2004

11th Annual report

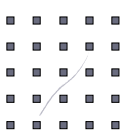
BELGIAN INSTITUTE
FOR POSTAL SERVICES
AND TELECOMMUNICATIONS

BIPT

2004

11th Annual report

BELGIAN INSTITUTE
FOR POSTAL SERVICES
AND TELECOMMUNICATIONS



MESSAGE OF THE COUNCIL

The BIPT Council has the pleasure of presenting its annual report, the eleventh in the Institute's history.

In order to mark a change from the first decade of operation, the Council members have wished to revamp the presentation of the report in order to provide a wider audience with a document that rounds up the defining events of the past year in a clear and plain language.

This report describes developments in the postal service and telecommunications sectors in the context of the opening up of markets and in the light of technological advances, which have themselves sprouted new services or instances of convergence and substitution. The year 2004 was rich in events and sudden developments in both sectors, as was the case, albeit at a more modest level, for the Institute. It was by all accounts a very busy year.

Faced with the dynamics of the market, the regulatory authority has seen its tasks grow in complexity and number. They require an ever greater deal of expert knowledge and accuracy. In this respect, the Council is pleased to note that companies and consumers alike value the Institute's actions, which are often taken in a difficult context. In 2004, the world of telecommunications again had to do without the transposition of the package of European directives on electronic communications. Putting the interest of the market first, the Institute managed to provide clear answers by means of circulars, decisions and certain provisions in the Programme Act, thus reducing uncertainties which are inherent to any period of transition. The Institute notes in this respect that the legal certainty that is demanded by the whole market, is sometimes scuppered by the systematic appeals lodged by certain operators against its decisions.

BIPT hopes that its actions will enable a harmonious development of the electronic communications and postal services markets: emergence of new services, better quality and good-value prices for existing services, satisfaction of residential and professional users, etc.

The progress we have made and will continue to make is the fruit of a team effort. The BIPT Council is in no doubt that while reading the following pages, anyone will be convinced of the necessity to extend staff attribution in order to provide the Institute with the human resources to tackle the diversity and complexity of its tasks.

Michel Van Bellinghen
Member of the Council

Georges Denef
Member of the Council

Catherine Rutten
Member of the Council

Eric Van Heesvelde
Chairman of the Council

Our identity

In the liberalised markets of electronic communications and postal services, the Belgian Institute for Postal Services and Telecommunications carries out tasks of economic regulation, of technical organisation and compliance with the regulatory frameworks.

BIPT ensures that interests of sector players and users are protected. These tasks are performed for the benefit of the community.

It is the clear wish of BIPT to fulfil these duties with transparency, cooperation and dialogue.

1.1. TASKS

The actions of the Belgian Institute for Postal Services and Telecommunications fall within the scope of the liberalisation of the network industries. Given the characteristics of these highly technological activities and products, market management is a necessity. This general task is entrusted to regulatory authorities.

Liberalisation of network industries

Since the end of the eighties, the concept and the workings of a number of network industries have been undergoing profound changes. This involves the electricity, gas, transports, telecommunications, postal services and other sectors.

Previously, a monopoly, more often than not held by a state-owned company, appeared to be the formula offering the best guarantee for the provision and durability of the public service, the economic rationale being based on effects of scale.

Gradually, in the world, and more particularly in Europe, this concept has evolved, notably due to contributions from new technologies. The free market and competition between different providers are currently regarded as the best models for reaching the highest performance and customer satisfaction levels, including for network industries and products of "primary need".

Management of the markets

In the implementation of such a new policy, two concerns have constantly guided the legislator.

On the one hand, the market can only exist if there is true competition. And yet, owing to some of their technological and organisational characteristics, the network industries include significant obstacles for new potential players. These obstacles must be lifted to allow the market to work.

Hence, mechanisms must be implemented so that all competitors have access to network infrastructures under fair conditions. At the same time, competition must not give rise to dysfunctions in complex technological systems. Therefore, the economic regulation of markets in the literal sense is coupled with strict technical procedures.

Ensuring the implementation and effectiveness of this competition is the main task of the Belgian Institute for Postal Services and Telecommunications.

A second concern results from the particular nature of the products and services involved and their well-established usefulness to the public. It is essential that the functioning of the market does not disadvantage or exclude certain weak users.

It is also essential that competition to acquire important clients is not waged at the expense of private individuals. Therefore, the public authorities take appropriate measures to that effect, by ensuring a minimum service for all, protecting the private user, laying down specific conditions for defined categories of consumers, etc.

A second task of the Belgian Institute for Postal Services and Telecommunications is to guarantee the protection of some categories of users and to ensure that the services of public interest remain available to all.

These two essential concerns, which are geared towards a single objective of common interest, require appropriate management of the markets.

Regulatory authorities

Powers, forms and statuses of regulatory bodies can strongly vary from one European country to another. But fundamentally, their overall mission remains the same: ensuring that the market works properly, for the benefit of the economic players and all consumers.

1.2. FIELDS OF ACTIVITY

The national federal authorities have empowered the Belgian Institute for Postal Services and Telecommunications (BIPT) with the management of two sectors: electronic communications and the postal sector.

Electronic communications and postal services

In the early nineties, the Belgian legislator created the Belgian Institute for Postal Services and Telecommunications in order to ensure the management of the electronic communications and postal services sectors, made essential by the liberalisation that was taking shape at European level.

As its name suggests, the Institute is competent in two fields of activity. After kicking off in 1993, BIPT's activities have expanded over time, following the emergence of competition in the markets concerned.

Electronic communications

For more than ten years, the telecommunications industry has been undergoing a real technological transformation. The liberalisation of the markets has accelerated and has now been completed in Europe. BIPT exercises its powers through two kinds of activities in particular.

The first concerns new regulatory tasks in the liberal-ised telecommunications markets. BIPT makes the necessary arrangements in order that the regulatory framework is observed, competition can develop fully and fairly, some tasks of public interest are carried out and consumer interests are protected.

The second concerns the exercise of supreme authority in specific technical fields. The space of the electromagnetic spectrum is limited: it must be shared, regulated and monitored with precision. The European legislation acknowledges this "scarce resource" as such, by leaving the States the care of organising frequency plans. In this field, BIPT inherited the know-how of pre-existent services, as this technical reality long preceded any liberalisation. Telephone numbering is also a scarce resource, managed in the same way by BIPT. The Institute carries out yet more technical tasks of public interest.

Postal services

The postal sector is also involved in a process of liberalisation. BIPT is responsible for ensuring compliance with the regulatory framework and the good functioning of the liberalised part of the market. With a specific view to consumer satisfaction and the provision of a universal service, BIPT was also given the task of monitoring some aspects of the management contract that binds La Poste to the State.

1.3.

VALUES

The main concern of the Belgian Institute for Postal Services and Telecommunications is the general interest. Its ambition is to carry out its tasks with independence, transparency, cooperation and dialogue. BIPT nonetheless holds coercive power.

Independence

The Act of 17 January 2003 on the status of the regulator bestows on the Belgian Institute for Postal Services and Telecommunications the status of institution of public interest and ensures its independence. Its Council, composed of four members, takes its decisions autonomously and independently from the government. It has no links with any of the market operators. The corollary of this autonomous decision-making power is that appeal procedures are available to market players as well as to the government.

