THE ELECTRICITY AND TELECOMMUNICATIONS SECTORS IN SPAIN:

RAPID CHANGE, REGULATORS AT THE CROSSROADS

Nicolas Curien and Michel Matheu

There is certainly no "Latin" model of industrial organisation and regulation of public services and networks. Spain provides proof of this, if proof were needed. It is a country where the postal monopoly is circumvented – in fact, there is no flat postal rate - where the electricity sector has long been very fragmented, where private operators already have a major presence in several sectors and where, for some years now, the government has been very quick to take measures to open up to competition – measures which go well beyond Community requirements.

In view of these specific features and some others besides, can we conclude that Spanish markets are rapidly moving towards a more northern European model, with very strong competition and fairly numerous private operators? A study of the electricity and telecommunications sectors – chosen in view of the scale of the changes which they are undergoing – leads us to qualify this argument.

As we will see, there is no doubt a real political will for reform in the various sectors. But the actual organisation and concrete form of regulation, which are the main issues discussed in this study, highlight limits. Clearly the regulators are truly independent, in the sense that they have many guarantees over appointments and funding, but they are only consulted on major decisions. Many matters relating to public services and networks can be referred to the competition authority, namely the Competition Court, but it does not appear to have adequate resources to make effective rulings. It has very limited access to outside expertise and is highly dependent on the Ministry of Finance in terms of investigating individual cases. The monopoly has virtually ceased to exist and the operators are private, but in both of the sectors studied a duopoly or a single dominant operator succeeded in achieving important positions before competition was really introduced, which considerably complicates the task of the regulators, who would like to see their market share reduced.

Is the current period one of transition towards a more competitive industrial organisation and more powerful regulation, in terms of human and financial resources, and in terms of decision-making powers? It would be rather premature to suggest an answer to this question during this period of very rapid development in Spain.

REGULATION OF THE ELECTRICITY SECTOR IN SPAIN: A VERY LIBERAL LAW, BUT A STRONG DUOPOLY AND A RATHER TOOTHLESS REGULATOR

There are still strong barriers in the electricity sector. In recent decades the Spanish electricity system, which was very fragmented during the Franco era, has consolidated in recent years without however establishing any strong connection to the continental electric grid. The 1997 Act opened up the market considerably and the implementing decrees provide for a more rapid rate than that required in terms of the minimum legal thresholds. However, competitive practices do not appear to be increasing as rapidly as might be expected in view of the objectives announced by a government with liberal leanings. Nor is the fall in prices to consumers, including industrial consumers, big enough to put the country among the European leaders. The power of a private duopoly which is difficult to challenge and the relative weakness of the regulatory authorities – in that order – appear to be the two major reasons for this.

The structure of the Spanish electricity market

As far as the continental part of the country is concerned, the Spanish electricity system is basically dictated by the fact that the country is a peninsula. Interconnection with the European network is extremely limited: it is restricted to a link with France, which is now saturated, and the creation of a new link has come up against strong opposition from local inhabitants and ecological groups. In such conditions, Spain cannot import competition from the neighbouring countries, as is possible for other European countries including Scandinavia, central Europe and the Pyrenees, which have high levels of interconnection[1].

Total demand for electrical energy in Spain, including the island regions, was 182 TWh in 1998, which represents comparatively low per capita consumption - roughly one and a half times lower than in comparable European countries. In terms of production, no one energy source has any significant edge on the others. In terms of *consumption*, the coal and nuclear segments - which supply basic energy - clearly prevail, with 35% and 34% respectively of the total in 1998. In terms of *installed* capacity, hydro-electric power predominates, but this source was only used at just over half of its maximum potential. It is worth noting that the national coal industry benefited, and still benefits, from significant public aid (fifty billion pesetas in 1998, or the equivalent of about two billion francs or 300 million euros). Autoproducers supplied some 11% of total electricity consumption in 1998. This represents a rapid increase since their contribution was virtually nil up until 1989. Cogeneration has also been growing rapidly, reaching 8% in 1998. Spanish electricity has long been expensive: assuming a constant currency, the price hardly fell between 1982 and 1991. Between 1991 and 1999, there was a drop of just over 30% - this has been most marked since 1993. Between 1996 and 1998 Spain improved its European ranking for most categories of consumers. If we consider the standard basket of consumption by private and industrial users set by the IAE,

[1] There is also a link with Portugal and Morocco, but this does not solve the problem of "importing" competition: the Iberian peninsula as a whole has limited connections to the continental European grid which, were it not for this, could be the source of significant flows.

the Spanish price to consumers was still the second highest in Europe in 1998. For industrial consumers, Spain was in the middle of the range, but only in the antepenultimate position after adjustments for purchasing power parity.

