may charge the new carrier for the technical modifications to be made at cost-oriented level (DM 10/client from 1 January 2000). Although mobile operators are subject to this obligation under the German legislation, it has been temporarily suspended by RegTP.

Greece

There is no National Numbering Plan. The Framework Law provides for EETT to assign numbers. However, according to some operators the existing numbering plan is managed by

the incumbent - in other words, other licensed operators have to ask the incumbent for the numbers necessary to provide their services. These operators claim that the incumbent, rather than the regulator, is implementing numbering policy. They have also maintained that this policy does not always promote competition. However, the Ministry and EETT take a radically different view - they refute the allegation that the incumbent manages the numbers, insisting that responsibility continues to lie with EETT. In EETT's opinion, each mobile operator has been assigned sufficient numbers to meet the needs of new entrants. The Ministry is carrying out a study on the establishment of a numbering plan.

The incumbent is the sole provider of non-geographic numbers (such as "800").

Spain

The principles of carrier pre selection and number portability are laid down in Royal Decree No 1651/1998 on interconnection and numbering. Pursuant to this Directive and the Commission Decision granting Spain an additional period for the implementation of Directive 96/19/EC on full competition in the telecommunications markets, Spain has until 1 December 2000 to implement pre-selection and number portability.

The above Royal Decree and a Decree of 18 July 1997 provide for carrier pre-selection to be operational by 30 November 1998 for subscribers connected to digital telephone exchanges. Royal Decree No 1651/1998 requires the dominant operator to implement CPS for long-distance calls and mobile communications, but the latter has indicated that it will not be able to comply with this obligation until November 1999 owing to delays on the part of the authorities in adopting the necessary technical specifications. The authorities, for their part, attribute the delay to the lack of an appropriate response from the industry, pointing out that the technical specification for pre-selection was adopted by a decision of the Secretariat General for Communications on 18 June 1998.

Call-by-call selection is available in Spain for national, international and regional calls, including mobile.

New entrants point out that, even if pre-selection were implemented within the time limit set by the Community legislation, there is a residual uncertainty since an actual date for its introduction has not been fixed. Moreover, in their view, the fact that the economic aspects of CPS have not been regulated is no less a problem. These issues, according to the authorities, will be regulated in a forthcoming CMT communication. The distinction between A and B operators with regard to pre-selection will be maintained only until 1 December 2000 (mandatory implementation date for pre-selection in Spain).

Spanish legislation provides for number portability to be in place by 1 January 2000 for the fixed service. The CMT has promoted a portability forum for operators and manufacturers, which was created in November 1998.

France

No major problems are reported regarding numbering in France as all operators are granted number capacity on equal terms and conditions by the ART, and as the National Numbering Plan is published.

Geographic number portability is part of the current RIO, and number portability for non-geographic numbers will be offered in the RIO 2000. As regards geographic number portability, some new entrants regret the technical solution currently implemented until end of 2000 (forward routing). In particular, they state that this solution is very costly and therefore not used by new entrants in practice. French Law provides for full number portability (carriers and geographic portability) as of 2001, one year later than required by the EU framework.

Call-by-call selection was introduced in January 1998. Call-by-call selection is not available to those customers who have subscribed to the low users scheme or to the social tariff proposed by FT. Local calls (within the same *département*) are still excluded from the scope of carrier selection, as a result of a decision taken by the ART.

Carrier pre-selection should be implemented by operators with significant market power from 15 January 2000 on the basis of a decree which is due to be adopted before the end of the year; however, new entrants are critical that the late adoption of the decree will impede introduction of pre-selection in the market, as new entrants cannot start marketing campaigns owing to uncertainty about the date on which the decree will come into effect. Guidelines on the implementation of pre-selection were published by the ART on 9 June 1999, following a broad consultation of the sector.

FT is committed to implement carrier pre-selection as of 15 January 2000 and to ensure that the necessary upgrade of the network is in place by the end of October 1999.

Ireland

According to the new law transposing the Numbering Directive (98/61/EC), number portability can be introduced in the fixed public telephone network and the Integrated Services Digital Network for geographic numbers at a specific location by 31 December 2000 at the latest and for non-geographic numbers at any location by 1 January 2000, i.e. within the deadline set by the EU framework. Operators with significant market power are required to make available to their subscribers carrier pre-selection services before 1 January 2000.

ODTR has had control of the National Numbering Plan since 1997. The legal basis for such control is provided by the regulations implementing the Voice Telephony and Interconnection Directives. Operators do not seem to be concerned about the availability of numbers. ODTR has put procedures in place for the allocation of geographic and non-geographic numbers. ODTR has set up two working groups to deal with issues concerning the introduction of number portability and carrier pre-selection.

Although Eircom conducted an advertising campaign to inform the public of the availability of the single European Emergency Number (“112”), the public does not appear to be well informed about it according to operators. There is a relevant provision in the licences granted to reserve and use this number for emergency services. Eircom advertises the number in its phone book and public payphones.

Italy

On 29 July 1999, the NRA issued a new numbering plan and the corresponding technical regulation, updating and modifying the Decree of February 1998. This decision, carried out with the support of the Numbering Technical Committee of the Ministry, includes procedures

for allocating numbers, conditions for the use of specific codes, emergency numbers and numbers for services of public interest. Overall, the Plan is to be reviewed regularly, in order to take account of the introduction of new services. Although the numbers are allocated by the NRA, new entrants claim that in practice the numbering database is still managed by the incumbent, which might lead to possible discrimination. Some new entrants have also expressed concerns over procedures and timing for number allocation, which appear unclear. The next revision of the plan, which is scheduled to take place by 31 January 2000, should set key principles in the field of numbering, including economic conditions and procedures between customers and operators.

Call-by-call selection is available for long-distance, international and mobile calls. The NRA has recently extended this facility to local calls with effect from 1 January 2000. With regard to carrier pre-selection with call-by-call override, market players have argued that the economic conditions and procedures regulating the issue for both customers and operators are still lacking. Although technical conditions have been defined by the NRA after a hearing with interested parties, the incumbent stated that there could be some delays. The scope of this facility, as defined by the July decision on numbering, should include national and international calls, although there is uncertainty about the introduction of this facility for local and mobile calls as provided for by Community legislation. With regard to number portability, pricing conditions have yet to be determined while the NRA is carrying out work to define the technical elements. Telecom Italia expects to be ready by June 2000.

Number portability for mobile should have been in place by July 1999, as provided for by Italian legislation, as a measure to foster subscriptions with new entrants. The effective application of this provision, which is not required by the EU regulatory framework, has been postponed to the year 2000 and may possibly be introduced at the same time as number portability on the fixed network. However, as a transitional measure until number portability for mobile is in place, the NRA has introduced the obligation for mobile operators to provide an automatic message indicating the new number of the subscriber. Such a facility is provided free to customers for at least 60 days.

Luxembourg

Action by ILT has led to progress on several numbering issues. There are now sufficient numbers available for new entrants and ILT ensures, on request, timely allocation of numbers.

Rules concerning the management of the numbering plan were adopted on 25 June 1998. Such rules were made publicly available in August on ILT's website. ILT adopted the national numbering plan by Decision 99/18 of 19 April 1999.

The numbering plan provides for a transition from 1 May 1999 from a 6-digit to an 8-digit numbering plan, while the shorter 6-digit numbers currently used have not been changed to the new format. New entrants claim that the effect of this reorganisation of the numbering plan is to discriminate against new entrants, as clients changing operator have to move to the longer digit numbers, while current clients of P&T Luxembourg can continue to use their shorter 6-digit numbers. New entrants criticise that the discrimination as to the length of the numbers will not be removed when pre-selection enters into force on 1 July 2000. They are also unhappy that pre-selection and introduction of 8 digits for all numbers will not be introduced simultaneously.

However, under the new scheme, the move to numbers with 8 digits applies both to new entrants and to the incumbent. All numbers, old and new, must be portable from 1 July 2000. If subscribers with a 6-digit number move outside their switching zone or ask for additional numbers, they will be attributed an 8-digit number. However, 6-digit numbers can still be allocated if they fall within a numbering block already in service. The new system is therefore formally non-discriminatory, but further examination as to its discriminatory effects is necessary.

Operator number portability is not currently granted. Following ILT's Decision 99/17/ILT of 19 April 1999, number portability must be granted from 1 July 2000 by all operators, in accordance with the EU framework. New entrants expressed uncertainty that this facility would be granted on time. However, the authorities and the incumbent operator are committed to meet this deadline and various technical solutions proposed by ITL are currently being discussed.

According to Decision 99/16/ILT of 31 March 1999, the incumbent operator must currently ensure a system for call-by-call carrier selection**.** Tests appear to show that this facility is operational in practice and new entrants are expected to launch their services soon, in particular for international calls.

Carrier pre-selection must be ensured from 1 July 2000 in accordance with the EU framework. New entrants have not been informed by P&T Luxembourg and ILT as to how this facility will be implemented technically and therefore are not sufficiently certain that the deadline will be met. However, the incumbent operator says it is committed to meet the deadline. Discussions between ILT and operators are in progress and the incumbent operator is preparing to conduct tests and take the necessary logistic measures.