Transparency

As an administrative authority, BIPT is legally bound to formally motivate its acts while observing the confidentiality of certain information concerning companies and their products. In addition, the statutes of the Institute allow every person who is directly and personally involved in a decision of the Council to be heard in advance.

Cooperation and dialogue

In its daily practice, the Institute favours dialogue and consultation. Before any decision is taken, it conducts in-depth consultations. It then sends out its draft recommendations or decisions so as to allow the parties concerned to respond to them. In case of disputes between them, the operators have the option of requesting a conciliation procedure with BIPT before considering other appeals (e.g. with the Competition Council).

The common good

The actions of BIPT are at the crossroads of areas which provide the access to the information society. Its ambition is therefore to allow this information society to develop harmoniously, notably through fostering competition. The ultimate objective remains that this competition should be beneficial to users and consumers.

Even though the Institute wants to favour transparency, cooperation and dialogue, the cornerstone of its task is nevertheless the observance of laws and regulations. Therefore, BIPT is legally authorised to demand any information that is useful to the fulfilment of its duties. It has coercive powers, including the power to impose on offenders administrative sanctions, notably of a financial nature.

1.4. THE COUNCIL

Responsibilities of the members of the Council of the Belgian Institute for Postal Services and Telecommunications are divided as follows:

Eric Van Heesvelde, Chairman, is in charge of:

- the general coordination of the Institute's policies;
- the representation of the Institute;
- the management plan, the report to Parliament, the report to the Minister;
- external communication;
- the coordination of the support services of IT/translators, personnel and training, budget, billing and logistics.

Catherine Rutten, member, is in charge of:

- the analysis of the market, the economic analysis (including the tariffs of the public service) of the telecommunications sector as well as all economic aspects of telecommunications (analysis of the market, SMP, tariffs, cost models, calculation of the cost of the universal service, statistics) access and interconnection (BRIO, BROBA, BRUO);
- international telecommunications relations (coordination of activities in terms of ERG, IRG, European institutions, ITU, WTO and CEPT);
- the budget and logistics: the BIPT budget, accounting (collection of revenues and management of expenditure), the procurement department, equipment.

Georges Denef, member, is in charge of:

- the postal services sector: strategy, legal and economic aspects, monitoring of compliance with legislation (authorisations, universal service, quality standards, tariffs) and the management contract of La Poste, representation in international postal institutions;
- the monitoring services, the public service, consumers, universal telecommunications service (monitoring of frequency use – including radio broadcasters in the FM band -, radiation standards (certificates), radio interference, monitoring universal service obligations and the management contract of Belgacom, information on the universal service, e-security team, Comixtelec, relations with consumer organisations, protection of consumer rights, application of the legislation on telephone tapping and emergency services;
- the IT and translators services: management and procurement of equipment and software, management of the internal network and development of software and translation of documents (French – Dutch – German – English).

Michel Van Bellinghen, member, is in charge of:

- the legal aspects of telecommunications: legal framework of telecommunications and radio communications, general legal support to other departments, disputes, conciliation, international treaties, protection of privacy, ethical commission;
- the technology service: the use of telecommunications and radio communications (international and national), spectrum management, international organisation for radio communications, management of the frequency plan, computerisation, monitoring equipment and notifications in accordance with the R&TTE directive, (international) standardisation; issuing of authorisations for radio communications and authorisations for voice telephony and fixed networks, declarations of telecommunications services, RF Radiation Department, management of the numbering plan, domain names, number portability, use of numbers;
- the human resources department (status, sector committee, training).

BIPT and electronic communications

THE ELECTRONIC COMMUNICATIONS MARKETS, THEIR ECONOMIC REGULATION AND THE PROTECTION OF THE COMMON GOOD

2.1. LEGAL FRAMEWORK AND TASKS OF BIPT

The liberalisation of the telecommunications markets is proceeding in Europe. As the markets are increasingly open and competitive, the role of regulators is evolving. They have to move on from implementing strict ex ante regulations to a priori imposing more targeted obligations that are dictated by market developments. The Belgian Institute for Postal Services and Telecommunications faced this change in a legally uncertain context in 2004. The protection of users is notably guaranteed by public service obligations that are assigned to operators under the Institute's supervision.

Full liberalisation in Europe

The liberalisation of the telecommunications markets was completed in 1998, in accordance with a series of directives issued by the European Parliament and Council between 1995 and 1998 (directives 95/62, 97/13, 97/33 et 98/10) as well as directive 96/19 of the Commission. This liberalisation was consolidated by the adoption in March 2002 of four additional directives and decisions that profoundly altered the regulatory approach (directives 2002/19; 2002/20; 2002/21; 2002/22 and decision 679/2002). They were complemented by a directive on private life in electronic communications (2002/58 of 12 July 2002) and by a directive of the Commission on consolidating the liberalisation (2002/77 of 16 September 2002). These texts are collectively known as the "electronic communications package".

A true policy of free access was introduced. Candidates must no longer be subject to prior authorisation, either for setting up networks or for providing services. They only need to declare their project with BIPT, the market regulator in Belgium. The only restrictions apply to so-called "scarce" resources, which need to be organised through a supreme authority: the allocation of telephone numbers (see page 41) and the frequency user rights (see page 38).

The European regulatory framework also sets out a number of criteria which enable regulators to determine operators with significant power in different markets, namely those that are liable to impede free competition. In order to allow the market to operate, these powerful market players are subject to a number of obligations which are determined and policed by the regulator.

Characteristics of the electronic communications markets

As a network industry, the electronic communications sector has this distinguishing characteristic: in order to get from A to B, communications need to follow an itinerary which consists of subsequent segments, all belonging to different operators.

Without interconnections between these infrastructures, competition would not work and there would be no market. Though they are competitors, operators have no choice but to cooperate in order for communications to take place.

Example of a phone call

A subscriber with company X makes a call from his mobile phone to the fixed telephone of a subscriber with company Y. The connection comes about in several stages:

- *from the mobile phone to the mobile phone antenna of company X,*
- *from the antenna to an interconnection point with the fixed telephony network,*
- *from the fixed network to an interconnection point,*
- *on the "local loop" of operator Y (the last wire between the local exchange and the user).*

Numerous combinations and formulas are possible. An operator, for instance the historical operator, may own a large part of the network and allow competitors to have access to it. It is also possible for certain operators not to own any infrastructure at all, and to market their services by using networks of other operators in return for compensation.

Historic mission of economic regulation

Historically, the telecommunications industry was more often than not a monopoly sector. As markets were opened up, historical operators controlled nearly all of the physical networks (cables, antennas, connections). The initial role of the regulator in a liberalised market was to enable access to the network to allow competition to get established.

A new operator needs to be able to use part of the network of one or several powerful market players, for two reasons. First, it is not a realistic proposition to have all new operators install their own infrastructure. Second, for a call to come through between a customer with a new operator and one with the historical operator, the two networks necessarily have to be connected in order to ensure that communications are routed smoothly.