In recent years, the Spanish electricity market has moved towards rapid concentration, resulting in the creation of a real duopoly.

Initially, there were a very large number of production and distribution companies, each with an operating area the size of an autonomous region, or smaller. With the backing of the government, which considered that this fragmentation was detrimental to the efficiency of the national electricity system, many new groups were created, centred on the two major companies, Endesa and Iberdrola. In late 1998[2], the combined market share of the two main operators and their subsidiaries was 81%, both in production – where Endesa had a clear edge - and distribution, where their shares were balanced[3]. This vertically integrated organisation based on a duopoly exacerbates the relative isolation of the Spanish electricity system, making it very difficult to bring about effective competition. The network operator REE is far and away the major carrier on the Iberian peninsula: it owns 98% of the extra-high-voltage 400 kV network, but only 27% of the network for voltage below 220kV.

The liberalisation of the Spanish market

Basically it was the Electricity Act of 28 November 1998 that paved the way for the liberalisation of the Spanish electricity sector. It has been supplemented by various decrees, most of them dating from 1998, which govern tariffs and regulation. The Hydrocarbons Act of 8 October 1998 indirectly involves electricity insofar as it led to the establishment of a single regulatory body for electricity, gas and liquid hydrocarbons.

Prior to the 1997 Act, the Spanish electricity system was fragmented, but the companies involved were for the most part vertically integrated. From 1985, the operator REE (*Réd eléctrica de España* - Electricity Network of Spain) was recognised as being responsible for managing the transport network, even though it did not own the whole network. An initial Act for liberalising the sector was passed in 1994, but was not implemented. The government undertook negotiations with the electricity industry and in 1996 it reached a draft agreement which formed the basis of the 1997 Act.

---

[2] Most of the figures are taken from: Comision nacional del sistema eléctrico, *Informacion basica del sector electrico 1998,* CNSE Publication, 1999.

[3] Excluding the islands and Morocco, which account for about 5% of the country's total consumption. In the islands, integrated companies account for all production, transport and distribution services.

This Act created a new organisational model for the sector. It created a wholesale market, managed technically by a network manager and financially by a market manager. It authorised a forward market. As well as the spot market, there are bilateral agreements. The competitive framework adopted for access to the network is that of regulated third-party access. Competitive areas are regulated by a licensing system. The implementation of the system was wound up in late 1998. In the last quarter of 1998, transactions carried out with eligible customers, who were still rather scarce, and dealers accounted for 6% of the market.

The eligibility thresholds set by the Act are as follows: 1·5 GWh (or half of the ceiling set by the Directive for 1999) as at 1 January 1999, 9 as at 1 January 2000 (or the ceiling provided for by the Directive for 2003), 5 as at 1 January 2002 and 1 as at 1 January 2004. Unless another Act is passed, all consumers must be eligible by 1 January 2007. In practice, the government is going ahead more rapidly, with a series of decrees. The threshold of 1 GWh was reached on 1 October 1999; this corresponds to 42% of the market. Immediately after he was re-elected, the current prime minister announced that he intended to achieve universal eligibility by the end of his present term of office. The pace of liberalisation is thus much faster than the minimum set by Community legislation. In addition, production and distribution activities have to be separated by the end of 2000. Separate accounts are already required for regulated and unregulated activities.

Planning only applies to the field of transport. A system of sunken costs will be implemented for a maximum period of ten years. Finally, a system of special benefits applies for renewable energy and cogeneration. The intention is to cut aid to the national coal industry, but without abolishing it entirely. Between now and 2004, aid should apply to no more than 15% maximum of total consumption, and it must be granted "in keeping with the principle of fair competition", which could pose practical problems which the Act does not elaborate upon.

The regulatory system : institutional aspects

Regulation is shared by the Ministry responsible for energy, an independent body – currently the *Comision nacional de Energia (CNE)*[4] (National Energy Commission) - the autonomous regions[5] and the body responsible for competition, the *Tribunal de defensa de la competencia* (Competition Court). As we will see, although the CNE is independent, the system provides for a large role to be played by the government.

The Commission includes nine full members, including the Chairman, and a Secretary who has a consultative role. The Chairman and commissioners are appointed for a term of six years and the terms of office of half of them are renewed every three years, by Royal Decree further to recommendation by the Ministry of Industry and after an opinion from the relevant parliamentary committee. They cannot be dismissed other than in the event of misdemeanour,

---

[4] Until the implementation of the 1998 Act, the scope of authority of the Commission, then called the *Comision nacional del sistema eléctrico*, was restricted to electricity.

[5] Which are charged with regulating electricity companies whose acitivities only cover their territory.

serious neglect of their duties or the simultaneous pursuit of business interests which is forbidden. The Minister or a high-level representative may request to take part in meetings when this is deemed necessary.

