

○ PORTUGAL AMONG THE WORLD'S BEST EXAMPLES

Mário Lino, Minister of Public Works, Transport and Communications

The Government has been implementing a modernisation programme for Portugal based on the creation of a new generation of infrastructures for the **Economy and Society of Information and Knowledge**.

We are undertaking a true technological revolution which is crucial for the country's modernisation and which must be thoroughly inclusive, allowing all Portuguese citizens to access the Information and Knowledge Society.

When the current government took office, during a time of significant imbalances, paucity and delays in the development of this activity sector, it began by working out the actions needed to stimulate and enable exponential growth of the competitive atmosphere then in place. It namely approved the **Technology Plan**, encompassing a coordinated set of policies meant to stimulate the creation, dissemination, absorption and use of knowledge, as a lever to transform Portugal into a dynamic and global economy

Aware that the **Communications Sector** is undeniably a critical sector for the entire process of modernising the country, we decided on fundamental priorities, many of them already accomplished.

We were able to assure full coverage of the territory with broadband infrastructures.

We connected public schools to the internet via broadband.

Under the Technology Plan an **e-School Programme** (which includes the **e-Teacher, e-Opportunities and e-Little School Programmes**) was launched and is totally consolidated, part of a policy marked by the emphasis on knowledge and the spread of broadband internet access, by making portable computers with mobile broadband access available to primary and secondary school students, to pre-school, primary and secondary school teachers, and to trainees in the New Opportunities Programme.

The programme has been a success nationally and internationally, and we have already topped the impressive number of 1 million computers distributed through this programme. We have been able to ensure that everyone, regardless of social status or education level, can have a portable computer with broadband internet connection at their disposal.

The e-School Programme has been distinguished internationally and we have signed bilateral agreements with other countries with a view to exporting this programme, whose purpose is to encourage widespread use of computers and broadband in schools.

In the area of **mobile networks**, all the set challenges have been overcome and Portugal is now clearly among the front rank of European mobile, in terms of both voice and internet.

In **voice**, we will soon reach 15 million users; the overall internet figure already stands at 4 million.

In **television**, our infrastructure is unique at European level in the cable and satellite area, serving 3 million customers with diversified content ranging from sports to films. We recently launched **Digital Terrestrial Television (DTT)**, which will make digital service commonplace in Portugal – this new technology will be available to the entire population by the end of 2010.

On the other hand, we have the highest rate of direct **alternative operator** access, as indicated in the European Union's 14th Implementation Report.

The alternative operators already account for 36.5 percent of the market, double the European average of 18.6 percent.

This is one of the indicators that effectively enable the sector's level of competition to be gauged.

The activity undertaken by the sector regulator **ICP-ANACOM** has contributed a great deal toward these results.

The regulator is meant to assure correct market functioning from the standpoint of consumers and citizens. It is supposed to intervene when the market is not functioning as it should, but should not substitute the market where the latter can suitably function.

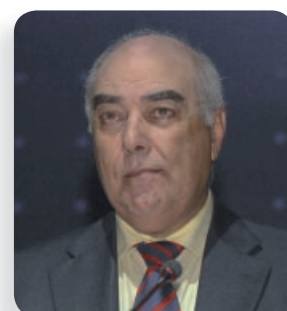
The main principles governing a regulator's action should be fairness, efficiency and quality of service.

The regulator must therefore also be evaluated to see whether or not it has been able to ensure fair prices for consumers, improved quality of service provision and the development of various alternative options to available services.

To that end, a policy of encouraging investment in infrastructures, as well as the promotion of interoperability and innovation, respect for technological neutrality and for a regulatory framework that protects consumer interests, must necessarily be applied and followed.

Now in a sector as dynamic as that of electronic communications, such investments necessarily imply technological and commercial risks. For this reason, as I have often repeated, regulation should stimulate and reward the risk taken by those who invest.

Regulatory stability is a prerequisite for the promotion of investment to modernise networks and create new multi-service platforms, as it creates the conditions needed to invest and obtain adequate return on the invested capital.





The results obtained today indeed reflect the regulator's activity on the one hand, and on the other the policies and tangible measures adopted by the government. This is obviously besides the excellent response to same by the operators and other players in the sector.

I am very proud of the results achieved to date. But this should not prevent us from continuing efforts to improve our indicators, because at the level where we're situated, we have to increase our ambition in order to consolidate our position among the most advanced countries in this area.