The role of the regulator is to ensure that the costs of these access rights are applied fairly and with transparency. The tariffs that are elaborated need to be low enough to stimulate competition; they need to be high enough to encourage operators to continue to invest in infrastructure. These calculations are very complex and are constantly readjusted on the basis of market developments and new technologies.

BIPT, the Belgian regulator

The Act of 21 March 1991, amended by the Act of 19 December 1997 and later by the Act of 17 January 2003, empowered the Belgian Institute for Postal Services and Telecommunications to regulate this sector. Since that date, the Institute has put in place the necessary mechanisms to strengthen competition, by establishing a stringent framework and introducing checks for operators with significant power in the market. By laying down BIPT's new statutes, the Act of January 2003 guaranteed the Institute's independence, as was required by the directives.

Developments in economic regulation

Europe adopted a new regulatory framework in March 2002 so as to integrate technological developments and the ensuing market transformations (expansion of the Internet, development of broadband transmissions, increasing use of mobile phones, but also the growing convergence of television, information and telecommunications technologies).

The new European directives simplify conditions for entering the market by taking into account recent developments. Current dynamics no longer put one historical operator to the fore who is the sole proprietor of key infrastructure, but bring to the stage a myriad of operators who control segments of the network and its interconnections, which are indispensable for the good operation of the whole system.

New market configuration

In order to quickly react to market developments, the new European framework adopts an approach which is largely based on competition law. This approach entails a three-step analysis:

- identifying the markets;
- evaluating the level of competition in an identified market and determining the operators wielding significant market power in those markets;
- imposing obligations specific to these operators in order to restore fair competition.

Regulatory mechanisms no longer operate automatically. They only do with regard to segments and "relevant" markets. In accordance with guidelines issued by the European Commission and in consultation with it, a large discretionary margin has been granted to national regulators.

Transitional measures taken by BIPT

Both years 2003 and 2004 were momentous in terms of the application of rules by European regulators, who all had to deal with the transition to a new regulatory framework. For its part, BIPT was confronted with an exceptional legal context.

By the end of 2004, the March 2002 directives had still not been transposed into Belgian law, despite the July 2003 deadline. The Institute took transitional measures, but this uncertain context opened the door to its decisions being challenged.

Tasks relating to the public telecommunications service

The directives have always allowed Member States to introduce a universal service, i.e. compulsory services aimed at ensuring universal access and tasks of general interest in the field of telecommunications.

The role of BIPT is to monitor whether these services are well provided by one or more operators within the defined standards of quality. It calculates the cost and ensures that this not an unfair burden on the operator entrusted with the service.

2.2. ECONOMIC CONTEXT OF THE SECTOR

In Belgium, indicator trends reflect the will of the regulator, the Belgian Institute for Postal Services and Telecommunications: despite tribulations following a relatively late liberalisation, true competition has taken hold in all segments of the market. This is furthered by regulatory mechanisms set up by the Institute.

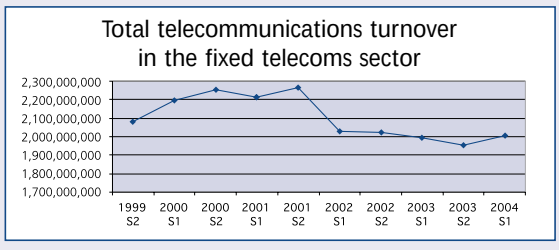
Some delay in Belgium

We should remind that the liberalisation of Belgian telecommunications was introduced with some delay. Belgium was one of the European Union Member States not to have anticipated the 1998 deadline. EU statistics show that this group has less benefited from the effects of liberalisation, in terms of dividing up the market between different players, as well as investment and price trend.

This trend can be explained. Alternative operators have concentrated their investments on the first markets to be liberalised. Their resources were more limited for the second wave of liberalisation. This effect was further amplified by the stock exchange adjustment in the second half of 2001. The crash of the so-called technology stocks cut down the financial resources that could be mobilised by telecommunications companies. They therefore preferred to consolidate their positions in the first national markets in which they had invested.

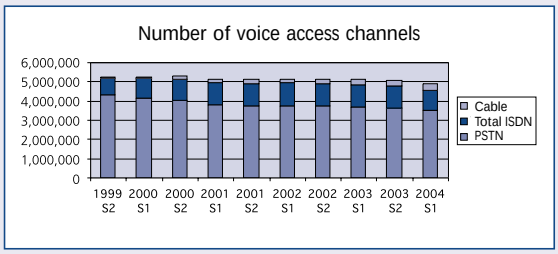
A new deal of cards

2004 marks a turnaround in the telecommunications sector. In Belgium, an overall drop in turnover was felt from the second half of 2001, after a peak had been reached. For the first time in three years, the first half of 2004 showed a rise (by 2.57%) compared to the previous six months.



This rise can mainly be put down to the increase in revenues from data services, mobile telephony, connections and international voice telephony.

The growth in traffic does however not go hand in hand with a rise in the number of telephone lines. Indeed, the number of "voice access channels" (fixed telephony connections) in Belgium continues to slide very slowly and has gradually dropped under the threshold of 5 million units. The decline in the number of PSTN lines, i.e. telephone lines which connect the subscriber's terminal equipment to the switched public network, is the most marked. This is partly compensated for by the growing use of network cables for voice telephony.



The overall drop in the number of fixed connections is caused by the fast growth of mobile telephony and the effects it produces, sometimes with some lag: some consumers eventually refrain from having both a fixed and a mobile line. Between 30 June and 31 December 2003, mobile telephony had gained about 500,000 active subscribers. Over the whole of 2004, it only attracted 450,000 new active subscribers. The 8-million-subscriber mark, which was exceeded in late 2003, is probably not far off from the saturation point in the market. The mobile phone penetration rate in Belgium has thus caught up with the average rate in the European Union.

Another explanation lies in the use of DSL lines and cable for Internet connections. The million-line mark was reached in late 2004. The installation of a number of these lines has meant that PSTN lines were abandoned as they were only used for dial-up Internet access.

Real competition

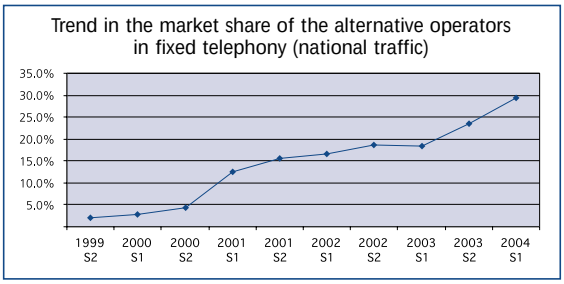
The preceding data already demonstrate the true competition and the system of communicating vessels getting established between market segments. Competition is also a reality on the ground within segments themselves, as is shown by other indicators. This has been made possible by market facilitators, put in place by the Institute and on which we shall elaborate further in the next chapter (see page 23).