A very keen political debate surrounded the 1998 reforms. The members of the previous Commission, solely responsible for electricity, were appointed on a political basis. The seats were allocated to figures with close links to the major parties proportionally to their importance. Seats on the CNE were officially allocated purely on the basis of know how. The opposition parties lodged an unsuccessful complaint to the effect that the new breakdown was heavily biased in favour of the governing People's Party. It is worth noting that reports are often adopted on a simple majority basis. In 2000, the Chairman has even been in the minority.

Before the creation of the CNE, its predecessor responsible for electricity - the CNSE – had 73 salaried staff. Its funding was based on sales in the electricity sector (0.094% of the total), which meant that in 1997 it had a budget of just under two billion pesetas, or about 80 million francs (12.2 million euros).

The CNSE produced many quality reports, using its own staff, since it was not able to outsource much work with the resources at its disposal. The dark part of the picture is that, according to the directors of the Commission, salaries in the electricity sector are significantly higher than those which the regulators can offer, even though these are themselves considerably above the level of salaries in the state sector. As a result, turnover is very high: according to the directors of the Commission, it rose to 60% in 1998.

The Commission's scope of authority was extended to liquid and solid hydrocarbons as soon as it became necessary to have a law regulating competition in the gas sector. There does not appear to have been much debate on whether this extension was appropriate. For Spanish experts in the sector, the idea that it is necessary to regulate gas and electricity jointly, taking account of the overlap of their markets and production processes, is considered to be self-evident.

The CNE requires on a mandatory basis a considerable amount of accounting information, including information on transport and distribution costs, costs arising from obligations in respect of security of supplies, sunken costs and supplementary costs for the island markets. It has access to information on costs borne by network and market managers. Most information is provided on a monthly basis.

In addition to the CNE there are two consultative councils, in which major interests, including those of consumers, are represented. These councils are systematically consulted on many of the Commission's acts.

Decisions by the CNE are open to appeal before the Ministry of Industry, except for those concerning the settlement of disputes and documents (*circulares*) which require that the operators provide it with information necessary for the due exercise of its functions. In the latter two cases, appeals are submitted to administrative tribunals.

Regulating competition

The government grants licences to the operators. The CNE is not able to issue opinions in this respect.

The CNE is also empowered to make suggestions or issue opinions in fields of implementing regulations pursuant to the Electricity Act and the planning of transport infrastructures.

Its only real powers involve the settlement of disputes relating to network access and issuing rules within the framework of decrees governing regulation. In addition, the Commission authorises companies which exercise a regulated activity to take stakes in trading companies – subject – and we will come back to this later – to these being duly notified. It does not have real powers to impose penalties.

In theory, the Commission is responsible for ensuring a competitive framework for activities in the electricity sector. In practice, if it becomes aware of a breach of the competition rules, it duly informs the department responsible for competition at the Ministry of Finance, which is responsible for bringing action before the Competition Court. The Court is the real body responsible for competition. In practice, it is possible for one and the same matter to be considered by the two bodies.

The Commission was also consulted on the calculation of sunken costs. It issued an opinion, which was not taken up, against the calculation proposed by the government, which grants about two billion pesetas (80 million francs or 12.2 million euros) a year in all – this amount will be reduced if the production price of electricity does not fall below a threshold.

The increases expected in terms of price correspond to the productivity gains which can be made by operators. The figures are comparatively modest considering the rather high price of Spanish electricity: the basis for calculation is –1% for the period from 1999 to 2001, and this figure may be revised downwards if interest rates are low, if demand increases more rapidly than expected or if repayments in respect of sunken costs do not fall.

Quality is controlled in accordance with regulations whose principles are set by the government, with the autonomous regions being responsible for applying the regulations. The quality criteria vary according to whether the area concerned is urban, suburban or rural. The new law provides for consumers being compensated in the event of failure to comply with quality standards. The parameters measured are the differences in theoretical voltages and an indicator of breakdowns in service.

A system whereby competition is only being introduced gradually

All in all observers – including local observers - consider the Spanish system as being rather uncompetitive, and there are doubts as to the possibility of making it more dynamic in the short or even medium term.

The regulator's powers seem to be rather limited, although it does seem to be truly independent. Essentially it formulates proposals, but it does not set tariffs and its recommendations are by no means systematically implemented.