We must thus keep in mind that electronic communications is an industry and that without networks there are no services. So investment must continue to be made in the sector, new networks must be created, existing networks modernised.

Our ambition is obvious: to transform Portugal into a model country which is an example in the area of disseminating information and communication technologies, so that populations can enjoy the external benefits generated by the investment meant to make the economy more dynamic, create jobs and foster technological development.

In this regard and with a view to ensuring Portugal's place in the vanguard of the global communications sector, the government approved a programme to promote investment in **Next Generation Networks** (NGNs) as a strategic priority for the country, as it considers

such networks to be a way to guarantee that most consumers have access to technologically innovative products and services.

NGNs don't just mean an improvement of existing networks, but rather the introduction of networks of a new kind, nowadays deemed crucial for the communication sector's evolution and development.

The definition of this priority has been accompanied by an ambitious plan to assure development of these infrastructures.

It is important to note that investment in NGNs is the cornerstone of a strategy to modernise the Portuguese economy and society set out in the Initiative for Employment and Investment approved by the government, which contains the following measures, among others:

- modernisation of technological infrastructure – broadband and next generation networks;
- support for investments in broadband and next generation networks through investment in fibre optic networks;
- tax deductions associated to NGN equipment and facilities.

The existing broadband networks already carry high bandwidth services, thus contributing towards citizens' economic and social wellbeing. Yet the continual evolution of services and applications with high speeds means the current networks will be unable to satisfactorily meet consumers' needs as they seek more and better services.

We are therefore endowing the country with more advanced communications networks, with more innovative services and in modes enabling access by families and companies.

These investments are decisive for ensuring a strong sector that generates positive external benefits, specifically investment in adjacent sectors (software, multimedia, systems engineering), besides fighting info-exclusion. However, and despite the infrastructures currently in place in national territory, there are areas of the country that the market doesn't reach.

Two of the main critical factors for the business viability of investment projects for electronic communications networks are:

- population density, which determines how much it costs to take the network to places;
- per capita income, which determines the potential revenues generated by the network.

These two factors enable two kinds of regions to be identified:

- urban areas and along the coast, where at least one of the two variables is clearly favourable – the markets are by themselves expected to drive NGN development;
- rural areas and the interior, where neither of the variables is favourable – NGNs would in all likelihood never be implemented without State intervention.

In the past this situation generated a country at two speeds: areas where the market 'resolves' things versus areas with no competition.

This government wants to leave no-one behind, especially in a sector critical for the country's development. The NGNs are in this sense an instrument that generates economic, training and development opportunities, to which we want all Portuguese to have access.

In this context, the government launched five international tenders for the construction, upkeep and operation of **next generation networks in rural areas**, namely in the Centre, North, Alentejo and Algarve, Azores Autonomous and Madeira Autonomous Regions.

Our aim is thus to plug market gaps throughout national territory. The introduction of NGNs in rural areas will help further equal opportunities among all citizens, decisively promoting info-inclusion and enhancement of human capital. Over time this should enable externalities to arise in rural development policy, with respect to employment, growth, competitiveness and sustainability of the industries based in those areas.

The promotion of conditions that allow investment in NGNs has become essential in order to further boost the national electronic communications industry, thus corresponding to the choice of a path which places Portugal among the world's best examples in terms of the quality of communications services provided.

With this in mind, the importance of the new networks and the set strategy would be incomplete if we didn't think of making our industry more dynamic. Portuguese industry will have to take the necessary steps to produce fibre optics, all the optic transmission required for the networks, and also the TV boxes and modems which we have today in our homes.

A financial support line was therefore also announced as part of the Compete programme for supporting **R&D and industry**.

Full achievement of the defined goals will involve the appearance in national territory of an industry able to satisfy our needs and even of an important part of the international market.

We should likewise favour support for the development of **services to be supplied over the network**, which should take advantage of the high speed transmission provided by fibre optics.

In this case we hope to see the birth and development of an industry focused on less material areas and to provide the market with advanced services, within the shortest possible time period.

Fibre capacities will lead to the emergence of applications and services until now either non-existent or limited only to the largest companies' areas of intervention.

Our aim is clear: for the Portuguese to be the first European citizens to benefit from these investments and from access to these technologies.

We intend to establish in Portugal an **industrial cluster** with a significant national component and international participation that consolidates true multinational alliances to enrich national capabilities and streamline access to international markets.