Fixed telephony

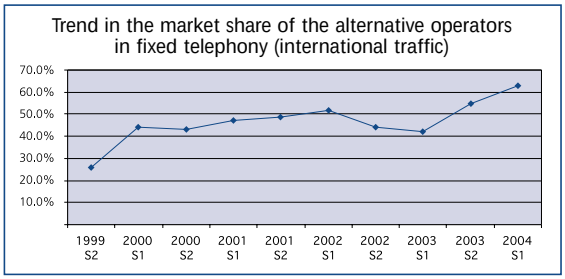
In fixed telephony, some 30 alternative providers are declared with BIPT. Around ten of those control their own connections on the main PSTN/ISDN network. About 15 use carrier select or preselect (four figures dialled before each call; see page 41). Two operators provide access to voice telephony via cable.

The last report of the European Commission on liberalisation showed that in Belgium, the shares of the four main operators need to be added to cover 90% of the market. Only the UK, Sweden and Denmark have a more diversified offer, while Germany and Austria are similar to Belgium. In all other countries, four or less operators are enough to have 90% of the market covered.

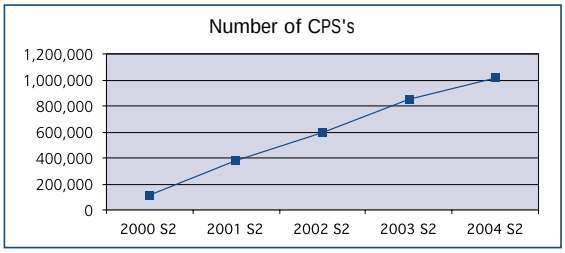
In Belgium, the market shares of the alternative operators in fixed telephony now reach 29.3% of the total number of national call minutes.



As for international calls, alternative operators represent more than 60% of these.



Another indicator: in 2004, carrier select or preselect was activated on 165,000 lines (+13.6%). The table below shows the trend in the total number of activated CPS's.

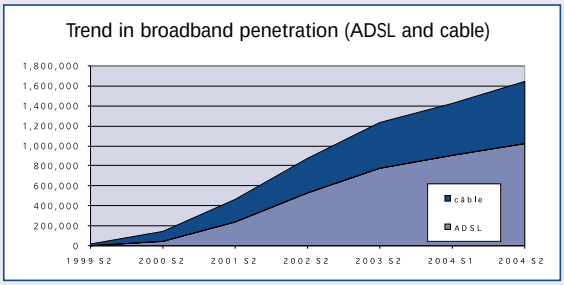


As for the number of "ported" fixed numbers (facility allowing the user to keep the same telephone number when he changes operators; see page 41), this stood at 767,000 at the end of 2004.

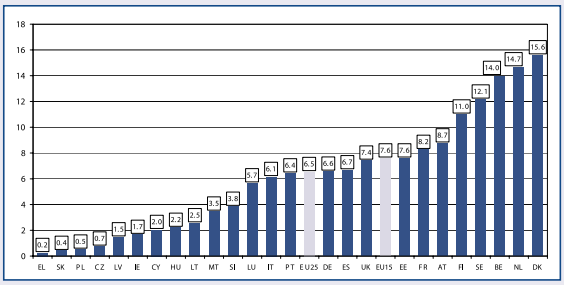
With regard to interconnection for fixed voice telephony, the policy pursued by BIPT has borne fruit (see page 24). The end customers benefit indirectly from the tariff cuts applied by alternative operators for using the network of the incumbent operator. These tariffs have been cut by half and sometimes by two thirds over the last six years.

Internet and broadband

As for broadband Internet connections, these numbered about 1.5 million on 31 December 2004.



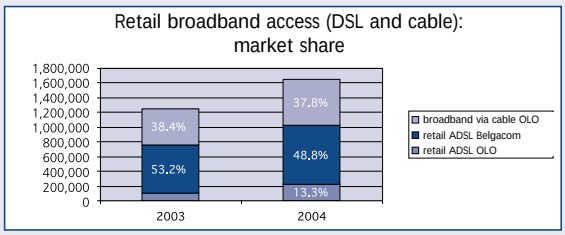
This puts Belgium among a leading group of European countries, with a broadband penetration rate of 14 per 100 inhabitants (see graph). 63% of Belgian families are now equipped with a personal computer.



(source : EU implementation report 2004)

An explanation for this performance lies in the competition between Belgacom's excellent infrastructures and the cable networks, which has enabled the offer to develop substantially. Moreover, instruments introduced by BIPT have also made broadband competition possible on fixed Belgacom telephone lines (BRUO and BROBA; see page 25).

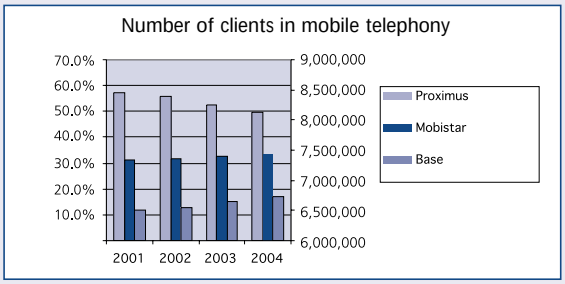
The trend in broadband shows that the way the market is divided up between Belgacom and the alternative operators is changing: 48.8% of the Internet retail market is controlled by the historical operator, while the alternative operators share the remaining 51.2% (37.8% for cable and 13.3% for the other ADSL operators). The latter rely in large part on the Belgacom "bitstream" offer or on the resale of the historical operator's product.



Mobile telephony

Proximus totalled more than 4.2 million active customers on 31 December 2004. At that time, Mobistar had more than 2.8 million customers and Base more than 1.4 million, making up a total in excess of 8.4 million active subscribers.

The graph below shows the trend in the number of active mobile subscribers between 2001 and 2004, as well as the operators' market shares.



The number of ported mobile phone numbers is also revealing: at the end of 2004, these totalled close to 720,000, of which more than 400,000 were ported in 2004 alone.

In time, competition in mobile telephony will stiffen further due to MVNO's (Mobile Virtual Network Operators), i.e. operators offering their own services without a mobile network of their own. The Institute is preparing legislation in order to provide a legal basis for their activities. A draft implementation decree specifying the details of implementation, including numbering aspects, has been submitted to the Minister.

A varied offer

Such competition in market segments boosts the development of new offerings for consumers. Technological innovations will continue to reshape the market. An example of this are "hot spots" or local networks for wireless Internet connection. Their number apparently doubled to more than a thousand in 2004.

We must especially mention "Voice Over IP", which sends telephone voice calls over the Internet. BIPT accepted a first request for a VOIP voice service in April 2004. Internet telephony was thus officially launched in Belgium. For this, the user requires an adaptor between his telephone and the broadband Internet connection.

Through this technology, alternative operators launched a new offer in 2004, combining broadband Internet and other services such as voice telephony in a single product and at a competitive price over a DSL line. This system enables users to cancel their subscriptions with the historical telephony operator.

Also in 2004, Belgacom introduced in November the first commercial VDSL service, which offers performances even markedly superior to ADSL. The Institute monitors closely the implementation of this technology, in narrow consultation with the market players, in the same way that it very closely follows any developments regarding third-generation mobile telephony (3G).

2.3. ECONOMIC REGULATION

As the regulator, the Belgian Institute for Postal Services and Telecommunications establishes a set of mechanisms enabling the liberalised market to open up and operate. These tools are based on expertise in the use of highly complex economic, legal and technical models. Each decision by BIPT is taken after consulting the sector, with the ultimate goal of developing services for the public at the best price.