In several recent cases, it issued opinions which were not followed up and which were all more favourable to competition than the government's position. For instance, the CNSE was against the merger between Endesa and Sevillana, which gave the duopoly's competitors the smallest share. In practice, the regulator does not seem to have influence over mergers. According to the regulatory body's directors, the competition bodies are often not notified of mergers as they should be, and therefore the Commission is not consulted. It proposed an amount of sunken costs significantly lower than that adopted by the government – this has come in for sharp criticism from other European electricity companies. For 1999, it suggested a price ceiling much lower than that adopted by the Ministry of Industry: an average fall of 5.8% instead of 2.1%. Its point of view did not hold sway, even though in its method of calculation it referred to the draft agreement signed with the industrial operators in the sector in 1996.

The other independent body, the Competition Court, also appears to be rather powerless. It has a very modest budget – less than ten million francs a year. This sum precludes it from seeking outside expertise. Only one person in the department knows about energy problems, and furthermore the person in question has other areas of responsibility. A new law will change the role of the Court somewhat but, according to those involved, its major thrust will be to reduce delays in handling disputes, without supplying the human and material resources concomitant with its objectives. In particular, the Court is dependent on the Ministry of Finance, whose competition unit refers cases. According to specialist regulators and some experts, the Ministry is not sufficiently independent to fulfil this mission adequately.

In addition, the opinions of the Court may differ from those of the Electricity Commission, or even the ordinary courts. Admittedly, this does not worry those in charge. The Chairman of the Court is certain that the unification of the criteria for fair competition will come from the authorities in Brussels and Luxembourg jurisprudence.

All in all, the liberalisation of the Spanish electricity sector seems paradoxical. In some respects, it seems to be far-reaching and rapid. As we have seen, the eligibility thresholds are advancing much more rapidly than required by Community legislation, and the objective is for universal eligibility within less than six years. Sophisticated markets are already up and running, and the system of a spot market linked to bilateral transactions opens up the range of possibilities. In the first three quarters of 1999, the volume of transactions made by intermediaries reached 14% of the market total. The regulatory Commission estimated that at the end of 1999 total transactions effected on the wholesale market accounted for almost half of the total opened up to competition.

But at the same time, the conditions for a rapid increase in competition do not appear to be in place. Again according to the Commission, few large customers had switched supplier by the

end of 1999, and the same seemed to apply to a large number of eligible customers (almost 90% of customers potentially involved) who announced their intention of buying on the market after the fall in the threshold on 1 October[6]. At the time the Act came into effect, the Spanish electricity system was almost entirely run by a duopoly. In these conditions, the effectiveness of opening up sales to important customers is questionable.

In practice, competition mainly has to be imported. The interconnection with France is not sufficient for this. It would have been possible to take advantage of the gradual increase in electricity consumption to facilitate the entry of new operators. For instance, it might have been feasible for a large foreign operator to buy up one of the remaining small Spanish operators and gradually develop it. In the first quarter of 2000, the government opposed an attempt of this kind involving Hidrocantabrico, whose fate had not yet been sealed in June this year.

In addition, like a large part of Europe, Spain has surplus installed capacity, so that the development of a third producer would not in any event be easy. The gas market is also very concentrated and relatively isolated from the rest of Europe, so that the path to competition using gas production is not very feasible either. In practice, the dominant operator - Gas Natural, linked to the Repsol oil company - cooperates with the two companies in the electricity duopoly, mainly at international level with one of them and mainly in Spain in the production of electricity from gas with the other.

In short, it is not easy to bring about competition in a sector which has already been privatised and has powerful players. The method involving restructuring a sector while it is publicly owned and then partially privatising it is certainly less onerous, but this did not apply in Spain. In view of the above, the directors of the regulatory Commission think it would have been better to follow the UK example: oblige operators in the duopoly to sell off some of their assets to achieve a significant number of competing producers. The government decided otherwise.

Finally, things are proceeding as if some sort of compromise had been negotiated, which leaves room for competition, but slows its effects; low eligibility thresholds, improved tariffs but no excessive pressure on the existing producers, and high sunken costs which protect the Spanish operators. In the current situation, it will no doubt be difficult to obtain meaningful results in the short term. The private duopoly is powerful. On the other hand, the bodies responsible for competition and regulation both have limited resources and powers. What it comes down to is knowing whether, after a transition period making it possible, inter alia, to solve the problem of coal production, the Spanish government will one day come round to the view that the disadvantages of the duopoly outweigh its advantages.

REGULATION OF TELECOMMUNICATIONS: A POWERFUL PRIVATE OPERATOR AND REGULATION REQUIRING FURTHER ADJUSTMENT

Spain was initially one of the few countries for which the European Commission pushed back the deadline for opening up the telecommunications sector by five years, to 1 January 2003.

---

[6] Unfortunately no statistics are available on this point.