The Netherlands

In The Netherlands number portability was introduced on 1 April 1999, several months ahead of the European deadline of 1 January 2000, after a national deferment was granted by OPTA from 1 January 1999 (the national implementation date) owing to technical problems with practical implementation. OPTA indicated that it has taken a pragmatic approach and only intervened in the last few months leading up to the April deadline and in the subsequent monitoring phase, but that it has not participated actively in solving problems and in stimulating market players. OPTA merely set the date and the end tariffs, leaving the rest to the market, to the regret of the market players concerned who had hoped that the NRA would play a more active role.

Not all technical problems had been solved by the end of September 1999. The majority concern portability of mobile numbers, which is also mandatory in The Netherlands, not only for network operators but also for service providers. OPTA received a large number of customer complaints in the first few months after 1 April. It is not always clear to the customer that to retain a number, they themselves have to end the contract with the current operator (before a number can be ported) and at the same time they have to sign a contract with the new operator. A few companies were threatened with fines by OPTA for failing to inform their customers properly by 1 April 1999. In response to these problems, OPTA is preparing guidelines on quality levels and the establishment of proper complaint procedures, which will be published in the autumn of 1999. The NRA expects that by October/November 1999, number portability will operate without significant problems. There have been more

requests for the transfer of mobile numbers than of fixed numbers in the first months after implementation.

In the case of carrier pre-selection (CPS), which is to be introduced by 1 January 2000 in conformity with the European deadline, OPTA has been more actively participating in the technical preparations for implementation. It has turned down a request by the incumbent operator for a 3-month deferment for the implementation of carrier pre-selection, but is currently considering an appeal by the incumbent. Some of the new entrants have indicated that it would not be a problem if CPS were to be introduced later, for reasons relating to the Y2K problem. At the moment, the NRA does not expect other companies to offer CPS, apart from the incumbent on whom the legal obligation rests.

The Ministry is in charge of the numbering plan and has started a consultation on a new numbering scheme for Internet traffic.

Austria

The numbering plan of December 1997 has still not been implemented. Further modifications are expected by the end of this year.

Concerns have been raised, both by new entrants and consumer organisations, that the availability of full number portability and carrier pre-selection by 1 January 2000 might be delayed as a result, although carrier pre-selection already seems to be technically feasible. The Austrian authorities, however, asserted that number portability and carrier pre-selection will be implemented on time.

A working platform "Technical Co-ordination", originally established by the NRA, aims to ensure the implementation of number portability and carrier pre-selection. It is expected to complete its preparation work by the end of this year.

Portugal

ICP has established the main elements of the new National Numbering Plan which will apply with effect from 31 October 1999. The national regulations implementing Directive 98/61/EC lay down, in accordance with the EU framework, 1 January 2002 as the date by which Portugal must apply number portability and carrier pre-selection. The Commission has no information as to whether practical measures have been put in place to give effect to this requirement by the target date.

ICP also notified 1 January 2000 as the date by which fixed telephony and network operators had to guarantee access on a call-by-call basis to switched interurban and international services of interconnected operators. It is also requiring mobile operators to offer call-by-call selection for international calls by 31 March 2000 at the latest and 30 June 2000 as the latest date by which fixed telephony and fixed network operators must offer pre-selection with selective call barring.

New entrants consider that the details for carrier pre selection have still to be defined. However, in its provisions on the essential elements of the RIO, the ICP has also laid down certain conditions for carrier selection and pre-selection. The first call-by-call selection codes

have already been assigned, together with the first series of numbers for the new voice telephony licences.

According to Portugal Telecom, the NRA has still to decide certain technical aspects of number portability. The incumbent considers that the large number of prefixes and access codes for the various services generally gives rise to confusion among users.

Finland

Call-by-call carrier selection has been available for international and long distance calls since 1994 and is working effectively in practice.

Carrier pre-selection for national long distance calls was introduced on 1 January 1994. Carrier pre-selection for international calls from fixed telephone networks was introduced on 30 September 1998 and from mobile networks on 1 January 1999. Carrier pre-selection is not available for local calls. Calls made without a pre-selection agreement and without using call-by-call carrier selection are routed to one of the long distance or international operators that have opened the relevant services to the public without a special prior agreement. Such calls are allocated to those operators on the basis of their market shares. All operators with significant market power are obliged to offer carrier pre-selection.

It has however been argued by new entrants that the current level of prices charged for effecting carrier pre-selection for international calls is limiting the uptake of this facility.

Use of the "00" international code is required to exercise carrier pre-selection from a mobile telephone, while use of the "+" prefix will direct the call through the network operator. The Finnish authorities have decided to leave the "+" code outside the scope of pre-selection for the time being, for technical reasons.

It is also argued that the fact that the Finnish regulations do not provide for carrier pre-selection for calls from fixed to mobile, from mobile to fixed or for local calls is limiting competition, particularly in view of the fact that the mobile penetration rate has overtaken that for fixed lines in Finland. The Finnish authorities have stated that they are studying the benefits of these types of pre-selection and are ready to implement them as and when necessary.

Number portability within a numbering area and nation-wide portable numbers have been available in Finland since 1 October 1998. Portability of non-geographic numbers (freephone and premium rate numbers) is intended to be implemented by 1 January 2000. No decision has yet been made about mobile number portability. The TAC issued a new regulation on number portability in February 1999. The technical solution adopted for number portability is a combination of advanced call forwarding and intelligent network (IN) database query.

However, very few numbers have been ported up to now, owing to the high charges involved in effecting the transaction. Pricing issues were largely left to negotiation between operators (subject to the general requirements that they be public, non-discriminatory and cost-oriented) and were only addressed after the technical solution had been decided. New entrants argue that current pricing levels undermine the business case for number portability. This is seen by them as one of the most significant barriers to competition in the Finnish market and as requiring specific regulation. The incumbents, on the other hand, refer to the very high costs

incurred in putting number portability into place and argue that prices would be even higher if they were designed fully to cover those costs.

The Ministry is currently considering the issue of the costing of number portability, with a view to determining whether further regulatory measures are required.

Sweden

Numbering is administered completely by PTS, which also allocates numbers. All operators are granted number capacity on equal terms and conditions. Two numbering plans have been created and published by PTS since 1993, one each for the telephony and public data networks.

The main concern of most operators in respect of numbering is the implementation of carrier pre-selection (CPS). PTS' alleged failure to set guidelines, issue secondary legislation or intervene in disputes is seen as having created considerable uncertainty. PTS issued a decision on 8 April 1998 requiring CPS to be implemented by 11 September 1999. That decision also stated that from 15 September 1998, new four-digit codes would be valid for all operators (in parallel with the old codes, until those old codes lapse on 11 September 1999). In addition, national regulations concerning CPS were adopted on 12 April 1999. The provisions in the amended Telecommunications Act on CPS came into effect on 1 July 1999. The legal competence to take the measures in question was consequently conferred on PTS by an amendment to the Telecommunications Act in July 1999 – which amendment was immediately utilised. CPS is offered for long-distance national calls, international calls and mobile calls; and also for local calls if the area code is dialled. Implementation of CPS is still ongoing due to disputes between operators about, inter alia, the handling and processing of orders by Telia (PTS is currently involved in mediation over the administrative procedure for ordering CPS from Telia). Many operators criticise PTS for having been insufficiently pro-active, and for failing to provide clearer guidance. As indicated in the chapter on the NRA, PTS admits that it might have underestimated the capacity of the industry to solve various practical problems, leading to it having insufficiently regulated this field. Despite this, 12% of the customer base has selected another operator, and PTS predicts quite significant changes in the market shares of the various operators. PTS has decided to carry out an assessment of CPS implementation and the conditions under which it was implemented.

There was concern on the part of some operators that number portability would not be in place by the stated date, and that PTS did not have the necessary powers for controlling the development of its practical implementation. The introduction of number portability for fixed telephony services (including ISDN), premium rate calls and free-phone services began on 1 July 1999 and will be completed in December 1999. Onward-routing technology was used to implement number portability, but many operators believe that this is not the best technical solution, partly due to difficulties in identifying whom to charge. It is considered too early to gauge fully the extent of the problem, but some new entrants expect even greater difficulties in future.

United Kingdom

Operators appear to be generally satisfied with the availability of numbers, although some consider that the way in which numbers are allocated is inefficient, resulting in inefficient use of numbering resources.

OFTEL has been responsible for number management and allocation of numbers since 1994. Any operator, including service providers operating under class licences, may apply to OFTEL for numbers. Operators may also obtain numbers by way of sub-allocation from an individually licensed operator if they prefer. There is still no fee for granting/using numbers, but OFTEL has consulted on plans to start charging for number allocations as a response to any inefficiencies of use.

The numbering plan has been published. A new national numbering plan was subject to consultation in 1997 and is currently being implemented by OFTEL.