2.3.1. Access to the market

Fewer restrictions

The new European directives of March 2002 established a true policy of free access to the market. In other words, with the notable exception of numbering and networks when these use frequencies (see page 35), the future service provider no longer has to apply for the regulating authority's authorisation. A mere declaration is sufficient. In Belgium, this declaration is registered with BIPT (for more information, consult the Internet form: www.bipt.be > English > Telecommunications).

Even though this declaration is a purely clerical matter, it is no less stringent. It is part of a general policy of authorisation. Thus, in January 2004, before the European directives were transposed into Belgian law, the Institute published, after consultation of the sector, a "Circular letter regarding the conditions for installation and operation of public telecommunications networks" as well as a "Circular letter regarding the conditions for the provision of fixed and mobile telephone services" which operators must abide by. For the provider, registering a declaration amounts to guaranteeing that he meets all installation conditions that feature in these lengthy documents, to be found on the BIPT website under the section News – Communications.

Declarations

All procedures were thought out in order to ensure a smooth transition between the previous system of licensing and the new policy of declarations by the provider. In 2004, 19 service providers – 16 of which are new to the market – filed declarations with BIPT. These include both Internet or DSL access providers and operators using "Carrier Pre Select".

The Institute equally took the opportunity afforded by the new regulations to update its lists of operators of commercial fixed and voice telephony networks to eliminate those who are not or no longer active.

2.3.2. Regulation of the operator with significant power in the fixed telephony market

Fair and transparent conditions

The regulator's mission is to ensure that operators with significant market power allow their competitors to have access to their network under interconnection conditions that are transparent and fair. The regulator also sees to it that charges for the use of networks are not excessive but encourage operators to invest.

At the time of the liberalisation, Belgacom, the monopolist, was declared a player holding significant power in the fixed telephony market. It maintains this status. It is therefore subject to regulation and monitoring of the conditions under which it allows access to its infrastructure.

In 2004, the Institute analysed and amended Belgacom's three "reference offers" for 2005: BRIO (Belgacom Reference Interconnect Offer), BRUO (Belgacom Reference Unbundling Offer) and BROBA (Belgacom Reference Offer Bitstream Access).

These reference offers, the respective purposes of which are explained in the following chapters, aim to establish for one year at what tariffs and under what conditions Belgacom grants alternative operators access to its network. Though publication deadlines differ, the procedure is identical for all these offers: Belgacom submits a proposal to the Institute, whereupon the market is consulted and expresses its remarks. On that basis, the Institute takes a decision. The offer is then published and serves as a reference for the following year.

Belgacom Reference Interconnect Offer (BRIO)

As regards fixed telephony, BRIO is the fundamental document which lists the conditions under which Belgacom makes its interconnection network accessible to other operators (the interconnection network being the part of the network beyond the "local loop").

As an example, a tariff is set for "termination". Termination is the last phase of a call's itinerary on the interconnection network. To reach the customer, this "ultimate" section needs to be passed. The BRIO sets a single tariff per minute for calls passing through this part of the network and originating from a competing network.

However, the BRIO is much more than a mere table of tariffs for the conveyance of calls on sections of networks. The BRIO also includes quality standards, technical specifications on the services offered or the existing infrastructures, ordering procedures, delivery times, etc. BRIO 2005 can be consulted at http://www.belgacom.be/nationalwholesale/nws/jsp/static/brio.jsp).

BRIO 2005 was approved by the BIPT Council on 14 December 2004, which decision was published on the Institute's website. In order to reduce distortions and barriers to competition, BIPT insisted on adding some new requirements:

- The directory enquiry services, provided by Belgacom, offer the option of automatically dialling the number that has just been communicated: this is done by merely pressing a button. In future, the message announcing this facility will point out that calls made through this service are invoiced by Belgacom. Customers of other operators are therefore informed that they need to hang up and redial the number of their correspondent if they wish to use their usual service provider.

- The call block (calls which do not terminate) was set at 1.5% in BRIO 2004. For 2005, Belgacom must guarantee to bring down the failure rate to 1.2%.

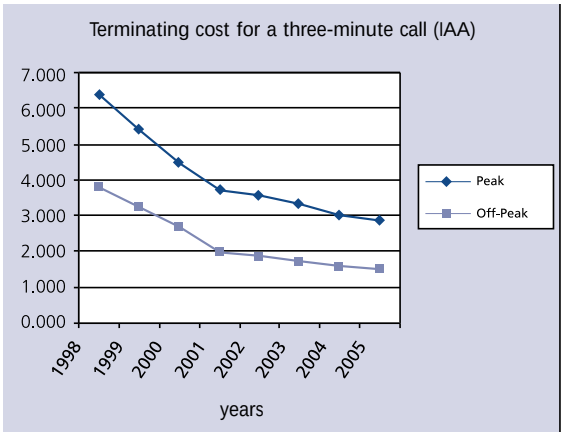
- According to the terms of BRIO 2005, Belgacom is required to report on a quarterly basis on the necessary waiting times for the installation or reparation of half links (half links are sections of leased lines which alternative operators can use to construct complete leased lines). This information will enable BIPT to check whether Belgacom does not discriminate between the half links it supplies to its competitors and the leased lines it supplies to its own customers.

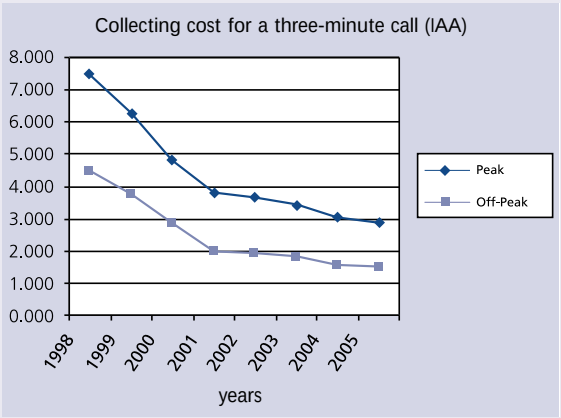
- The maximum waiting time the historical operator must observe for providing an "IC link" at the request of another operator has been modulated depending on possible circumstances. IC links are lines that connect two networks and thus constitute essential links for alternative operators to be able to construct their offer.

- The LoA (Letter of Authorisation) is a standardised document by which an operator must prove to Belgacom that he has the customer's authorisation to activate a pre-selection. The LoA has now been edited in a language that is easier for consumers to understand. Moreover, there was no valid reason why the rules should be more stringent for one operator than for another. BIPT has therefore ordered Belgacom to use a standard letter of deactivation.

The Institute is sometimes compelled to take intermediate decisions on the prevailing BRIO in the course of the year. This occurred in June 2004, with the publication of a decision of the BIPT Council on certain points completing BRIO 2004.

On 23 December 2004, BIPT took a decision regarding the interconnection tariffs for 2005. Following this decision, termination and collecting rates will be cut by 4.6%. This decrease follows reductions decreed in the past few years, as shown by the graphs below.