This cluster should make good use of Portugal's progress in terms of networks to thus appear with a competitive advantage internationally, specifically by offering GPON on a Box. The latter will be a key-in-hand network with all components, from fibre to optic technologies and even the installation of advanced services, which we'll also be able to offer on the international market.

Finally, with all these efforts, I am certain that the post-crisis Portuguese economy will be more competitive and come out stronger.

We will be more modern, with more qualified jobs, we will place Portugal among the best examples worldwide, and I have no doubts about stating that



as a result of all the work we have done we shall take our place in the front rank of the communication sector in international terms, with the credibility of having in our country one of the most advanced markets in Europe.

○ TELECOMMUNICATIONS – FROM MONOPOLY TO THE BOOM IN SERVICES AND TECHNOLOGIES

ICP-ANACOM – the Autoridade Nacional de Comunicações – was established in 1989, precisely 20 years ago. Two decades of life, in which it witnessed and promoted many of the changes affecting the sector, in what was one of the most dynamic periods with respect to telecommunications. Technologies appeared, developed and were replaced with extraordinary speed. Monopolies fell one after the other, giving way to a multiplicity of operators. Companies had to focus once again on the market, driven by consumers increasingly conscious of price and quality.

The sector recorded strong growth as a result of this trend. The more than 9 billion euros in total profits currently recorded (electronic communications account for about 90 percent of the total, and postal service the rest) are far from the 1.2 billion euros registered in **1989**. Impressive growth for a sector which makes a significant contribution to the wealth produced in the country and which today represents around 4.7% of GDP.

But such was the evolution experienced over the last 20 years. In **1989** that was not the situation. What exists today has nothing to do with what was there when the so-called ICP-Instituto das Comunicações de Portugal was created as a public body meant to regulate and oversee the postal and telecom-



Twenty years ago the sector counted five companies, all of them public.

munications sector, including a technical aspect (management and supervisory control of radio spectrum, certifications and communications equipment conformity assessment).

Indeed, while there are nowadays several dozen operators, in **1989** there were only five companies in the Portuguese telecommunications sector, all publicly owned: TLP, CTT-Correios e Telecomunicações de Portugal, Companhia Portuguesa Rádio Marconi, Telepac and TMN. CTT and TLP were shareholders of these last two.

While TLP was responsible for providing telecommunications services in the Lisbon and Porto metropolitan areas, CTT was in charge of providing telecommunications services in the rest of the country (a sector made autonomous in **1992** with the new company called Telecom Portugal), besides taking care of postal distribution. Marconi oversaw international traffic.

Beyond voice services, an activity which in analogue mobile was pursued in consortium by CTT/TLP, whence TMN arose, there was only data communication service.

Liberalisation began in **1991** and as the sector opened up the panorama began to change. In the early 1990s the first steps were taken to open more services, such as mobile, video-conferencing, videotext and paging. At the same time the launch of other services was prepared, among them value added services, which gave rise to Sevatel, along with the publication of telephone directories and exploitation of the respective databases through a company called Directel.

The first area to open to competition, in **1991**, was terrestrial mobile telephony, where a licence was granted to Telecel to operate the service using GSM technology. The service had existed since **1989**, provided by a consortium of the public telecommunications operators.

Competition lowered the prices of the service and the terminals, which in the beginning cost up to 4,000 euros, leading to market expansion and widespread use of the service. Mobile telephony's evolution in Portugal went beyond all expectations, and even became one of the top successes worldwide, creating room for a third operator to move in several years later: Optimus in **1998**.

Just to have an idea: in **1989** there were 3,000 mobile telephone users, versus the more than 15 million existing today. This puts Portugal in the front rank of European mobile communications, behind Greece, Italy, Luxembourg and Lithuania.

Despite the great success of this sector, not everything went well. In **2000**, and given the continual growth, the government decided to grant one more licence to operate mobile service to Oniway, upon the introduction of third generation mobile technology, UMTS. But the operation eventually failed. The market's three existing operators, Optimus, TMN and Vodafone, successively refused to provide interconnection, failing to comply with ICP decisions, and this led to the project's untimely end.