The UK implemented geographic and non-geographic number portability in relation to fixed operators in December 1997. Mobile operators were required to offer number portability by 1 January 1999. There have been 78 000 cases of number ports in the first six months of its availability, and 100 000 ports by the end of July 1999 (mostly in the direction of new entrants). Some mobile operators consider that mobile number portability has been implemented hastily, applying an inferior technical solution - i.e. in a way which is both inefficient and expensive. However, according to OFTEL the technical solution chosen — a general implementation approach known as 'Signalling Relay Functionality' — was recommended by the industry itself. The approach requires minimum implementation work by donor operators, and utilises standard interfaces and signalling protocols (thereby minimising the need for system development).

According to some mobile operators, the competitive benefits of mobile number portability are not yet fully effective due to 1) the practice among certain service providers of levying an excessive charge on customers who wish to keep their number when changing to a different service provider; 2) the laborious number transfer process that has been implemented; and 3) inefficient routing practices.

OFTEL accepts that porting customers may currently incur a charge from the donor service provider. This arises because mobile network operators agreed not to seek to recover per-number set-up charges from each other. OFTEL may intervene to ensure that these charges are "reasonable", but generally considers that the market will determine whether these charges are sustainable over the longer term or whether recipients will bear these costs in any event (for example, by offering to compensate the customer).

Many operators are worried about the wording of the draft licence conditions which transpose the Numbering Directive verbatim (i.e. there has been no attempt by OFTEL to consider how the Directive should be implemented into national law so as to reflect the UK telecommunications market). However, in October there will be a formal consultation exercise on the legislation implementing the Directive.

Many operators are likewise concerned by OFTEL's interpretation of "number portability *on customer request*". In their view, OFTEL insists that every customer must be able to move between every service provider, network operator and code - thereby necessitating a very complex matrix of about 120 operators. The Numbering Directive states that NRAs must ensure that an operator number-portability facility is made available by 1 January 2000 (at the latest) to allow subscribers to retain their numbers on the fixed public telephone network. OFTEL has communicated this requirement to all operators over the past year, and has informed operators that it is up to them to decide how to provide number portability by the deadline. In order to provide this facility, operators can choose to rely on direct porting,

interconnections between operators *or* available transit products that transfer numbers using another operator's network. Given the number of operators in the UK, OFTEL envisages that transit products will play an important role in helping operators to comply with the requirements of the Directive. The use of a transit product will mean that direct porting or interconnections between all operators are *not* required.

Carrier selection ('Easy Access') is offered by BT. It allows customers to select, on a call-by-call basis, a long-distance or international carrier other than BT by dialling a three- or four-digit prefix. Many operators see lack of carrier pre-selection (CPS) in the UK as a barrier to new entrants, although they have been working hard together over the past 15 months to put in place an effective order-handling system for CPS. The UK is committed to a comprehensive implementation of CPS covering an all-calls option.

3.7 Frequency

Belgium

Market players have not reported any market entry barriers relating to frequencies, and there have been no reports of major problems regarding the availability of frequencies.

By Royal Decree, published on 10 August 1999, Belgacom/Proximus was given the right to use DCS 1800 frequencies. The two other mobile operators on the Belgian mobile market, Mobistar and KPN/Orange, were not granted additional frequencies. According to the Belgian authorities, neither Mobistar nor KPN/Orange had officially applied for additional frequencies. In any case, the Proximus network was very often congested and the necessity for additional frequencies had been proved by Proximus, with the result that they were granted the required frequencies.

Denmark

No major frequency problems in Denmark have been identified.

The phasing out of the analogue NMT technology in the 900 MHz frequency band is due to be completed between 2000 and 2002.

A package of legislative measures related to frequency matters will be adopted by 1 January 2000. This will provide for the grant of one or more additional GSM 900 licences; up to four licences for third generation mobile networks; up to 8 national and/or a number of regional licences for fixed wireless access to the local loop; licences for the establishment of public mobile radio networks (e.g. TETRA); and licences for the use of frequencies for certain smaller local networks.

There is provision in the Danish legal framework for the possibility of frequency auctions, but the practice until now has been to award licences on the basis of a comparative assessment of bids (beauty contest).

National roaming is required by law and can only be refused on economic or technical grounds.

Germany

There does not seem to be any market entry barrier due to lack of frequencies.

Market participants consider it a major barrier to market entry that the national frequency band allocation plan and the rules regarding the content, scope and procedures for frequency assignment have not yet been adopted. Adoption of this plan does not appear to be very advanced, as a draft regulation for procedures to establish this plan and the frequency use plan have still to be drawn up (*Frequenzzuweisung*; *Frequenznutzungsplan-aufstellungsverordnung*). Two GSM 900 and two DCS 1800 licences have been granted. There are still frequencies available in the DCS 1800 bandwidth which will be assigned in October 1999 by an auction procedure announced by RegTP on 2 August 1999 in its Official Journal and on its website. As expected, only the four established operators licensed for mobile services have been admitted to the auction, as sufficient frequencies are not available to grant a new licence.

RegTP published the conditions for the assignment of third generation mobile frequencies on its website on 10 May 1999. Assignment is expected to take place in the first six months of 2000. The first phase of the auction procedure is expected to be launched before the end of 1999. The procedure is in three parts: admission to the auction, setting of licence conditions, and the auction itself.

There has been broad interest in the assignment of frequencies for the wireless local loop. The tender procedures in 1998 and August 1999 assigned all the frequencies available. New entrants criticise the manner in which these frequencies have been assigned, claiming that it will probably result in their having an incomplete "patchwork" area of activity which will affect the economic viability of the service. However, they can negotiate transfer of frequencies among themselves in order to create coherent zones of services. They have also claimed that far fewer frequencies were assigned than available on grounds of preventing interference between neighbouring areas. New entrants consider that interference could have been tackled at an operational level, allowing more frequencies to be assigned.

Greece

Some operators consider frequency allocation and frequency management to be especially problematic. This is due firstly to the lack of a consistent frequency plan, and secondly to the State's apparent inability to take the necessary measures for dealing with statutory violations – particularly the unauthorised use of frequencies by FM and TV broadcasters. The situation is exacerbated because operators lawfully using frequencies are required to pay fees to the State. Operators feel that these discrepancies favour the incumbent, which does not face the same difficulties.

A working party has been established on the Ministry's initiative, composed of representatives of the Ministry, EETT and the operators. Its objective is to address issues relating to requests for allocation of frequencies and other relevant topics.

The Ministry is committed to clearing the frequencies: to this end it has undertaken to carry out an extensive study of frequency management. Monitoring of frequencies is expected to take place in 2000. In the short term, a working group has been established by the three mobile operators and EETT to deal with frequency interference problems. Moreover, the

Amended Table showing the Allocation of Frequencies for certain uses is finalised and expected to be published shortly

Spain

Pursuant to the General Telecommunications Act and the secondary legislation, the power to assign frequencies lies with the *Ministerio de Fomento*. Frequencies are assigned by public tender if demand exceeds supply.

The *Ministerio de Fomento* has initiated the procedure for granting licences for the establishment and operation of wireless local loop for public fixed networks in the 24.5-26.5 GHz band and announced the forthcoming licensing round in the 3.4-3.6 GHz band. The Ministry has also invited tenders with a view to assigning frequencies for the wireless local loop for public networks.

It announced that a call for tender would be launched in the coming month for third generation mobile licences.

In principle, the incumbent is not excluded from participating in these tenders.

France

No major problems regarding availability of frequencies have been reported. The necessary bandwidth has been reserved and assigned to GSM, ERMES and DECT operators. The national plan for allocation of frequencies has been published as provided for by the Community framework. Further frequencies have been attributed by ART to the existing three mobile telephone operators to enable them to offer dual-band GSM-DCS 1800 services, following a public hearing procedure.

For alternative wireless local loop services, experimental licences were granted to 16 operators and are valid until the end of 1999. A public tender procedure is expected to be decided on this autumn, and a public tender should take place at the beginning of 2000, so that licences for wireless local loop can be granted in June 2000.

Ireland

The ODTR has undertaken to carry out a review of spectrum used for mobile telephony. Some new entrants expressed concern about the charges for providing DCS 1800 and third generation mobile services. Some operators expressed concern as to whether it will be the Ministry of Public Enterprise or the ODTR which sets the charges for these services (this issue is also discussed in the section on the NRA). In this connection, the Department of Public Enterprise pointed out that the Licensing Regulations specify requirements to be observed by the Director in determining fees for such licences.

A tender to grant a third mobile licence was launched in 1997. The two mobile operators providing GSM services in Ireland were offered frequencies to provide DCS 1800 services. The companies will provide a combined dual band mobile telephony service and have undertaken to serve customers using DCS 1800 in excess of the minimum requirement of one third of the population by the end of 2002. The licences of the two mobile operators will be amended to allow them to operate in the DCS 1800 MHz band. The additional spectrum was

not expected to be allocated before 1 January 2000. According to the incumbent, the reason for setting such a late deadline was to allow the third mobile operator to establish itself in the market. However, the legal dispute initiated by an operator who failed to obtain the third mobile licence had not been predicted. According to the incumbent, there is a shortage of available GSM 900 spectrum in Ireland at present. On the other hand the DCS 1800 frequencies are less suitable for the low population density in Ireland.