Other interconnection services have also seen price cuts: the monthly charge for access points is down by 10.9%, for transit by 12.15%. Moreover, the Institute rejected price hikes suggested by Belgacom for half-link tariffs.

Belgacom Reference Unbundling Offer (BRUO) and Belgacom Reference Offer Bitstream Access (BROBA)

The BRUO and BROBA offers are aimed at fostering competition, as is the BRIO. The objective of the BRUO and the BROBA is to establish the reference offer that will apply to the "unbundling of the local loop". 'Unbundling the local loop' means that the alternative operator should continuously be able to use all or part of the transmission capacity of the final wire, which connects the subscriber to the network (see above).

These offers are particularly important with regard to Internet access, which is generally provided as a continuous service. The BROBA, which only concerns bitstream access, even enables operators to provide an alternative offer without possessing a network infrastructure. The BRUO and the BROBA have strongly contributed to boosting competition and diversifying the offer on the Internet market (see page 21).

BRUO 2005 and BROBA 2005 were published on 12 December 2004 and 23 December 2004 respectively. The BRUO and BROBA tariffs are set by the Institute within a double framework of cost orientation for Belgacom on the one hand (the alternative operator has to pay the costs caused to Belgacom) and fair competition on the other (Belgacom may for example not exaggerate the costs of the service it provides to alternative operators to such an extent that these alternative operators can no longer compete with Belgacom).

Certain requirements imposed by the Institute are worth looking into. They fall within the framework of the regulator's task to reduce distortions and barriers to competition:

- Clear, simple and transparent procedures were introduced for activating requests of alternative operators who wish to make use of Belgacom reference offer, both the BRUO and the BROBA.

- Quality standards for the provided services have now been clearly defined. This is the result of a long process of negotiations with market players, which started in 2003. These quality standards enable barriers to competition to be lifted. Two notable examples illustrate this. Firstly, a clear maximum waiting time must be set for line repair, within the framework of a prior agreement between the parties (Improved Service Level Agreement). For such an operation, the alternative operator is totally dependent on the provider with significant market power. Secondly, Belgacom is required to provide clear information on its network so that alternative operators have all necessary elements at their disposal to make an offer to customers, depending on their location and, especially, their type of connection to the network.

- Clear procedures and short and precise waiting times for customers who wish to change suppliers, have also been provided for. Previously, the move from Belgacom to an alternative supplier entailed an interruption of service.

BRUO-BROBA II 2005 Tariffs

BRUO 2005 (Raw Copper Loop)	
Monthly rental fee (type 1)	€ 10.98
Monthly rental fee (type 2)	€ 11.62
BRUO 2005 (Shared Pair)	
Monthly rental fee (for active loop with Belgacom voice)	€ 1.64
Monthly rental fee (for active loop without Belgacom voice)	€ 11.62
BROBA II 2005	
Total monthly rental fee per end-user line ADSL (active loop)	€ 8.43
Total monthly rental fee per end-user line ADSL (non-active loop)	€ 18.40

Compared with the previous year, tariffs generally show a slight drop.

Complex economic models

Drawing up procedures for consultation and analysis of the reference offers constitutes an in-depth technical and economic exercise performed by BIPT. On the economic side, BIPT has the task of monitoring, on the basis of complex models, whether the proposed rates reflect the costs which the powerful operator has to bear, while preserving the return on his investment.

Setting interconnection tariffs in particular can be done by taking either a "top-down" or a "bottom-up" approach. In a "top-down" approach, a cost model is used that is put together on the basis of an operator's accounts and that spreads the relevant costs across the different elements in the network (e.g. switching and transmission) and among the services that use these network elements. In a "bottom-up" approach, a cost model is used that is put together on the basis of the volume of traffic to be routed by an operator, whereby this volume determines the optimum dimensions of different layers in the network (switching, transmission). A "bottom-up" model better reflects the situation of an efficient operator.

Until now, Belgacom's interconnection tariffs have been established by using a top-down model. However, BIPT has also developed a bottom-up model in consultation with telecommunications operators. In future, interconnection tariffs will be able to be set by integrating the results of the two models.

In order to verify whether the costs have been correctly allocated and to avoid competition-distorting cross-subsidies between the different services, the Institute monitors whether Belgacom meets certain requirements regarding separate accounts.

A last point concerning fixed networks relates to leased lines. A leased line is a service that consists in providing a permanent transmission capacity between two points. This means that this capacity is totally allocated to one customer, who pays the operator a fixed monthly charge. Belgacom is subject to several obligations in terms of leased lines, such as universal access, cost orientation, as well as certain publicity obligations (technical characteristics, tariffs, conditions for provision). The Institute monitors whether these different obligations are met.

2.3.3. Regulation of the operators with significant power in the mobile telephony market

Termination rates

In mobile telephony, licences have been awarded to three operators. Proximus, the historical operator, has increasingly been considered as an operator holding significant power in the different market segments in which it operates. Mobistar was for its part for the first time declared an operator with a significant market position (SMP) in February 2003. At the end of 2004, the respective market shares in mobile telephony held by these two operators were estimated at 52% for Proximus, 33% for Mobistar, against 15% for Base.

Currently, regulation of SMP operators in the mobile telephony market only applies to charges for "call termination". Whether the call originates from a fixed or from a mobile handset, in order to arrive at a correspondent who is equipped with a mobile phone, it needs to pass through the mobile network of the correspondent's operator (the "termination"). Again, in order to let fair competition prosper, the SMP operators in the market need to offer this termination service to the other operators under transparent, non-discriminatory and cost-oriented conditions. The two SMP operators are therefore subject to a regulatory mechanism which was set up by BIPT.

Monitoring of costs

Tariffs applied by operators for termination rates must be set on the basis of real cost. In order to verify this, the Institute relies on cost calculation models which are put forward by the SMP operators and are audited by Bureau van Dijk.

For Proximus, a schedule for the gradual lowering of termination tariffs was drawn up in December 2001. This tariff has regularly been revised on the basis of current trends. BIPT published a decision in August 2004 and a communication in October 2004 in this respect. These consisted on the one hand in postponing until November 2004 the cut in tariffs which had initially been scheduled for Proximus for 1 July 2004, and on the other hand in altering the extent of the cut (7%).

For Mobistar, a decision taken by BIPT in June 2004 imposed a cut in its terminating tariffs that was higher than initially envisaged. In November 2004, Mobistar thus applied a 7% cut instead of the 6% that had been planned when the programme was drawn up in 2003.

Through these decisions, which result from a long process of market consultation, BIPT sought not to increase the current difference in termination tariffs between Proximus and Mobistar, while letting the moment coincide when both operators should implement their tariff cuts.

Setting a common schedule (November 2004) for changes to termination tariffs applied by operators with significant market power represents a first step towards harmonisation.

BIPT now intends to have a generic cost model adopted for the three operators. This is because the new European directives state that with regard to call termination in mobile telephony (market 16), every operator is considered to have SMP status as far as the termination of calls on their network is concerned. In time, mobile operators will be bound by the regulations set out in the directives.

Moreover, Proximus's cost calculation model for termination had reached its expiry date. It needed updating. A consultant was then selected to fine-tune this generic model and a consultation of the market is now underway.