Other mobile service operations also did not go well, such as paging, which arrived at the same time as mobile service. The **1991** tender was meant to grant three nationwide licences and five regional ones. Three new licences were eventually awarded: to Finacom, Telechamada and Contactel, who thus joined Telemensagem, the first to enter the

market and which still had a monopoly. However, the operators found it hard to compete with mobile phones and a few years later those operations were discontinued.

Also in the mobile area, there was another business whose success was below initial expectations: trunking or mobile service with shared resources. Here as well two licences were awarded, to Repart and Radiomóvel, but the business of those operators never fully met expectations. The service then underwent a



Mobile service is one of the most successful and now has more than 15 million subscriptions.

technology upgrade and in **1999** began using Tetra digital technology, but even this did not substantially change the situation. Radiomóvel ended up buying Repart; both remain active in the market, but they are niche operations with only a few thousands users.

In **1991** legislation was enacted to allow the creation of cable television distribution networks on a full access basis – any interested party could now apply to ICP and request authorisation to begin activity. Despite this, only one nationwide coverage project resulted, TV Cabo Portugal, held by the incumbent operator and which started operating in **1992**. Other projects eventually came forward, but they were regional, examples being Pluricanal, Bragatel and Cabovisão. A few years later those entities received permission to provide telecommunications services using their networks.

In the mid-1990s the government decided to reorganise the sector with a view to its privatisation. It set up a holding company, CN-Comunicações Nacionais, to which it transferred all its shares in the sector, and then engineered a merger between TLP and Telecom Portugal, subsequently integrating Marconi in this new entity. There was now one single operator providing fixed telephone service – Portugal Telecom.

This new company's capital was later privatised in five phases, with the process ending in **2000**, the year that fixed telephone service liberalisation began. All of PT's capital became private, except for 500 shares with special rights that are still State-held.

Even before fixed service was opened to competition (the last to open), a tender was launched in **1999** to award FWA licences. There were several candidates and 11 licences were assigned to the tender. Yet three years later the coverage and number

of installed base stations were less than expected, beyond the fact that two of the licensed companies had ceased activity. This led the national regulator to re-examine the entire process.

The aim was to see who was effectively interested in the licences and who had spectrum needs. In the wake of this process the titles were reworked and awarded to Ar Telecom, Novis, Oni, Vodafone, WTS, PTC and Broadnet, and it was possible to free up some spectrum which could return to the market on a full access basis.

The liberalisation of fixed telephone service finally began in **2000**. Portugal persuaded Brussels to grant an extension that would allow it to open this market five years later than in the other European Union countries, in **2003**, but decided not to use this postponement and opened the market in **2000**. Yet the process was slow and difficult.

The liberalisation model adopted in Europe was based on opening the basic telecommunications network held by the historic operator to its competitors. But its application in Portugal did not go well, generating an outpouring of criticism that is still mentioned today to explain the problems faced by the alternative operators.

The sector's opening raised a great deal of interest. Dozens of companies appeared ready to operate in this market, yet three or four years later most of them had disappeared. They either gave up on the business or failed, or were bought by some competitor. Telecommunications is a capital intensive sector requiring huge investments with delayed returns, and many of the projects did not have sufficient financial muscle. This circumstance, along with the existing access deficit (the country's only existing networks belonged to PT, which caused many problems for the development of new operators), only made the situation worse. The disappearance of some operators led to the appearance of unemployment in the sector, following the euphoria experienced with the technology bubble.

Portugal Telecom itself wanted to become more efficient in order to cut costs and improve margins. This led to the suppression of thousands of jobs in the fixed telephony area. Even the new operators who survived, who were founded with expectations of business growth that did not subsequently happen, had to adjust their operations, lowering salaries. And companies that one or two years earlier had inflated salaries in the sector ended up contributing to the crisis in which the sector now found itself, exacerbated by the economic recession which began to be felt in **2001**.

To overcome the difficulties faced by the alternative operators and improve the situation, creating more suitable competition conditions, the ICP proceeded to adopt a wide range of regulatory measures. These included a number of obligations imposed on PT, running from the obligation of non-discrimination, transparency and price orientation to costs, and the reduction of interconnection prices. PT was also forced to launch wholesale offers for leased lines, conduit access and local loop unbundling, so that market access conditions could be fairer for the new operators, as well as wholesale offers for the products and services which it sold

in retail. These measures were accompanied, among others, by better conditions for accessing PT's exchanges, improvement of the wholesale service the latter provided, with the setting of quality indicators, and the improvement of many of its offers, especially regarding local loop; it was also forced to launch a wholesale network subscriber line offer.