With the change of government in 1996, this position was reviewed and the final date was brought forward to 1 December 1998, less than a year later than the 1 January 1998 deadline applicable to most Member States. The new General Telecommunications Act (GTA) came into force in Spain on 24 April 1998 and the specific regulations for interconnection, dialling, universal service and granting of licences were implemented in the third quarter of 1998. Without waiting for the statutory deadlines, "limited liberalisation" was introduced between 1996 and 1998: two new fixed telephony operators, Retevision and Uni2 (Lince), and two new mobile operators, Airtel and Armena (Retevision), obtained licences during this preliminary period. In addition, in most regions cable network operators were authorised to offer combined telephony and cable television services.

Concomitant with this reform of the telecommunications sector, a new legislative framework was also set up for the audio-visual sector, including cable and satellite and land-based digital networks. This constitutes a regulatory field separate from that for telecommunications. However, there is an exception, concerning the provision of telephony service over cable networks on the one hand and the allocation of frequencies on the other, which are subject to the general telecommunications legislation.

The institutional framework of regulation

In accordance with Article 67 of the GTA, the Minister of Public Works (*ministerio de Fomento*) is responsible for submitting proposals on the policy for developing the public telecommunications service to the government. Within the Ministry, the General Secretariat for Communications drafts and proposes the regulatory standards governing the sector, including allocation of scarce resources – especially frequencies – and assessing service quality. In parallel, a Telecommunications Consultative Council, chaired by the Minister of Public Works, has been set up: it examines all draft laws and decrees issued by the Ministry and can also issue opinions spontaneously, following an internal referral procedure. The members of the Council are appointed by the government and include representatives of users, service providers, equipment producers and suppliers, unions and the government.

Exactly one year after the promulgation of the GTA, on 24 April 1997 an initial Act on the liberalisation of telecommunications led to the setting up of an independent regulatory body, the Telecommunications Market Commission (*Comision del Mercado de las Telecomunicaciones* or CMT). The powers of the CMT are set out in a ministerial decree dated 9 April 1997: they apply both to the telecommunications and audio-visual sectors – apart from content regulation. The stated objectives are providing and maintaining the conditions for effective competition on the telecommunications markets, controlling "fair" price formation, and mediating disputes between network or service operators. To achieve its objectives, the powers of the regulatory Commission comprise:

- granting licences and authorisations, with the notable exception of the most important licences and those involving frequencies (mobile networks and local radio loops), which are subject to public tender and government decision;
- assigning numbers and managing the numbering system;
- monitoring their public service obligations and their funding;

- determining the technical and tariff conditions and settling disputes between operators over interconnection of networks;
- promoting and maintaining competition by means of resolutive decisions, with the proviso that regulation of the retail prices of Telefonica, the established operator, remains the prerogative of the government, as does authorising new services for which the legislative and regulatory framework is not yet in place.

The CMT has to submit a report to the government every year, and this report is also presented to parliament. It includes about sixty people and is managed by a Board, comprising a Chairman and Vice Chairman appointed by the government and six other members appointed by the Minister of Public Works. Appointments are submitted to parliament for ratification and the six year mandate can only be renewed once. In theory, the decisions of the CMT can only be revised by the government and appeals are brought before the Administrative Disputes Tribunal (*Tribunal di contenzio admistrativo*).

Although at first sight the CMT's Articles of Association appear to guarantee its independence from industry and the government, there is still some concern as to the possibility of "capture" considering that on the one hand the present Chairman of the Commission comes from the dominant company, Telefonica, and on the other hand that a former Director General from the Ministry is a member of the Board. In addition, the role of the CMT is often considerably reduced in practice by the fact that the government retains substantial regulatory powers – particularly regarding licences and frequency allocation – that the departments of the Ministry of Public Works themselves submit many cases, and that they even gather and directly process some complainants' grievances. Seen ex post, these practices may originate from the fact that the creation of an independent sector regulatory body in Spain was not considered ex ante to be self-evident, since the State, which only held a minority stake in the old company Telefonica, sold off its stake before the market was opened up.

In the absence of political debate and a ruling on the question of clearly defining the respective fields of regulation and the implementation of competition law, the tasks of market control are shared de facto by the CMT and the antitrust body, the *Tribunal de Defensa de la Competencia*. This Court, which comes under the auspices of the Minister of Finance and Economic Affairs, submits an annual report to the government on the state of competition in various economic sectors, and it issues judgments to settle competition disputes from private industry. As concerns telecommunications services, the market players can refer directly to the Competition Court, except in the event of disputes over interconnection. These fall under the sole jurisdiction of the CMT, which must give a ruling within three months.

The resources of the Competition Court – both in terms of staff (15 people) and budget resources (about ten million francs) – mean that in practice it hardly has the resources required to exercise its powers effectively. This translates into considerable delays in bringing cases (sometimes up to a year); there are additional delays in the appeal procedures with the Administrative Disputes Tribunal and the Supreme Court in the event of a further appeal. In addition, the government often shows excessive meddling, by bypassing the decisions of the Competition Court, particularly with a view to promoting sector consolidation. However, a new Competition Act, which comes into force this year, should help to improve the situation.