2.3.4. Market analysis

In order to allow regulators to respond flexibly to developments in usage and technology in the field of telecommunications, the new European regulatory framework stipulates that the regulating authorities should apply an identical method to that used in competition law, which comprises several stages. The first step is to define the relevant markets. Secondly, analyses are made in order to determine whether, judged by a list of indicators, competition is active. Thirdly, if competition is not satisfactory, the SMP operator or operators are identified.

In an effort to improve harmonisation, the Commission regularly issues a recommendation listing the markets which it considers to be relevant. The current recommendation totals 18 such markets.

If a market does not show characteristics that are conducive to the practice of competition, the regulator is compelled to apply corrective measures and mechanisms for the required period of time. In such case, measures include non-discrimination, transparency, separate accounts, access to networks and facilities and cost orientation. Corrective mechanisms are those that have been set up in Belgium: interconnection reference offers, unbundling offers or offers for access to equipment.

As the sector regulator, BIPT was assigned the task of analysing 17 of these markets (the 18th, which relates

to broadcasting, has been entrusted to the care of the Communities). Analysing these markets means collecting economic data from operators. For this purpose, BIPT had devised and sent out questionnaires to operators since 2003. More than 100 companies, operators, cable distribution firms and subsidiaries of international corporations were polled. More than half of them replied.

The innovative approach and the workload that this survey entailed prompted BIPT to seek assistance from a consultant for the analysis of the collected data. The results of these analyses will be known in the course of 2005. On the basis of these, BIPT will elaborate a draft decision which will be submitted for consultation at both national (sector and competition authority) and European levels (Commission and other national regulators).

2.3.5. Monitoring

Observance of licences

Between 1996 and 2000, the State had awarded three licences (reference to technical chapter; reference to the beginning of this chapter) to mobile phone operators under precise conditions. They were allocated a frequency band, but in exchange took on a number of commitments. It is incumbent on the regulator to monitor whether operators honour these commitments, which form an integral part of the awarded licences.

Thus, in 2004, the National Spectrum Monitoring Department (see page 38) embarked on a most important monitoring mission, which it will pursue in 2005. It consists in verifying from a technical point of view whether the three operators honour their commitments on service quality and on the coverage rate for the territory. The administrative and IT-related preparations for this campaign took place in 2004. Field measurements were initiated in 2005.

Monitoring operators' and providers' activities

Within BIPT, a special cell, staffed by civil servants with the capacity of criminal investigation officers, is in charge of enforcing the different provisions and obligations carried by operators and service providers. This cell may take action of its own accord, at the request of the public prosecutor's office or the police services, following a complaint or at the request of other services in BIPT. This year, this cell has particularly focused on monitoring activities relating to the universal service (see next chapter, page 29).

With regard to the supervision of operators' and service providers' activities, various complaints have led to enquiries. Two of those were the subject of official reports of questioning in cases relating to discriminatory pricing and problems with telephone number portability.

For the third consecutive year, BIPT services in charge of field checks carried out investigations in the sector of call shops. These are premises which house phone booths and offer, for instance by the minute, electronic communication services (international communications, fax, Internet, etc.) for private customers. These activities must be declared with BIPT. 257 businesses were investigated in 2004, most of which in collaboration with the police services, notably in Antwerp, Mons, Liège, Courtrai, Ghent, Charleroi, Wavre, Mouscron and Brussels. 59 official reports were produced during these operations, which represents 23% breaches, a figure largely similar to 2003. The clean-up of this sector, where 80% of the shops operated in administrative illegality in 2002, seems to carry on.

2.4. USER PROTECTION

Liberalising the market and introducing competition are aimed at bringing prices down as well as diversifying the product offering. The market should however not get established at the expense of certain categories of users. This concern also features in European laws and regulations. The regulator, the Belgian Institute for Postal Services and Telecommunications, is empowered to monitor whether these protective mechanisms work properly.

Independent mediation

BIPT contributes to user protection by managing liberalisation. BIPT may issue recommendations and opinions based on consultations, reports from the mediation service and on the opinions it receives from the Consultative Committee on Telecommunications, Beltug and Test-Achats, in order to guarantee a growing quality of service. Pricing that is transparent for the consumer is also an important concern for BIPT, which at the end of 2004, started to prepare for the tasks that it will be entrusted with by virtue of the new Electronic Communications Act.

The powers of the mediation service for telecommunications are of a totally different order. Moreover, even though the operational cost and the staff of the mediator are at BIPT's expense, this service is completely independent. Its jurisdiction is very specific as it covers disputes that may occur between a customer and their provider.

BIPT's other activities for the protection of users concern the organisation of the public telecommunications service, which comprises the universal service, the universal access and tasks of general interest.

The universal telecommunications service

The universal telecommunications service consists in providing a minimum range of services or accessible infrastructures of a defined quality and at a reasonable price to all end users across the territory. In Belgium, Belgacom is the operator assigned for the universal service.

The universal service comprises several parts:

- access to the network and to the basic telephone voice service,
- the free routing of emergency calls,
- the provision of a helpdesk and a directory enquiries service for subscribers,
- the provision of public telephone booths across the entire territory,
- the publication of an annual directory,
- the application of social tariffs and special measures in case of non-payment of phone bills.

In 2004, BIPT started to prepare for its new tasks concerning the universal service, which it will receive by virtue of the future legislation on electronic communications. These tasks notably include the integration of new criteria for spreading telephone booths across the territory and the management of a database of beneficiaries of the social tariff.

The issue of beneficiaries of the social telephone tariff was incidentally an important point of interest in 2004. It will be explained in more detail later on.

Monitoring of services

The first task of BIPT in terms of the universal service consists in monitoring whether Belgacom meets its obligations as the designated universal service provider. In 2004, the Institute published and forwarded its report on 2003 to the competent Minister. In 2004, the service for field checks, mentioned above, (see page 28) intensified the monitoring of quality in the provision of the universal service:

- Theoretical checks, based on statistical data, looked into the quality of the services provided;
- With regard to waiting times for connecting customers, an important series of checks was carried out in one of the Belgacom exchanges directly; these random tests enabled to produce

samples and to compare these with the results notified by the provider of the universal service (USP);

- 344 telephone booths underwent checks on site;
- As every year, the publication of the directory was screened in terms of legal requirements; more than 400 processed complaints related to the splitting up of the Brussels directory;
- A number of test calls were made to directory enquiry services in order to better gauge their performance levels by standards set in the relevant future legislation.

BIPT prepared its report on the universal service over the year 2004 for the benefit of Mrs Van Den Bossche, Minister for Employment and Mr Verwilghen, Minister for the Economy, Energy, Foreign Trade and Science Policy.

Social tariffs

Legislation provides for the USP to grant preferential tariffs to certain categories of customers who request these, if they meet certain criteria. In the course of 2003, this supplier had embarked upon a clean-up of these lists without notifying the regulator.

On the basis of information from the Social Security Department (the Crossroads Bank), the universal service provider sent a letter to clients whom he no longer deemed to be entitled to social tariffs or whose status had become unknown. The 17,000 subscribers who did not reply to this letter saw their entitlement to the social tariff withdrawn.