This intense activity by the regulator led to an improvement in the market's competition situation, as can be seen by the sharp growth in the number of unbundled local loops (now over 300,000), the number of exchanges with co-mingled operators (258 at the end of last year) and the growth of the alternative operators' market share.

But technological evolution continues and with the switch to fibre optics and the creation of next generation networks there is a great deal of market expectation about the impact same will have on the sector and its players.

Yet for now, and given that fibre is still in the launch stage, with the operators starting construction of their new networks, the situation is quite different from what existed in **2000**. Today competition is a reality and the new operators already hold more than a third of the fixed voice market. Portugal Telecom has in fact lost market share and currently only holds 62.3 percent of direct access customers, while at the same time its traffic share has been reduced to 64.5 percent in minutes and 65.3 percent in terms of calls.

While such is the situation of fixed service, Portugal is experiencing even more competition with broadband internet. First off because, as opposed to fixed voice (a mature market in which a large number of operators began to dispute a market that was not growing, and in which some operators inevitably grew at the expense of the others' market share, namely PT), with the internet we were dealing with a new service that had growth potential.

Once again, the regulatory changes introduced enabled the new operators to gain market in this area and PT began losing hegemony. The new operators were even responsible for the growth of broadband use, as a majority of customers entering that market were very often attracted to them.

Internet use began to become significant as access speeds increased. Today there are more than 1.7 million fixed broadband users.

PT no longer dominates this market, given that 57.2 percent of broadband customers pertain to the alternative operators. The implemented regulatory measures contributed to this about-face, namely the extent of price cuts and operational conditions for local loop unbundling, as well as PT's decision to split off its cable internet and television business. PT had been forced to adopt this measure following the unsuccessful takeover bid by Sonaecom in **2006**.

This business circumstance eventually caused an impact. In order to protect itself from a new attempt and to end criticism that it made its competitors life hard because it owned Portugal's two only existing access networks, PT decided to make that business autonomous, thereby losing force in the broadband market. It nowadays has a 42.8 percent share, while the alternative operators hold 57.2 percent, with Zon possessing 32.3 percent of that market. In any case, the broadband internet (fixed and also mobile, which has recorded enormous growth, among Europe's highest) and subscription television are areas where competition is currently more dynamic, with Zon and PTC's

Meo fighting over new customers.

And this should continue to happen. Above all because PT won the tender for the digital terrestrial television platform for paid channels (it was granted licences to operate Mux B thru F in June, and had already obtained the Mux A licence, which houses the four current open signal channels), which will add some capacity to what it already has.

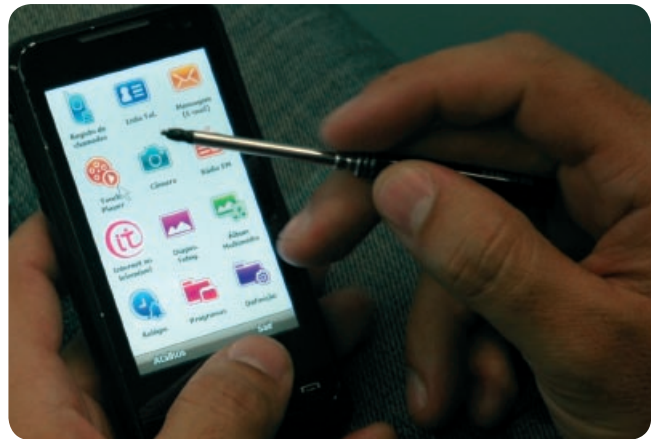
Note that in **2001** the first tender was launched to award the operation of a digital terrestrial television platform, which eventually failed; the licence was returned by PTDP in **2003** and subsequently cancelled.

The current period is marked by the creation of next generation networks, which open up an entire world of new possibilities regarding the transmission of data and images at extremely high speeds.

PT has already begun installing fibre optics, along with Sonaecom, Oni and Zon, which uses the Docsis 3.0 technology, and all have already made commercial offers available.

To encourage the launch of fibre optics in Portugal, creating the next generation networks, a protocol was specifically established between PTC, Sonaecom, Oni, Zon and the government in May of this year, aiming to speed up this process. The protocol is open to the entry of other operators.

Under the terms of this protocol, the operators commit themselves to investing around 1 billion euros and to anticipating to **2009** the assignment of resources that enable the connection of a fibre optic network for a million and a half users.