Italy

There is an urgent need to rationalise the use of the spectrum owing to the explosive demand for mobile systems, and operators have expressed the need for the establishment of a system of periodic verification. Given the level of mobile penetration and expected growth of traffic and customers, market players are requesting an earlier phasing out of analogue from the lower part of the GSM band, currently planned for 2005, and calling for the allocation of further DCS frequencies, at present owned by the Ministry of Defence. The analogue switch-off is complicated by the large number of subscribers to analogue (3 million) representing 12 % of the total mobile population. It is considered that there are limited possibilities for granting further GSM/DCS licences since there are no other frequencies available. On balance, it should be noted that, with a view to fostering a more efficient use of the frequency spectrum, roaming agreements with exchange of frequencies have been allowed in the "Pro-competitive measures relating to the market entry of the fourth mobile operator". Moreover, future assignment of frequencies in the 1800 band is based on a number of parameters, taking into account roaming traffic, and site and network segments shared with other operators.

Both the incumbent and the new entrants claim that the plans for frequency assignment to the mobile operators are not available to interested parties, and the overall situation relating to frequency assignment lacks transparency. The Ministry has recently submitted to the NRA an updated version of the National Frequency Plan for its advice and recommendations, prior to adoption.

Four mobile licences have been granted so far. The incumbent has been granted the only analogue licence, TACS. In practice, a similar bandwidth of frequencies has been assigned to all operators for the year 2002. By that date, a partial re-allocation of frequencies from the Ministry of Defence should be completed. The first three GSM-DCS operators have a licence to use dual-band systems, allowing them to exploit both the 900 and the 1800 band. The fourth licence did not include the granting of frequencies on the 900 band, since all frequencies available in that band had already been assigned. Other competitive conditions have been granted to the fourth operator with the aim of compensating for facilities which could no longer be provided.

The shortage of frequencies limits the rapid implementation of the wireless local loop, although some tests have already started. Frequency demand and availability are being evaluated by the NRA. A public consultation on wireless local loop is expected for the end of 1999.

With a view to collecting the opinion of market players on the introduction of a third generation system, the Ministry has launched an open and public consultation, to be completed by the end of September 1999. The assignment of a licence for a third generation system, via a beauty contest or an auction, is also being evaluated in such a consultation, which has been welcomed by operators. Frequencies for a third generation system have not

been freed yet, since some of them are occupied by the national broadcaster RAI for news gathering and internal communications. Similarly, problems have also been identified in relation to the effective application of the S-PCS Decision on satellite mobile services. The conditions for the transfer of the public broadcaster to a different frequency band are being evaluated by a technical group set up by the Ministry of Communications, which is assessing the arrangements for making available the frequencies for a third generation system and the S-PCS frequencies by 2002.

Luxembourg

Progress has been made on the completion of the necessary legal framework for allocation of frequencies, in particular by adoption of a regulation on 28 January 1999 laying down the conditions for use of the spectrum and ILT's Decision 99/24 of 16 June 1999 relating to requests for assignment of frequencies. However, new entrants feel there is a lack of transparency on the available bandwidths, as the frequency allocation plan has not yet been established.

As described in the Fourth Implementation Report, two dual-band GSM 900/DCS 1800 licences have been granted, one to the incumbent and one to a new entrant. In practice, they have been assigned a similar bandwidth of frequencies. No licence has been granted for analogue services. A frequency bandwidth has been reserved to ERMES, but no licence has been granted and no specific frequencies have been assigned. No DECT licence has been granted yet.

There is an initial one-off fee for use of frequencies for VSAT services of LUF 260 000 (= EUR 6445.216) plus LUF 120 000/year (= EUR 2974.715) per authorisation, with no limit on the number of antennas or stations by site. This is higher than in most other Member States. As calculation parameters differ substantially, further detailed analysis must be carried out to enable a proper comparison to be made.

The Netherlands

No specific problems with frequencies have been identified by market players in The Netherlands, except for the ongoing discussion on, and preparations for, the issuing of licences for the wireless local loop (WLL) and third generation mobile. It is not always apparent to market players, for technical reasons, why a given number of licences is decided upon in relation to the available number of frequencies. The frequency plan was published in June 1999.

KPN Telecom and Libertel are not allowed to use DCS 1800 frequencies until two years after the auction (February 1998). Consultations are in progress as to whether this period should be prolonged. A decision will be made by the Ministry by 1 December 1999 at the latest. The national competition authority *(NMa)* and OPTA have advised that the operators involved should be allowed to use the frequencies and that the prohibition should not be prolonged.

Austria

The mobile market in Austria has undergone remarkable expansion. The penetration rate in August touched 41% and is expected to exceed 50% by the end of this year.

A fourth mobile licence was granted in May 1999. This is the second nationwide licence for DCS 1800 and is expected to be operational either by the end of the year or in early 2000.

Additional frequencies from the DCS 1800 range have been assigned to the two existing GSM 900 operators *Mobilkom* and *max.mobil* owing to lack of capacity in certain regions. The Austrian Constitutional Court confirmed the constitutionality of the legal basis for these additional frequencies.

Operators have expressed concern that no more frequency is available for GSM 900 and that the analogue system operated by the incumbent will be phased out too slowly. There are currently about 190 000 users of the incumbent's analogue D-net. The number of clients is decreasing, but at a rather slow pace.

On 27 September 1999, the NRA started an auctioning procedure for a TETRA concession. Auctioning is expected to be completed in February 2000.

There are also plans to amend the Telecommunications Act in order to modify the auctioning procedure for regional licences with regard to the remaining non-nationwide DCS 1800 frequencies.

In general, new entrants complain that frequency management, which is the responsibility of the Federal Ministry of Science and Transport, is non-transparent and inefficient.

Portugal

ICP is responsible for the management of civil frequencies, the remainder being administered by the Ministry of Defence.

New entrants consider that the main problems relating to frequencies are the system of frequency assignment through calls for tender, and the fees charged by ICP for the use of this resource.

ICP indicated that access to certain frequencies was restricted, in certain cases only, due to scarcity of the resource, and that even in these cases, assignment was objective and non-discriminatory. It also indicated that “positive discrimination” in favour of new entrants was applied in certain cases, with preference given to companies in which Portugal Telecom did not have a holding.

The Portuguese authorities launched a call for tender for licences giving access to the wireless local loop in June 1999.

Finland

No specific problems in frequency management in Finland have been identified. The phasing out of the use of the 900 MHz frequency band by the analogue NMT technology is due to be completed by the end of 2000, although some 156,000 users remained at the end of June 1999. The Ministry has asked the TAC to stop reassigning 900 MHz frequencies to the existing GSM licensees, in order to preserve sufficient bandwidth for a possible new licensee.

Fees for the licensing of spectrum, including third generation mobile technology, are related to the TAC’s administrative costs, and no auction procedure is provided for.

The Ministry decided in September 1998 not to make national roaming between GSM 900 and DCS 1800 networks mandatory, but to leave it to commercial negotiation between the operators concerned. Negotiations on national roaming proved unsuccessful and a complaint was made to the OFC, which reached a preliminary view in September 1999 that the charges for national roaming offered by the incumbents had been excessively high.

Sweden

Some new entrants are concerned that the analogue NMT 900 system (where Telia is at present the only player - but there are currently only 250,000 - 300,000 subscribers) continues to occupy part of the 900 MHz band. Under the GSM Directive this band should be exclusively reserved for GSM according to commercial demand. However, it is planned to allocate the 900 band exclusively to GSM by 2010 - hence, frequencies are gradually being transferred from analogue to GSM (though not quickly enough, according to some new entrants). Telia has also declared that the whole analogue NMT 900 system will cease to occupy the 900 band by the end of 2000. There are plans to use the available frequency spectrum to licence a fifth GSM operator, thereby increasing competition in the mobile market. A frequency plan according with the ERMES Directive has also been drafted.

PTS is responsible for frequency assignment. Some new entrants claim that frequency assignment is not entirely transparent and that the current assignment method gives Telia an advantage, since PTS allegedly uses Telia's network structure as a benchmark (possibly putting operators with a different network structure at a disadvantage). The assignment of frequencies to operators has sometimes been controversial in Sweden, although appeals by some operators have either been withdrawn or settled.

Provided that the legal framework is in place, from Spring 2000 PTS will begin the tendering process for four third generation mobile licences.

United Kingdom

No problems have been reported with regard to frequencies, apart from reports by some operators that there is generally a bottleneck for access to radio spectrum in the case of telecommunications services dependent on spectrum availability (such as mobile communications). However, the RA seeks to manage the spectrum in such a way as to ensure that sufficient spectrum is available for new and existing services, and the UK authorities believe that spectrum pricing has an important role to play in ensuring that operators have an incentive to optimise the use of spectrum.