The final body for institutional regulatory mechanisms, an interministerial Committee for price control (which arose from the interministerial Commission of Economic Affairs) is responsible for submitting proposals on all regulated prices, including those relating to the tariffs of the dominant operator in the telecommunications sector.

State of the market

The Spanish telecommunications market is an exception in Europe, insofar as services have always been provided by a mainly privately-owned company – Telefonica – and not by the public sector. This feature has probably boosted the process of adapting the sector to European requirements in respect of liberalisation. However, prior to liberalisation, the State was a minority shareholder, had a right of veto ("golden share") on strategic decisions by the company, and Telefonica still operated under a framework agreement drafted in 1991. Only recently has Telefonica been fully privatised, in order to adapt to the new open environment.

The established operator has an ambitious strategy of acquisitions and alliances and has taken significant stakes in the telecommunications sector in Venezuela, Chile, Argentina, Peru, Brazil and Porto Rico. In 1998, the company posted sales growth of 20% and earnings growth of 14.5%; its shares rose by 52%. Most of this growth was due to the company's expansion in Latin America and on the mobile telephony market.

As for Retevision, it was created in 1989 to transmit the television signals of the two public channels and three national private channels. It is a private company, with a minority public shareholder base. In the pre-liberalisation phase, the government chose Retevision to become the second national telecommunications operator. This decision was enacted pursuant to the decree-law on the liberalisation of telecommunications of 6 June 1996, whereby this company obtained a licence enabling it to provide telecommunications services, including voice telephony. Finally the Lince consortium, in which France Télécom is the major shareholder, obtained (under the name Uni2) the third fixed operator licence in 1998. It was the only bidder on this occasion. The fixed telephony market is still very asymmetrical today, with Telefonica's market share standing at around 90%.

In the mobile telephony market, Telefonica has been using analogue cellular networks since 1988. Since 1992 the company has offered the Movistar mobile phone service – this makes it the leading mobile operator, operating under public contract. Having won a tender, the Airtel consortium, comprising Banco de Santander, Airtouch International and BT (British Telecom), became the second mobile operator on 29 December 1994. Finally, the third mobile licence, using DCS-1800 technology, was allocated to Retevision in 1998, under the brandname Armena. Like the fixed telephony market, the mobile telephony market is asymmetrical. Movistar has a market share of 63%, compared with Airtel's 34% and Armena's 3%.

The liberalisation of the cable television segment started in January 1996. The process of choosing the successful applicants for the regional tenders is virtually complete. The result is a concentration centred on two large companies, Retevision and Cableuropa. Prior to the deadline of 1 December 1998, cable operators were authorised to offer fixed telephony services, counterbalanced by obligations in terms of levels of investment. Telecommunications companies entering the market after this deadline are not subject to the same obligations, but nor do they have the commercial advantage resulting from a linked offer of "cable and phone".

Finally, as concerns data transmission, BT Telecommunicaciones, the first of sixteen operators which have obtained an operating licence since liberalisation in 1993, remains the only real alternative on the market. Since 1996, this company has also offered a telephony service to closed user groups (CUGs), a segment where liberalisation started in 1995.

The state of regulation

Although the "independent" regulator has been in place since 1997, some major aspects of regulation are still in government hands (the Ministry of Public Works), with particular regard to granting major licences and allocating frequencies. This has the effect of creating a certain amount of confusion, exacerbated by a lack of transparency. In addition, although several recent decisions by the CMT have revealed a clear wish to introduce effective competition in Spanish telecommunications, there are still major efforts to be made and it will be necessary to take a more pro-active stance in order to offset the dominant position of the established operator.

Telefonica's benchmark offer of interconnection (RIO) was published in October 1998 and it is now accessible to all licence holders. Tariffs comply with the recommendations of the European Commission and the pre-selection of the long-distance operator is already available, but the range of services has not yet been fully defined. In respect of transferability of numbers, Spain is rather advanced compared with the European average, since the CMT has undertaken to make the service available as from 2000. After consultations with operators in the first quarter of 1999, the Commission submitted a draft to the parties concerned and the operators reached a consensus in respect of technical specifications. However, there are still divergent views on the procedures to be adopted, and on the extent to which the Commission should be involved in managing and funding the entity which will administer the reference database. Finally, although the law explicitly provides for the requirement of transparency and separate accounts for the established operator, Telefonica, and though the CMT has shown an unequivocal wish to impose this, methodological problems remain and there is still a considerable gulf between theory and practice.