Mobile broadband has registered major growth in Portugal, among Europe's highest.

To ensure that fibre reaches everywhere, the government decided to launch tenders with a view to installing the new networks in rural areas. Tenders have already been put forward for the Centre, North, Alentejo and Algarve, Azores and Madeira regions.

ANACOM has in turn already made public in a draft decision its regulatory approach to next generation networks. This is an important step much demanded by the market, which wants to be sure of the NGNs' regulatory framework before making investments.

○ POSTAL SERVICES EN ROUTE TO TOTAL LIBERALISATION

The history of the postal services sector, at least up to liberalisation, might be confused with the very history of CTT-Correios de Portugal. When the ICP-Instituto das Comunicações de Portugal was founded in 1989, CTT was not just a postal operator. A large part of its business involved telecommunications, more tangibly telephone connections throughout the country, except in the Lisbon and Porto metropolitan areas, which were assigned to the other also entirely state-held telecommunications operator, TLP-Telefones de Lisboa e Porto.

Together with TLP, CTT was a stakeholder in Portugal's only existing mobile operator, which later gave rise to TMN. It was present, also in partnership, in paging, value added services and directories.

Telecommunications at the time accounted for a substantial part of CTT's activities and revenue, representing the lion's share of investment made by the company. This situation only changed in 1992, when a new autonomous company, Telecom Portugal, was formed to take charge of its telecommunications activity, and CTT became a limited company focusing on postal service. When the ICP was established in 1989, CTT's postal activity was growing. A large part of the market was closed to competition and postal traffic was evolving quite favourably. It had grown 9 percent over 1988, especially in priority mail, which grew 45 percent; the same occurred with postal financial products.

The Postal Green Paper was being prepared in 1990. It approached the matters of defining reserved basic services, indexing tariffs to costs and obtaining Europe-wide quality standards. This community document was published two years later, in June 1992.

For the national postal operator, that year saw the launch of the Telecom Portugal brand image as well as preparations to create a new brand image for Correios de Portugal, with a view to separating the two activities, as actually happened in 1992.

From then on CTT focused on postal service, with part of its activity dedicated to philately; it was also active in the area of postal financial services.

The network of Correios post offices counted more than a thousand, for a total of around 18,000 attendance points, also including stamp sales points and stands. Until 1992 the prices of public postal service provided by CTT were administratively set by the government. At that time prices began to be regulated by the ICP-Instituto das Comunicações de Portugal. A Price Convention went into effect in 1993. From 1995 on it included quality of service indicators which the company had to obey. This convention was annually signed by the ICP, CTT and Directorate-General of Competition, pursuant to Decree-Law no. 207/92 of 2 October.

The company made efforts to improve the quality of service, reducing mail delivery times. In the following years the competition from telecommunications began to be felt. However, at that level the biggest impact was expected with postal sector liberalisation, which got under way in 1999.

Two years beforehand, in 1997, a community directive was approved which instituted common rules for the development of postal services and improved quality of service. Universal postal service and progressive market liberalisation were established, with the opening to competition.



CTT is the postal operator that provides universal service.

This directive was transposed to Portugal in 1999, giving rise to a new legislative and regulatory framework following approval of the Basic Law on Postal Services and the Concession Bases for Universal Postal Service. This framework formalised the gradual liberalisation of postal services and guaranteed the continuity of quality universal service at affordable prices. Universal service encompassed the collection, processing, transport and distribution of addressed postal correspondence, including direct mail up to two kg and postal packages up to 20 kg, for national and international service. The universal service operator, CTT, was granted an area of reserved services, provided on an exclusivity basis, to assure the viability of universal service.

Notwithstanding this area of reserved services, the Basic Law envisaged the provision of postal services on a competitive basis through the concession of general authorisations and individual licences.



The postal market will be completely liberalised as from 31 December 2010.

When the new legal framework took effect in 1999, the CTT signed a concession contract with the State and services prices began to be defined by a price convention (the first was signed in 2001), an instrument accompanied by a convention on quality of service levels the postal regulator had to meet.

Although postal service liberalisation got under way in 1999, it was only in 2001 that new operators began to be authorised pursuant to Decree-Law no. 150/2001 of 7 May, which established rules for their operations.