According to the RA it is fully aware of the fact that radio spectrum is a finite and scarce resource and reflects this in its spectrum-management policies. The UK fully recognises the importance of ensuring spectrum access for new market entrants in order to promote competition and innovation. This is explicitly stated to be one of the factors to be taken into particular account under the Wireless Telegraphy Act 1998. The RA attempts actively to provide spectrum for new market entrants and has developed new market tools, such as spectrum pricing, to promote its spectrum-management objectives. Unfortunately, according to the RA, it is an unavoidable corollary of the fact that spectrum is a scarce resource that it will not always be possible to make spectrum available as quickly as operators might like. Where spectrum is already occupied, it is necessary, according to the RA, to revoke or vary existing licences, and the Licensing Directive itself imposes checks on this process that

inevitably take time. This recognises the fact that incumbents require a degree of stability if they are to be encouraged to invest in new networks, which requires a careful balance to be struck between the interests of incumbents and new entrants. The RA considers that the Licensing Directive prevents the development of spectrum trading, which would provide an additional mechanism to make spectrum available more quickly for new services. In its response to the Commission's Green Paper on spectrum policy, the UK advocated amending the Directive to remove this barrier to new market entry.

Part of the 900 MHz band, which under the GSM Directive should be exclusively occupied by GSM according to commercial demand, is still occupied by an analogue system. However, analogue phase-out is due for completion by 2005.

The UK has cleared the spectrum at 2 GHz identified internationally for third generation mobile. The UK will implement the Decision on third generation mobile by determining the licensing-award arrangements by 1 January 2000 and enable services to be provided by 1 January 2002. The UK is also making spectrum available for broadband wireless at 40 GHz, in which matter the RA is currently consulting.

3.8 Rights of way

Belgium

Once a licence has been issued, the operator/service provider is theoretically granted rights of way in the public domain. In practice however, new entrants do encounter problems. There is in particular a conflict of law between the Federal Government and the regions (notably Flanders) on the competence and on the legality of charging for rights of way. The Federal Government takes the view that the regions should not charge for use of rights of way, but Flanders charges a fee based on parameters such as distance in metres and density of population of the area concerned. The NRA has indicated that a decision by the *Cour d'arbitrage/Arbitragehof* on the question of division of competence between the Federal Government and the regional authorities regarding rights of way may be the only way in which clarity can be achieved. There are no reports from operators of having to pay fees to local authorities, pending legal arbitration on the matter of competence.

New entrants complain that the lack of a proper coordination mechanism between the regions and municipalities is a major problem and constitutes a barrier to market entry. They also encounter problems in site sharing and colocation. These issues are in the discussion phase at the moment, but site-sharing is encouraged by the authorities insofar as mobile operators are concerned.

Denmark

No major regulatory problems concerning rights of way have been identified. Telecommunications operators are not required to pay a fee for the grant of public rights of way.

On a practical level, however, one new entrant did indicate that it had encountered problems in obtaining access on reasonable terms to certain transport infrastructure facilities (bridges, tunnels and railway lines) for its cables.

A new law on the erection and sharing of masts for radio communications entered into force on 1 April 1999. It was introduced mainly for environmental reasons to avoid proliferation of masts and antennas. It imposes an obligation on owners and leaseholders of radio communications masts to accept requests for sharing of the mast, subject to reasonable compensation.

There is currently no specific legislation requiring facility sharing in relation to the cable ducts of fixed network operators. However, there is provision for colocation in the law governing unbundling of the local loop.

A recent decision of the Complaints Board held that access to sea cable heads is covered by the Danish interconnection legislation.

Germany

Use of public ways is free of charge under the Telecommunications Act. All interested parties reported that this is now fully implemented following the Constitutional Court ruling on 7 January 1999 that cities and municipalities cannot charge “administrative fees”. The time for award of the authorisation is reported to be between four and six weeks. The operator then has the right to start work immediately.

There is no market entry problem linked to the right to use private land, subject to compensation under defined conditions.

The German legal framework provides for facility sharing. However, in practice DT only grants colocation to the extent that space is available and often claims that there is no spare capacity. RegTP is currently assessing whether the technical facilities placed at the disposal of the new entrants are sufficient, in particular as regards the need for ISDN connections. Furthermore, DT does not allow third-party operators to interconnect between themselves in its colocation facilities and they have to find other premises. DT likewise does not authorise the interconnected operators to lay cables in its premises. Colocation facilities are vital for new entrants, particularly in view of DT's request to establish further interconnection points.

DT has in the past denied access to its sea-cable head ends to new entrants for technical reasons and failed to provide sufficient space and did not allow for appropriate_security measures to permit equipment colocation. According to the German authorities, access to sea-cable head ends falls within the competences of RegTP.

Greece

New entrants have reported some difficulties over the installation of antennae for providing mobile services. The Ministry attempted to improve the existing framework by transferring powers to the local authorities. However, the Ministry later stated that the sole reason for delays is the transfer to the local authorities of the power to issue permits – it has therefore since adopted a new law to return that power to the Ministry.

Similar problems have been reported by a mobile operator requiring access to public and private land to install both optical fibre for the use of its backbone network and submarine cables. New entrants believe that these difficulties deprive operators of interconnection rights to the international optical fibre landing stations in Greece. EETT states that no relevant

complaint has yet been filed in this matter. In addition, EETT is currently reviewing an application to provide submarine cable not owned by the incumbent. The law on rights of way was adopted in 1998 and provides for access to both public and private land. A number of public services must become involved before permission is granted for access to public or private land. Undue delays are purportedly caused by poorly defined, complex procedures which are difficult to coordinate. The General Secretariat of the Ministry has launched a study to examine the situation.

Spain

Rights of way are regulated in the General Telecommunications Act and the Royal Decree on universal service.

Operators with a type B licence (telephone and network) or C licence (establishment and operation of a public network for services other than voice telephony) have the general right of access to public land or private property, but must first assume their public service obligations. The procedure for obtaining rights of way differs according to whether the property concerned is private or public. In the case of private property, an expropriation procedure has to be launched.

To have exclusive rights of way to public land, operators must obtain authorisation from the owner administration.

The Ministerial Order of 25 May 1999 stipulates facility sharing on major public highways for the purposes of establishing public telecommunications networks.

New entrants consider that the municipalities take an inordinate amount of time to grant rights of way and note that they frequently refuse to allow digging work on public highways. The NRA considers that the periods in question are variable but not always lengthy.

As regards access to sea cable head-ends, the NRA has completed a public consultation and announced that this matter falls within the definition of interconnection and that it would amend the reference interconnection offer in this regard.

France

Under French law, all public network operators are granted equal rights to lay cables on both public and private land.

Although fees set out in the regulatory framework are acknowledged as being reasonable for rights of way on public thoroughfares (*domaine publique routier*), some problems have arisen concerning rights of way to public property outside *domaines publiques routiers*, for the use of which local authorities are free to set the level of fees.

It is still of concern that some local authorities either restrict or delay access to public property on environmental grounds or while making over-extensive use of the French regulatory framework which invites local authorities to encourage the use of co-location and shared facilities. The difficulties are normally resolved, but this leads to delays and even to litigation on occasion.

As previously reported, access to cable heads and sea cable (IRUs) appears to be fully satisfactory.

Ireland

The installation of lines is governed by the Telegraph Acts, 1863-1916 and the Postal and Telecommunications Services Act, 1983 to 1999. In March, 1999 the Irish Government published a Bill, the Telecommunications (Infrastructure) Bill, 1999, to establish a new regime governing the rights of access of network operators to public highways and private land for the construction of telecommunications infrastructure. This Bill aims to put competitors on an equal footing with Eircom, which has statutory rights over private land for installing infrastructure for the purpose of its exclusive privilege, which no longer exists. The Bill proposes that where network operators and landowners fail to reach agreement on access to land, network operators may apply to a proposed quasi-judicial body, the Telecommunications Infrastructure Board, for a decision as to whether such rights of way should be granted compulsorily.

Concerns have been expressed by some operators that considerable delays could be experienced on the enactment of this Bill.

Italy

From a regulatory point of view, the NRA is empowered to intervene in issues relating to the granting of rights of way as provided for by Presidential Decree No 318 of 19 September 1997. In fact the NRA (and where explicitly provided for, local municipalities) can foster the common use of infrastructures and properties by telecommunications operators. In cases where additional rights of way cannot be granted, the NRA (and where explicitly provided for, local municipalities) can impose access to existing infrastructure under fair conditions. The NRA has power to settle disputes at the request of a party and it can set conditions for the shared use of infrastructure and properties in consultation with interested parties. These conditions can include elements defining the share-out of cost between parties.

The effective application of granting rights of way has been difficult, as reported by new entrants. Only a few cities (Milan, Turin, Cremona, etc.) have drafted a specific regulation for telecommunications cabling (in the case of Milan market operators have been waiting several months for this regulation). In other cities the situation appears less dramatic, since most of the investments by operators at regional level have focused on the northern area. In general terms, long lead times and bureaucratic hurdles continue to be reported; for example the municipality of Milan, in order to promote “joint excavation” and coordinate cable landing operations with those of other interested services (water, gas, electricity, etc.) has set up a complex licensing system with the objective of having all operators digging in the same street at the same time on the basis of a three-yearly “integrated” plan based on the expected needs of each of the interested parties in terms of infrastructure development. As a result, cabling plans by the new entrants have been significantly reduced and slowed down.

Some new entrants have mentioned the risk of possible discrimination in the grant of the requested rights of ways due to the involvement of local utilities in the telecommunications sector. As a result, new entrants are urgently calling for the drafting and establishment of common procedures at national level. In order to address this situation, the NRA plans to draft common guidelines on granting rights of way by the end of 1999.