Universal service includes basic telephony and slow-speed (less than 32 Kbit/s) data transmission services. The net cost of this service has been assessed at some thirty billion pesetas (just over a billion francs), or almost 3% of Telefonica's turnover, but no funding system has yet been set up. The amount of the monthly subscription is an "affordable" 1,200 pesetas (about 50 francs). This has not given rise, as was the case in France, to increased subscription charges to offset lower call costs. The subscription fee is reduced to 700 pesetas for senior citizens.

Regarding *the allocation of licences*, the General Act's promulgating decree provides for three standard categories of licence: licence "A" for service providers not operating their own network; licence "B" for service providers operating their own infrastructure; and licence "C" for network operators not providing services themselves. As at the end of 1999, 60 type "A", 20 type "B" and 500 type "C" licences had been allocated. Although the law allows market newcomers to set up their own infrastructures without restrictions, two major problems have emerged in practice. On the one hand, permits for civil engineering works are only granted by the municipal authorities after long, arduous procedures. On the other hand, no clear, transparent rule was stipulated at the outset for operators to share the infrastructure. However, there have been developments in this respect, since a Royal Decree of 22 February

1999, supplementing a decree-law of 27 February 1998, stipulates the technical standards which the joint telecommunications infrastructures within building have to fulfil, in order to open these up in a competitive way to telephone and cable television operators.

As in all European countries, *opening up the local loop*, the monopoly's last line of defence, is an extremely sensitive issue. A ministerial order of 26 March 1999 regulates the deployment of the high-speed ADSL (*Asymmetric Digital Subscriber Line*) technology in Telefonica's local loops. This technology is limited to Internet access, excluding voice telephony, and three modes have to be made available throughout the country, with the highest speed offered being 2Mb/s. Data flows coming from the ADSL loops are channelled through a network using ATM (*Asynchronous Transfer Mode*) technology to a hundred or so points of transfer to which the access providers (NSPs) and service providers (NSPs) can be interconnected. NSPs and ISPs are billed at flat-rate charges - that is, the charges do not depend on the volume of traffic. Modems have to be supplied by the NSPs and ISPs, in accordance with specifications which have to be made public, and the extension of the public network to all local automatic switching systems has to be achieved within three years.

These measures have brought mixed reactions. On the one hand, cable operators denounce them as not complying with the moratorium imposed on Telefonica in respect of cable television and they are demanding this moratorium to be extended for five years. On the other hand, global or long-distance operators think that the measure poses – in relation to competition law – a dual problem of linked offers: on the one hand, an access network (ADSL) with a transport network (ATM), and on the other hand, a voice service linked with a data transmission service. In addition, these operators consider that the projected service quality for the ATM network is not adequate and will thus be likely to put up barriers to entry to the markets in services which are most demanding in terms of speed, such as voice under IP Internet protocol, or video on demand.

Hervé Dumez
Centre de Recherche en Gestion, École polytechnique

Politics and the rise and fall of Regulation

A Comment on Curt Andersson's paper : « Sweden – A case of lighter or tighter telecom regulation ? »

Conference : « Regulating network utilities in the EU »
Oxford, Nuffield College
3/4 july 2000

Regulatory issues have been faced by all European governments for now more than a decade. All countries have dealt with those issues adjusting regulation to the characteristics of their national environment. But some more than others, the UK, and particularly Sweden have articulated some kind of model of regulation that is frequently used as a benchmark.

Curt Andersson's paper presents this experience from a practitioner's point of view. Yet, theoretical questions lie behind this point of view. I would like to focus my comment on two points : politics and the rise of regulation, and the question of the end of regulation.

1. Politics and the rise of regulation

Regulation is always politics. That is an idea we insist upon in our works on regulatory policies, Alain Jeunemaître and I. By that, I do not mean that regulation is nothing but politics. I mean that politics is an essential dimension of regulation, often underated. I have therefore very much appreciated Curt Andersson's beginning with an analysis of « Balanced political risks. ». Actually, the paper shows that the political dimension of regulation refers mainly to three points : institutional framework of regulation, redesigning interests and decision of regulation.

Institutional framework of regulation

The institutional frame of regulation has an impact on the style and the outcomes of regulation. The Swedish style of regulation seems to be a mix of negotiation phases, regulatory threats, imposing fines, balance of power, play on firms reputation. Reading Curt Andersson, it seems that the Swedish institutional framework gives heavy means to regulator in order for him not to have to use them. This was also the case in New Zeland's experience of « light handed regulation. » This style of regulation could be light because competition authorities had the power to impose a price control if they did not succeed in reaching an agreement with firms[1]. If fines are decided by the swedish regulator, these fines are not finally paid by firms : settlement tends to occur.