At the beginning of the liberalisation process the performance of the historic operator, CTT-Correios de Portugal, was marked by growth – a result of the increased economic activity and the sector's own dynamism. Mail traffic grew ahead of growth in economic activity. The same trend occurred with priority mail, packages and other CTT activity areas.

Despite the good performance, CTT sought ways to confront the expected competition and went ahead with the creation of new companies and businesses. Such is the case of Postlog (later CTT-Expresso), whose aim was to provide services involving the collection, processing, transport and distribution of documents, merchandise and other mail, as well as service in the logistics area; and Telepost, which provided services in the area of information, communication and message distribution systems.

However, the effects of 11 September 2001 and the start of the Iraq war led to a sharp economic downturn nationally and internationally, which impacted postal activity in the following years.

That was otherwise the year when new companies began to dispute the liberalised part of the market: DHL, TNT and Chronopost thus joined CTT Expresso to operate in one of the market segments now open to competition.

As new companies entered the market, competition intensified, based on price, quality and innovation of products and services. The transnational operators concentrated and operated in the national market, mainly in courier service, though also in the traditional mail and package products, as well as newspapers and periodicals, direct mail and non-addressed advertising mail.

The increased competition caused CTT's market share in terms of objects in the liberalised area to fall to 93.6 percent in 2001. If only express mail is considered, then CTT Group's share was 63.5 percent.

In 2002, besides the aforementioned companies, UPS, Rangel, SDIM and Notícias Directo entered the market, for a total of nine operators. This led to a new reduction in CTT's market share to 92.5 percent, 60.7 percent if only express mail is considered.

At the same time that competition in the sector increased, developments in the telecommunications and computer sectors enabled new services to appear, such as fax, EDI and internet, which began to increasingly threaten traditional mail service. On the other hand, the technologies' development did serve as a postal service modernisation factor vis-à-vis the offer of services (hybrid mail, postal electronic mail, electronic commerce).

These circumstances were joined in 2003 by a new, second phase of postal sector liberalisation, and competition increased. In 2003 CTT's reserved area changed from mail up to 350 grams to 100 grams and three times the price of a 20 gram letter in national priority mail. And as the market opened, new operators entered the market. In 2003 a total of 13 operators were working in the liberalised areas.



The postal services sector now counts more than 50 operators.

That year CTT's market share in services not covered by express mail was 94.1 percent, while in express mail the new operators already held 47.8 percent of the market.

Along with the more far-reaching liberalisation, electronic competition continued to increase: the internet expanded, as well as services provided over the network; people began to use SMS to send personal messages, respond to competitions, opinions, etc, which had previously been done using physical means. MMS and third generation mobile represented yet another threat to postal activity.

At the same time, new operators began to dispute the CTT's market. Small and medium sized operators multiplied, operating in areas with lower costs and/or more profits; the competition was greater in the express mail, packages and international mail markets. This situation accentuated in 2006, the year when the third and last phase of postal sector liberalisation began, which extends to 31 December 2010. In this phase, mail up to 50 grams with a price 2.5 times the 20-gram priority mail tariff is reserved for CTT.

As a result of this process there are today more than 50 operators working in the liberalised areas and CTT has a market share of 41.7 percent in express mail and 94.7 percent in services not covered by express mail, according to June 2009 data.

The market will be fully liberalised as from 31 December 2010. The advantages of greater competition brought by market liberalisation should lead to an improved level of services with respect to quality, price and choice for customers.

Directive 2008/6/EC keeps the scope of universal service unchanged and enhances consumer protection. Regarding the latter, for example, it applies minimum principles for complaints handling to all postal operators and not just universal service providers, which in Portugal's case was already established by national legislation.

In line with the new Directive, it is now also necessary to determine whether the appropriate means for ensuring the availability of universal service should be the designation of one or more providers of this service, or if same should be based on market forces or public tenders.

It will also be necessary to work on adjusting the national legislative framework to the new Directive in such important points as universal service financing (should it eventually be necessary to cover part of the net costs of providing same) and the rights and obligations of the market operators.

○ INNOVATION AND NEW CHALLENGES

Diogo Vasconcelos, President of APDC

The rapid development of communications and the increasingly vital role they play not just in other economic sectors but also in public administration and civil society at large are factors that set huge challenges for sectorial regulation. One of them is surely to make regulation accompany the speed of market transformations, which may or should lead to a reinvention of the role of communications regulation, so that it can provide more efficient responses adjusted to the needs of a business that is also undergoing far-reaching and constant change.