Given the large expansion of mobile services and the existence already of two national operators, measures have been put in place to foster site and antenna-sharing. The issue is dealt with by the "Pro-competitive measures" set to ease the market entry of the third and fourth mobile operators and published in conjunction with the related calls for tender. Site-sharing agreements at cost-oriented prices are allowed within a defined time limit and under the supervision of the NRA.

With regard to submarine cables, it appears that landing sites for undersea cables are controlled by the incumbent operator and that the Italian regulatory framework does not systematically regulate access to undersea cables. In practice, operators with submarine cables which terminate in Italy operate under uncertain conditions as to their access right. However, the NRA intends to re-examine the issue and create the necessary clarity.

Luxembourg

Under the national regulatory framework, the right of public ways must be granted free of charge.

An authorisation must be obtained by the authorities responsible for the management of the public domain (within the area of municipalities: the roads departments of the municipalities; outside: the national roads office = *administration des ponts et chaussées;* in the case of antennas, an authorisation from the Ministry of the Environment and in certain cases from the forest authorities and/or Ministry of Agriculture is needed). There is a lack of rules on co-ordination and transparency for the implementation of rights of way which constitutes a substantive market entry barrier. In practice, new entrants in the fixed market encountered important difficulties in implementing this right or were unable to do so. Competences are not clearly defined between the public building administration, the Ministry of Transport, the Ministry of the Environment and the municipalities. However an inter-ministerial body has been set up to define responsibilities, which might ensure a more coordinated granting of rights of way in future. ILT has taken action to ensure the implementation of the right of ways by all authorities involved, but lacks the power to intervene. The incumbent operator has reported delays for granting those authorisations varying between one and six months. However, no new entrant has yet received an authorisation to lay cable in Luxembourg.

The incumbent operator has been granted a general authorisation (*permission de voirie générale* N° 37/95 du 24 mars 1995) to dig**,** after receiving individual written authorisation by the *Administration des Ponts et Chaussées* to take the necessary action in the event of an emergency. According to the incumbent, this permission does not cover the laying of new infrastructure; the authorisation therefore needs further examination in this respect. It cannot yet be assessed whether new entrants are granted a similar, non-discriminatory permission, as no authorisation to implement right of ways has been granted yet to new entrants.

A rule of non-edificandi within 25 metres along the highways is currently being examined by the Commission to determine whether it is and has been applied in a non-discriminatory way to the incumbent operator and new entrants.

New entrants criticise the fact that they have to comply with excessive co-digging rules in certain municipalities, in particular given the small number of operators interested in laying cable, and the long intervals between different authorised works that entail the need to reopen

the streets/roads, varying between 3 and 10 years depending on unwritten rules in the different municipalities.

New entrants in the mobile sector had difficulties in obtaining information on the procedure to be followed for establishing their stations and install masts. However, intervention by the Ministry of Communications ensured that stations could finally be established free of charge for the use of the public way.

Use of private land is subject to private law only and must be negotiated. There is no specific expropriation mechanism.

Operators must ensure facility sharing on the basis of their licence conditions (*cahiers des charges)*. In practice, colocation is granted by the two mobile operators reciprocally. New entrants have not yet requested colocation of cables from the incumbent operator as none of them has yet been able to establish its network.

The Netherlands

Since the entry into force of the new Telecommunications Act on 15 December 1998, all operators who have registered or hold a licence have rights of way. The responsibility for, and co-ordination of, implementation is left to the municipalities, who have considerable autonomy in these matters.

Some new entrants claim that local councils, which cannot charge operators for the necessary digging work, are seeking other forms of remuneration for these activities. There are no known cases of discrimination, however. In order to coordinate work, the municipalities sometimes ask operators to wait a certain period until more applications have been made, which can lead to unacceptable delays. Market players claim that local officials lack knowledge of the current legislation. To remedy this, the Ministry has provided information to the municipalities in the form of a brochure and will also be organising meetings directly with the municipalities.

However, the major problem at the moment is not digging but the placing of antennas for mobile telephony and broadcasting services. There is much discussion in The Netherlands about possible health problems linked to antennas. This health concern is delaying the roll-out of the new entrants' mobile networks. In addition, a Court ruling affirming that a permit/licence may be needed for each antenna (to be decided by the municipality) could lead to costs for the operators and additional delay in roll-out. Many municipalities do not yet have any clear policy on such matters.

The sharing of antenna sites is an obligation under the Telecommunication Act for licensees authorised to use frequencies to offer either public telecommunication networks, public telecommunication services or broadcasting services. All reasonable requests for site sharing have to be considered.

In a preliminary procedure overturning a ruling by the NRA, a court has upheld the view of the incumbent that the placing of antennas on roof tops is not included in the site sharing obligation and therefore no information has to be given by KPN to the other operators about (private) roof locations This ruling has the potential to diminish drastically the number of possible locations for site sharing. In view of this constraint, the mobile operators have

decided to cooperate more closely in site sharing. The Ministry has indicated that this issue could have an impact on future developments in telecommunications in The Netherlands, such as the licensing of the wireless local loop and the third generation mobile licences.

However, the Government has also announced what steps it is taking to address the problems, and is planning to develop a more comprehensive policy towards antenna locations. In addition to the abovementioned brochure, which contains both factual legal information for municipalities and addresses the links between antennas and health, and the planned meetings with municipalities, the Government has indicated that the health issue will continue to be monitored closely in The Netherlands.

No problems have been reported regarding sea cables.

Austria

The Telecommunications Act was amended in January 1999 in order to provide for site sharing by all licensed operators.

The concerns referred to in the Fourth Implementation Report regarding ambiguities arising from provisions of both the Telecommunications Act and the Telecommunications Route Law have not been addressed so far.

Although no major application problems have been reported with regard to rights of way, new entrants complain that their obligation to make one-off payments to landlords for the additional use of existing networks would lead to discrimination, since there has been no such obligation for the incumbent.

Portugal

The Portuguese legislation (*Decreto-Lei no. 381-A/97*) provides for rights of way for public network operators and for infrastructure sharing in some cases. If operators fail to reach agreement on the latter, ICP has mediation powers, but new entrants consider that ICP should be much more pro-active in ensuring non-discrimination in access to rights of way. It believes that ICP should intervene to guarantee that in practice all public network operators have equal access rights to public land and non-discriminatory treatment in the establishment of alternative infrastructure.

ICP announced that a number of parties (including universities) were being consulted on the various problems related to rights of way.

Finland

No particular problems have been reported regarding the provisions in the Telecommunications Market Act granting operators the right to place cables and other network architecture on the basis of an approved route plan, nor in relation to the obligation to share facilities (antenna masts and cable ducts) and to lease excess network capacity. It is estimated that 25% of all antenna masts (approximately 40% of masts built in 1998) are already used by more than one mobile operator and the proportion is increasing.

An amendment to the Telecommunications Market Act will enter into force on 1 January 2000, under which objections to an operator’s route plan can be filed with the municipal

building supervision authority, which will decide whether the operator's route plan can proceed or whether a reasonable alternative solution exists.

It has been reported that some difficulties have been encountered by new entrants in obtaining non-discriminatory access to facilities within the control of local municipalities, particularly where a close relationship existed between the municipality and the incumbent local network operator.

Sweden

Facility sharing is not compulsory, but rights of way/access to property may be granted through individual agreements or under the Right of Way Act (applicable to both public and private entities). Telia also provides colocation, although not at its main switching facility.

Some new entrants find that it can be difficult to lay fibre in the ground if local government is uncooperative, and some also claim that they have to pay a quite substantial amount for laying fibre in the ground, while the incumbent pays nothing. This is a matter of concern in Stockholm, where Stokab (owned by Stockholm's municipality) is the sole company empowered to dig tunnels and lay fibre in the ground - although they are required to give access to anyone requesting it.

United Kingdom

Code Powers are granted under the Telecommunications Act to operators wishing to construct their own systems. Code Powers give operators the right to install facilities on the public highway or on private land with the owner's agreement. Certain obligations are placed on operators (such as not to obstruct access to other land). Should problems arise, the operator can apply to the Court for a compulsory order. Alternatively, section 34 of the Telecommunications Act provides for compulsory purchase of land - but this option has never been used. According to the DTI, the mere existence of the right of compulsory acquisition puts pressure on the parties.

The UK legislation on access to public and private land does not appear to pose any major problems and the Code Powers appear to be working well. OFTEL actively encourages the sharing of facilities, including ducts and (in particular) masts, although it has no powers with respect to rights of way and facility sharing - other than those flowing from Article 11 of the Interconnection Directive.

The Department of the Environment, Transport and the Regions is currently considering (in line with the Government's integrated transport white paper) the possibility of consulting on options for an incentive system with penalties, so as to minimise disruption to all road users and to encourage coordination of street works. However, there are, as yet, no proposals. A charge applicable to all utilities digging up roads would require primary legislation; penalties for overstaying an agreed time could be made under current legislation. Some new entrants are concerned, however, that since an operator who has already completed digging work would therefore (partly) avoid any future charges, such a measure would cause discrimination.