Redesigning interests

Regulation is politics in another sense. To be efficient, regulation has to work on and redesign interests. As Alfred Kahn, the very well known economist and deregulator of the civil aviation in the United States, has stated : *"What economists are good at, in politics, is pointing out the benefits of economically efficient arrangements. That fact that a policy is rational from society's standpoint is, of course, no assurance it will be adopted. It is helpful, nevertheless, that regulatory reform is not a zero-sum game. The trick is to introduce it at times and in ways that demonstrate that fact : that everybody - or almost everybody - can win."* [...] *"Ultimately regulatory reform depends on the emergence of coalitions of public and private groups with a strong interest in pressing for it. The possibility of moving closer to social efficiency constitutes a very favorable precondition, but it will take*

[1] Bollard Alan & Pickford Michael (1997) "Utility Regulation in New Zealand" *in* , Beesley Michael (1997) *Regulating Utilities : Broadening the Debate.* London, the Institute of Economic Affairs, pp. 75-129.

effective political leadership to take advantage of that opportunity and mobilize the requisite forces »[2].

Curt Andersson's paper shows that there were advocates of a more flexible system in the telecom, like Volvo, the car manufacturer. The Swedish regulator was able to rely on various interests : clients, European Institutions, new entrants, in order to open the market.

Decisions of regulation

The paper also emphasizes the role of economic models, of consultation papers, in shaping decisions. To enlight its decisions, the Swedish regulator has had the opportunity to use studies coming from other countries (USA, UK). But Curt Andersson suggests that regulatory decisions remain uncertain and cannnot be completely determined by economic models. Decisions are always a compromise between fighting interests. For example, access prices must be sufficiently low to help new entrants but sufficiently high to finance investments. One could imagine that economic models could give the optimal solution. Actually, they help to shape decisions, but they hardly give the optimal solution. In that sense, regulatory decisions remain political : a balance, difficult to reach, between fighting interests.

2. Politics and the fall of regulation

When economists set up the regulatory framework in the United Kingdom, they saw regulation as a transitory state, helping monopoly markets to become competitive ones. Once competition would be introduced and effective, regulation was supposed to wither away[3]. At the beginning of the eighties, competition in the telcom seemed very unlikely. There was one network in each country. Competition was expected only at the stage of the services, and on a limited scale. The duopoly in the United Kingdom was unstable. Mercury had marked difficulty to expand. Just appointed, the first British regulator, Sir Brian Carsberg was struck by the way competition developped. So, to sum up: regulation was supposed to be transitory and to disappear once competition had occur ; competition occurred in that industry at an unforeseen speed. Nevertheless, regulation is still alive, and well alive.

Consequently, there is a paradox : we have in the telecom an unexpected competition and an ongoing regulation. In 1937, Sigmund Freud wrote a paper, the title of it was : « analysis terminable and interminable. »[4] The same could be aked as regards regulation : is it terminable or interminable ? The importance of the question was stressed by Stephen Littlechild : *"permanent regulation is more complex than temporary regulation"*[5].

One element of the answer could be : competition is not sufficient for regulation to disappear. But competition is always, in every market, imperfect. In every industry, there is some sort of economies of scale, of barriers to entry, and so on. In spite of that, there is not a regulator in every industry. So, at what conditions can regulation disappear ? That is the question asked by Curt Anderson at the end of his paper. If my memory serves me well, that is the question I asked to him two years ago at the Conseil d'Analyse économique, in Paris. I must confess that the answer he gives in his paper does not seem to me fully convincing. It could be thought that

---

[2] Kahn Alfred E. (1982) "The Political Feasibility of Regulatory Reform." *in* Graymer LeRoy & Thompson Frederick [ed.] (1982) *Reforming Social Regulation : Alternative Public Policy Strategies.* Beverly Hills, Sage, pp. 247-263. Qotation : pp. 258- 259

[3] Steven Littlechild : *Regulation of British Telecommunications Profitability.* Londres, HMSO, 1983.

[4] Freud Sigmund (1937). « Analysis terminable and interminable ». *International Journal of Psychoanalysis,* vol. 18, pp. 373-405.

[5] Steven Littlechild : *Regulation of British Telecommunications Profitability.* Londres, HMSO, 1983, p. 60.

permanent regulation and temporary regulation are different by nature. Can a regulator regulate without knowing if regulation he/she is to decide upon will be permanent or temporary ? Few regulators have started their jobs questioning themselves about creating the conditions for losing it. Curt Andersson notes that operators themselves do not have a firm position : « The balancing of short term advantages to long term detrimental regulatory intervention is still not addressed in depth by most operators. »

I suspect that the fall of regulation is also a political problem : an institutional issue, the redesigning of interest groups coalitions and the making of decisions.