When it was founded in November 1989, then as the Instituto das Comunicações de Portugal (ICP), the Autoridade Nacional de Comunicações (Anacom) was one of the first regulators at European level. It was involved in the entire process of reorganising the State's business sector with respect to communications in the 1990s, as well as privatising the current Portugal Telecom which resulted from that restructuring. Under the regulator's guidance the process of liberalising the Portuguese communications market moved forward in accordance with the rules and timings agreed on with Brussels. This took place gradually until the sector was fully open, in a process marked by difficult equilibriums.

Besides the typical duties of a sector regulator, Anacom's statutes assigned it duties to advise the government, "upon the latter's request or on its own initiative, on the determination of strategy lines and general policies regarding communications". This responsibility derives on the one hand from the non-existence in central public administration of a body with duties of such type and on the other from the quality of the regulator's work. Future institutional evolution, however, should perhaps weigh the separation of regulatory and advisory attributions, which have diverse natures. This would imply creation of a body on the lines of the Directorate General of Communications or the assignment of that duty to a body which already exists in public administration; Anacom, being an independent body, would henceforth "collaborate with parliament and the government in drawing up policies and instruments concerning the sector" (as set out in the ERSE Statutes).

For companies as well as consumers the last 20 years of Portuguese communications have represented a true and total revolution.



Everyone is now familiar with concepts such as mobility, bandwidth, always on access, cable, copper-wire, fibre, third generation mobile, digital television, convergence, triple or multiple-play. Today it would be unthinkable to live without communications or, broadly speaking, without information and communication technologies (ICTs). Our way of being, of life, learning, working and interacting, depends on them.

By putting the world just a click away, the internet sped up the process of change unleashed by the ICTs. It went from being an information service to being an absolutely crucial infrastructure for all sectors of society, in a way unimaginable even 20 years ago. And this is just the beginning. The future promises more speed, more challenges, new paradigms with the massive launch of next generation networks. These high speed networks imply a low latency symmetric internet which paves the way to the society of the future.

It will have huge impacts on such high-growth sectors as health, elderly services, education, environmental services and energy. They mean a new infrastructure for the country, and their effects will be felt for decades.

Economic history associates growth cycles to new technological infrastructures. The mobile networks already offer excellent bandwidth, but the real game will be played with fibre optics. House-to-house fibre, symmetric 100 Mbps and low latency mark the new communication standard expected in coming decades.

For operators, this means the possibility that they can have a new network architecture, everything IP-based, more efficiency and lower costs, more competitiveness, new innovative services. For the economy this means more competitiveness, the possibility of tele-working, tele-attendance, more collaboration. For consumers it will imply new services, more choice, more online life, more remote and on-the-move work, better access and production of information/content, specifically video.

Next generation networks are a technological and market challenge, but also a tremendous challenge with respect to social innovation. For all this to happen it is essential to mobilise the entrepreneurial capacity of companies, the public

sector and the social sector, because to use the potential of broadband networks to create new responses to the major problems society faces represents a significant opportunity for social innovation. The APDC is deeply committed to the goal of fostering the creation of next generation content, as are the sector players and public administration.

Sector regulation will continue to play a crucial role in the development of communications and now of the high speed networks, always within the framework of rules set by the European Union for the European space and under community co-ordination and co-operation. The solutions in the New Regulatory Framework will create a European regulatory authority and oblige consultation with the other regulators and the EC – whereby regulation will increasingly require an ever complex regulatory balancing act, taking into account the specificities of the national internal market. The challenge

is to promote investment, innovation and competition. But the national sector regulator has singular capacities to reinvent itself and increase its efficiency: it has credible leadership, prestige to attract talent and financial capacity.

Only by joining all efforts, public and private, can we fully benefit as a country from all the potentials the technologies allow us. This is indeed a challenge for everyone – in which the APDC will offer unconditional support. As the ICTs

comprise one of the sectors that most contributes to the GDP, modernisation of the economy and innovation, they will have to mobilise for a new opportunities agenda. Because only an approach marked by total innovation, in companies, society and public services, will enable Portugal to overtake the crisis and begin a period of sustained growth.

As President of the APDC I would like to publicly acknowledge the collaboration between both entities and to highlight Anacom's inestimable contribution towards development of the information society in Portugal.





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