The UK Government expects operators to consider seriously duct-sharing arrangements on a commercial basis in order to minimise the environmental impact of the construction of new

broadband networks. The DTI and OFTEL have discussed with BT and the cable operators their plans and current practices on duct sharing. All are prepared to consider duct sharing and to have such arrangements in place for parts of their networks, particularly at "pinch points," where barriers such as road bridges constrain the construction of new ducts. However, they also point out that duct sharing poses both technical and commercial problems, in particular for guaranteeing the safety and security of lines in shared ducts and for ensuring that quality of service is not degraded on one operator's network by work on another's lines (in a shared duct). Companies must also ensure that they get a commercially acceptable contribution to their construction costs from any other operators sharing their ducts. While recognising these difficulties, the Government expects the operators to continue to do all they can to minimise the environmental disruption caused by the construction of new broadband networks. In areas of new construction, trench sharing (including with utility companies) may also be a useful means to this end.

3.9 Competition in the access network

Belgium

Access to the end-user in general (either via the Belgacom infrastructure, the wireless local loop, or via bit stream access) is a topic on which discussion is only just beginning in Belgium. New market players believe that comprehensive discussion/consultation is necessary, in particular for strategic planning purposes, and they criticise the inactivity of the regulator on these issues.

The regulator does not see an urgent need to unbundle the local loop, as there is already an alternative local loop available (at least in Flanders and Brussels) via the cable networks, but has announced a forthcoming consultation. Another local loop will be created when the licences for the wireless local loop are issued. Draft legislation concerning the permanent granting of licences for the wireless local loop is before the *Conseil d'Etat* at the moment. No timetable for the issuing of definitive licences has been announced yet. Commercial ADSL is now available from Belgacom, but these services have not been the subject of any interconnect offer yet and therefore competitors cannot provide competing ADSL services.

Denmark

Since the amendment to the Danish interconnection legislation in July 1998 made it clear that the interconnection regime extended to the right to lease the "raw copper", lengthy negotiations between operators took place, resulting in the conclusion of a framework agreement governing access to the local loop between Tele Danmark and most of its main competitors.

However, new entrants have argued that the regulatory regime governing access to the local loop left considerable power in the hands of the incumbent to dictate the terms on which access was granted. They claim that this is evidenced by the length of time taken to conclude agreements and to obtain delivery under them, and the absence of any penalty clauses for late delivery. They have also expressed dissatisfaction at the price set for leasing the copper wire (740 DKK per year). It is also argued that certain technical restrictions imposed by Tele Danmark limit the scope for competition and the development of new services in the local loop.

A complaint has been made to the Ministry by one operator which did not participate in the framework agreement, requesting that it take further regulatory measures to govern the terms on which access is granted to the local loop. A decision by the Ministry on this issue is expected shortly.

New entrants also claim there is a lack of certainty in the legislation as to what rules are to apply in cases where multiplexers are in use as an alternative to individual copper wires.

The forthcoming package of measures concerning the further licensing of frequency resources due to be adopted by 1 January 2000 will include provision for a number of national and/or regional licences (8) to be granted for fixed wireless access to the local loop.

Tele Danmark owns the most extensive cable television network in Denmark. Following the adoption in June 1999 of Commission Directive 99/64/EC amending Directive 90/388/EEC in order to ensure that telecommunications networks and cable TV networks owned by a single operator are separate legal entities, the Danish Government requested the NTA to assess what action needs to be taken to ensure compliance with that Directive.

Germany

Unbundled access to the local loop is compulsory under the German framework but not under the EU framework. New entrants consider that economically viable access to the local loop is vital in order for competition to take off, and that direct management of all technical problems is the only way to guarantee the end-user the required quality of service. 52 agreements for local network access have been concluded. New entrants have started activity at a local level, progressively widening their network and investing, in parallel, in the expansion of their own network. According to the German authorities, one operator plans to offer national services via unbundling.

However, operators have considerable concerns related to the level of the tariff DT can charge competitors for granting them access to the local loop. On 8 February 1999 RegTP set the fees for the rental of subscriber lines at DM 25.40 per month (EUR 13). This is to apply until 31 March 2001. Competitors complain that these fees are higher than those charged by DT to its subscribers (DM 21.39), thus excluding new entrants from competing with DT in the local loop.

Wireless access to the local loop (WLL) might be a possible alternative. There has been broad interest in the assignment of frequencies. As a result of an auction procedure in 1998, 10 operators have been granted 382 frequencies. A further 610 frequencies were assigned to 12 operators in August 1999 under a subsequent auction procedure. Activity is set to take off further in 1999 and at the beginning of 2000, and new entrants are investing several billion in wireless local loop. However, new entrants point out that wireless local loop services are only economically viable for certain types of clients and services and are not likely to be offered with general geographical coverage.

Telecommunications services can also be provided over the TV cable. In practice, DT owns the major part of the TV cable network in Germany, but does not currently offer telecommunications services on its broadband cable, which is a major impediment to competition in the local access network. An improvement in the situation might result from the planned sale of DT’s cable TV network.

Greece

There is no competition in the access network. The incumbent still enjoys exclusive rights both in the provision of voice telephony and in the establishment of the underlying network. No licence has yet been issued for access to wireless local loop to allow the provision of already liberalised services. Two applications filed recently with EETT are currently under examination.

Spain

The *Ministerio de Fomento* approved a Ministerial Order on 26 March 1999 laying down the conditions for provision of indirect access to the public fixed telephony network, intended to meet the demands of consumers and the Spanish Parliament for a flat-rate Internet access tariff using Digital Subscriber Loop technologies (ADSL).

ADSL access services will be provided by Telefónica, with national coverage, to all Internet Service Providers (ISP) under transparent and non-discriminatory conditions (charges to ISP will start at EUR 30/month). This will enable the ISP to provide competitive flat rate schemes for high-speed Internet access to end-users (i.e. retail Internet offers to end-users are emerging at about EUR 60/month flat rate).

The introduction of ADSL technology in the local loop by the dominant operator with the aim of enabling flat-rate tariff schemes for Internet users has led to concerns on the part of some new entrants, who think that Telefónica's roll-out of this technology might reinforce its dominant position in the access network. Moreover, certain aspects such as the bundling of ADSL with the basic telephone service are being scrutinised by the Commission for its possible anti-competitive effects in this new market.

This argument concerning the dominant position of the incumbent is at the root of the complaint filed with the Commission by an association of operators.

With regard to competition in the local access market, alternative forms of access are already in place such as cable networks and frequencies for the deployment of wireless local loop. The Spanish authorities have granted two licences to new entrants and the incumbent does not have licences for wireless local access at present. The Spanish authorities have recently launched an invitation to tender for the issue of six new licences for wireless local access.

France

The development of the provision of telecommunications services on cable TV (CATV) networks is monitored closely by the ART. 7.8 million sockets are connected, with 500,000 new sockets being installed last year alone. Although cable operators currently provide data services and Internet access to a somewhat limited extent, and there are virtually no voice services offered on cable, the number of subscribers to telecommunications services and Internet access via cable is on the increase according to the French authorities. A number of operators seem intent on offering telecommunications services on CATV networks, as can be seen from the number of pending licence requests to offer voice telephony services on CATV networks, and declaration of service provision. FT itself offers Internet access, but does not currently offer voice telephony on its cable network. Furthermore, the situation is likely to improve, as FT, which owns 2.7 million out of the existing 7.8 million sockets connections,

has announced a joint venture with La Lyonnaise des Eaux-Suez to combine the current technical and commercial cable operations of La Lyonnaise, with an option for FT to divest its stake in the joint venture later on, after a third partner has been found. Despite these encouraging signs, however, it appears that competition in the local loop is not likely to be offered with general geographical coverage, following the entry into the market of cable operators, because of a low geographical penetration of cable in France as a whole.

Wireless local loop licences have so far been granted on an experimental basis, with frequencies attributed to 26 such schemes, distributed on the whole territory. A call for tender should be organised at the beginning of 2000, and licences will be granted later in the year.

ART launched a public consultation on unbundling of the local loop on 2 April 1999, which ended in July 1999; 35 contributions have been submitted and are currently being analysed.

New entrants are of the view that the lack of competition in the local loop is one of the main bottlenecks on the French market, and they would favour the introduction of unbundling. They regret that the ART does not seem to have the legal power to impose the unbundling of the local loop.

In particular, they emphasise the crucial importance of access to FT's unbundled local loop in order to allow competition in the high speed Internet access market. They consider that the fact that FT has been authorised to launch its ADSL-Internet access service on 1 November 1999, while new entrants have no direct access to end clients, will mean that there will be no alternative offer in the market, until ADSL unbundling is provided. The Secretary of State in charge of telecommunications has indicated that he was in favour of some kind of ADSL unbundling. No proposal seems to have been made by FT so far.

As a result there is currently no satisfactory solution allowing competition to take off in the local loop.

Ireland

There is no unbundled local loop in Ireland at present. A request was made by an operator to Eircom to provide unbundled local loop access but Eircom has refused to satisfy the request. A complaint has been filed with the Irish Competition Authority under the Competition Act.

Some operators are concerned that the ODTR focuses exclusively on the issue of unbundling the wireless local loop and not the fixed line. ODTR objects to this concerns and cites a report due in October 1999 following a consultation procedure on the unbundling of the fixed line local loop. The ODTR has also successfully completed a tender to grant licences to operate fixed wireless point-to-multipoint access services for a period of ten years. According to the Commission's information, cable operators have expressed interest in upgrading their networks and indirect access is being used in some cases. According to Eircom, its contribution to the competition in the access network was its divestiture from its interests in the biggest cable TV company in Ireland. Further, Eircom favours facilities-based competition in Ireland. It considers that a regulatory requirement to provide access to unbundled local loop at regulated prices will eventually send wrong messages especially in view of the low charges for line rentals imposed through price caps. Eircom could be discouraged to further invest and modernise its network and similarly other operators' business plans for investing in alternative local loop infrastructure.

Italy

The legal basis for unbundling of the local loop (ULL) is the Decree on Interconnection of April 1998, which provided, in general terms, for access to the distribution network. This was supplemented by the NRA decision of 25 November 1998 on the RIO of Telecom Italia, which specifically imposed ULL, with technical, economic and administrative procedures to be completed by 25 August 1999.

The Committee on the unbundling of the local loop started work in January 1999 and completed its assessment in July 1999. Two working groups have been set up, a technical and legal procedures group and an economic and regulatory group. A Decision is expected by November 1999, including tariff principles. It is reasonable to assume that the ULL will not be operational before spring 2000, after a test phase. New entrants claim that interconnection contracts already in force should be re-negotiated to include the ULL.

The planned unbundling of the local loop is designed to meet the concerns of new entrants regarding the lack of access networks competing with those currently provided by the incumbent. In fact cable TV penetration is close to zero, wireless local loop is not implemented, short-distance leased lines local ends are still expensive and digging remains problematic in the main cities.

Telecom Italia recently started to offer a commercial ADSL service to all end-users. TI's offer at present covers data transfer and is available in only a few cities such as Rome, Milan, Turin, Bologna, Brescia, Padova, and Trieste. The service is going to be extended to 25 cities by the end of 1999. It includes a monthly charge and a set up cost including line, modem and splitter. The service is offered at different speeds, depending on the length and the size of the copper wire; therefore customers cannot be offered a standard speed, although free testing is provided in order to determine the maximum speed.

Telecom Italia had been testing ADSL technology for some time already prior to offering it commercially, following a request for authorisation for data transmission addressed to the Ministry, originally covering only Rome and Milan. Economic conditions and legal requirements in this regard have still to be specified. Some new entrants have expressed concerns in this connection about the competitive advantage Telecom Italia may gain in the related market until clear conditions are set, allowing new entrants to compete on an equal footing. The NRA is assessing the possibility of including the ADSL service among the different options for local access to be covered in the planned decision.

Luxembourg

Cable operators are expected to launch competition in the local access network and one operator already offers telecommunications services other than voice telephony on its cable.

No frequencies to offer wireless access network services have been assigned, as the frequency allocation plan has still to be adopted in the form a regulation. It is expected that some operators will enter the market. There is no licence specific to wireless access network services, but operators requesting assignment of frequencies must have obtained a licence under the general procedure.

Unbundling of the local access network is not compulsory and no decision in that direction is expected in the near future. The authorities argue in the main that unbundling does not appear to be necessary given the high cable TV penetration rate.

The Netherlands

The Netherlands authorities are very concerned by the lack of competition in the local loop. They have noticed that only two cable operators are investing to provide telephony in competition with KPN. Alternatives have therefore been sought to increase competition in the access network, namely local loop unbundling and the granting of wireless local loop licences.

The unbundling of the local loop is not mandatory under the harmonisation directives. Following a dispute on Main Distribution Frame (MDF) access, which in The Netherlands is considered to be a form of special access, OPTA has issued guidelines on the unbundling of the local loop. It sets a timeframe of five years in which the price of line rental is initially expected to be below the current monthly rental (based on historical costs) and will then rise to market prices (based on actual costs), giving players the opportunity to invest in their own local access infrastructure. This strategy should help new entrants get into the telecommunications market cheaply, while encouraging them to build their own infrastructure. A preliminary decision on the precise price of the line rental is expected from OPTA in 1999 on the basis of the proposal from KPN.

This is one of the areas in which a number of market players feel that OPTA has been too pro-active, aiming to create more competition at the local level. In The Netherlands more than 95% of households have cable (a potential alternative local loop) and the cable operators do not support the guidelines on local loop unbundling, considering their own investments in the last few years. On the other hand, in a study on the competitive situation in the local telephony market in The Netherlands, it appeared that only two of the Netherlands cable operators offer local telephony to customers. Other cable operators do not offer local telephony via the cable and are awaiting the development of IP-telephony. At the moment, a maximum of 25% of consumers have a choice at the local level.

In September 1999 a cooperation agreement was announced between a number of large cable operators in The Netherlands including plans to offer voice telephony over their cable infrastructure. This could lead to a maximum of 70% of the consumers having a choice at the local level in the future.

The unbundling of the local loop (MDF-access) is currently being tested. This test, which includes ADSL technology, will be extended in October 1999 and has taken a multi-operator approach. Full operation is planned for mid 2000.

As another alternative to the fixed local loop infrastructure, The Netherlands is planning to issue licences for the wireless local loop before the end of 1999.

Austria

On 2 July 1999, the NRA stated that the incumbent is obliged to provide for unbundled access to the local loop and fixed the tariffs for such access (ATS 750 one-off charge plus

monthly ATS 170 per customer). The incumbent is preparing a special reference offer on unbundling.

There is currently no need to obtain a licence from the NRA for the provision of wireless local loop (WLL). Competence for spectrum assignment for WLL lies with the regional telecommunications offices and – pursuant to a new ordinance on frequency allocation and assignment in the 26 GHz range issued by the Federal Minister for Science and Transport in September 1999 – procedures for spectrum assignment are expected to begin shortly.

In the Vienna region in particular, cable networks have now started to compete in the local loop.

Portugal

The authorities have not yet taken steps to unbundle access to the local loop. New entrants are unhappy with this situation, which is preventing them from planning investments, and their concerns about the absence of regulatory action are heightened by the incumbent's strong presence in the cable television market. However, the fact that licences for access to the wireless local loop are being issued will naturally increase competitive pressure in the sector.

Finland

Unbundling of the local loop has been provided for since June 1997 by means of an obligation to lease subscriber lines. Agreements between operators governing access to the local loop have been concluded. However, new entrants argue that there is a lack of detailed regulation of the prices at which access is granted and a number of complaints concerning pricing are pending before the TAC and the OFC.

In some cases the price of an ordinary 2-wire copper line (suitable for voice telephony) is reported to be higher than the incumbent operator's subscription prices for its own end-users.

In addition, new entrants argue that the absence of an obligation to allow colocation of equipment in local switching premises and the problems preventing the cost-effective exercise of number portability are significantly impeding the development of competition in the local loop. The Ministry is actively considering the option of amending the Telecommunications Market Act to provide for an obligation to provide colocation facilities.

Frequency licences for the wireless local loop are available to fixed network operators who have notified their activities and a total of 8 such licences have been awarded to date.

Sweden

Although 95% of all households are serviced by several networks (including mobile, but not yet including wireless local loop), there is considered to be insufficient competition in the access network in particular. Hence, PTS has recently proposed an amendment to the Telecommunications Act which would enable PTS to unbundle the local loop through licensing conditions. This proposal provides for mandatory cost-oriented unbundling of the local loop. All types of requested access should be provided (not just, for example, leasing). The proposal is presently under assessment by the Government.

Some new entrants are considering using the cable TV networks to provide telecommunications - although this would not be possible until those networks are upgraded. However, it appears that while Telia continues to own the majority of the cable networks, there is little impetus for upgrading.

ADSL access is being offered by Telia, but according to new entrants the price is so high that no operator other than Telia is able to compete effectively. A complaint has reportedly been filed with the Competition Authority.

Wireless local loop trials are in progress and temporary frequencies have been allocated (but nobody has applied for a permanent licence yet).

PTS considered that there is insufficient competition in the mobile market - mobile tariffs remain high and handsets are subsidised. Hence, recently proposed amendments to the Telecommunications Act would incorporate into licence conditions a discretion for PTS to require all mobile network operators to provide access to their mobile network capacity on market terms. Under the proposal PTS would have a mediating role and a mandate to impose conditions (including on prices between the parties) should agreement not be reached. The proposal is presently under scrutiny by the Government.

United Kingdom

BT's market share in the local telephony market is still very high, although cable TV operators are also providing telecommunications services over their networks. OFTEL is currently consulting on unbundling of the access network. This is viewed positively by many operators, although there are concerns that the proposed implementation time (two years) is too long.

According to recent information OFTEL intends to ensure that, when BT upgrades its access network to provide ADSL, wholesale products will be made available to other operators and service providers so that they can offer similar services over BT's network.

There are 7 fixed wireless access operators in the UK, although most of them are currently not operational. Of the operators that do provide services, one has no significant roll-out, and the other is currently only operating in Scotland (although it hopes to expand into England)