At the end of 2004, a large-scale survey was conducted by the BIPT monitoring service among a sample of around 800 private subscribers benefiting from the social tariff, in order to find out what proportion of beneficiaries were improperly rejected for simply not having replied to Belgacom's letter. The final results are not yet available at this present moment.

Monitoring of costs

The Institute is also empowered to verify and approve the cost calculation of the universal service. In 2004, the calculation methods, which had initially been developed by Belgacom, were revised and adapted with the aid of a consultancy. BIPT thus brought down the provisional estimate on the cost of the universal service from € 108 million to € 46 million. A sector consultation on the newly proposed methods was organised in September 2004.

The revision of the calculation methods is all the more important because in 2002, Belgacom requested the Fund for the universal service to be activated. If the government were to agree to activate this Fund, the cost of the universal service would be spread between all operators. It is therefore essential for this cost to be determined as precisely as possible.

Universal access

Apart from the universal service, the provision of yet other services is guaranteed across the territory, in accordance with certain implementation rules, which were laid down by royal decree. These relate to the provision of leased lines, the data switching service, access to ISDN and the telex and telegraph service. Belgacom is bound by law to provide these services, but the law also grants the government the option to designate, on the advice of the Institute, an operator with significant market power to provide one or several of these services.

The difference between "universal access" and "universal service" is that the universal service must be delivered at a reasonable price, whereas this concept of reasonable price does not apply to services included in the universal access. However, ISDN and leased-line tariffs are subject to the obligation of cost orientation.

Tasks of general interest

A management contract between the federal state and Belgacom provides for tasks of general interest, such as the supply of Internet connections in schools, libraries and hospitals. It also regulates the support lent by Belgacom to the civil protection service and the Mixed Commission for telecommunications. In addition to the management contract concluded with Belgacom, the law also offers the other operators the opportunity to cooperate in tasks of general interest. BIPT is evidently empowered with the monitoring of tasks of general interest.

For some of its activities, the Institute works closely together with Comixtelec, the Joint Commission on telecommunications, whose main purpose is to enable the optimum usage of telecommunications for the benefit of both military and civil authorities in the event of a crisis.

2.5. TECHNOLOGICAL MONITORING, NATIONAL AND INTERNATIONAL INSTITUTIONAL INVOLVEMENT

The Belgian Institute for Postal Services and Telecommunications is actively involved in the Consultative Committee on Telecommunications. The Institute also keeps a watchful eye on technological developments and their impact on regulation. Harmonisation between European regulators is aimed at creating a true single market. BIPT plays a particularly active role in international bodies, where future orientations are set out.

Tuned in to society

BIPT assumes the secretariat and provides the funding of the Consultative Committee on Telecommunications. This is an important place for exchanging views and thus a true national consultative forum. This Consultative Committee is representative of Belgian society, both civil and political, and the players in the telecommunications industry. It publishes a detailed annual report which provides a round-up of its activities as well as sector developments. For more comprehensive information, this report can be consulted and downloaded on the BIPT website.

Technological monitoring

Technological developments in the field of electronic communications have a substantial impact on regulatory tasks. The new 2002 directives were made possible and necessary by the vast implications of new technologies (more particularly mobile telephony and the Internet, which have dramatically contributed to the opening up of markets).

The role of the regulator is to be attentive to these developments, to prepare for them and to anticipate their impact on its tasks.

Voice over IP for instance, generated a lot of activity within the Institute in 2004. As a reminder, Voice over IP consists in using Internet links for voice communications. How is this technology liable to influence the market and its regulation? What will be its impact on regulation concerning the declaration by operators? On the reference offers of SMP operators? On interconnections? On terminating rates? On unbundling? On universal access to telecommunications? On numbering and portability? On access to emergency services?

The European regulators, a special interest community

These topics for reflection are anything but limited to Belgium. Voice over IP will be one of the major future developments for the community of regulators, as the technology is now ready. The European Regulators' Group and the International Regulators' Group have planned to reflect on the matter and to reach a common approach in 2005.

The IRG and the ERG were chaired by the chairman of the BIPT Council in 2004. This proved a real challenge at a time when much was at stake due to the implementation of the new regulatory framework and the enlargement of the European Union, which welcomed ten new members.

The establishment of the IRG incidentally preceded that of the ERG. The IRG was set up in 1997 on the initiative of regulators alone, as a forum where know-how could be exchanged and common principles could be elaborated for introducing regulations. This process of coordination is essential in the world of telecommunications, which knows no borders. A minimum of harmony is required for there to exist a real single market with a free movement of telecommunications.

The ERG was set up in 2002, on the initiative of the European Commission (which has a seat on its board, whereas it is absent from the IRG) with a view to implementing the new directives in 2002. The new regulations leave the national regulators a broad margin for discretion. However, a relative convergence and a coherent application of the provisions in the regulatory framework are needed to establish a true internal market for electronic communications.

The ERG and the IRG reached an agreement on this issue in 2004. They thus came to a common stance on the "Remedies Paper" (document on corrective measures), which comprises the obligations that regulators will put on the market operators in matters regarding transparency of tariffs, non-discrimination, etc.

The Institute assumed the chairmanship of the IRG and the ERG and was in that capacity the initiator and coordinator of numerous meetings of the IRG-ERG contact group, of plenary sessions and the exchanges that resulted from these.

European institutions

BIPT took part in the preparations for the meetings of the Council of Ministers on Telecommunications. The topics discussed related to the release of digital content, the exchange of data between administrations, the secure use of the Internet, the issue of unsolicited e-mail, etc. The matter of broadband, its roll-out and usage also generated interest at European level as ministerial conferences were held on this subject in Budapest (Hungary) in February and in Dundalk (Ireland) in April.

The Institute attended the meetings of the advisory group on the Information Society in Europe (the eEurope Advisory Group) as well as on broadband (eEurope Broadband Subgroup). This topic was also one of the battle horses of the Dutch presidency in the second half of 2004. The Dutch wished to rekindle the objectives set in Lisbon in 2000 to make Europe the most competitive knowledge society in the world by 2010.

Access to the information society by all was also the key topic of the World Summit on the information society, the first phase of which was held in Geneva in December 2003.

Finally, the Institute also took part in the proceedings of the Communications Committee (COCOM), which particularly looked into the top-level domain ".eu", into powerline communications or PLC, the price of emergency communications, the renewal of 2G licences, etc.

2.6. GENERAL FRAMEWORK AND TASKS OF BIPT

The use of frequencies creates a restriction to the principle of free access to the telecommunications market. This is because radio communications are based on a limited resource: the electromagnetic spectrum. The management, monitoring and policing of the spectrum have been entrusted to the Belgian Institute for Postal Services and Telecommunications. The Institute also organises the management of another scarce resource: telephone numbering. Finally, BIPT takes on other tasks of public and general interest in various technical fields falling within its remit.

A complex technical area

Electronic communications in general and radio communications in particular are a complex area. But even though the technological development enables to continuously improve the way in which it operates, the resources of the electromagnetic spectrum are limited.

Given the number of users and the diversity of uses – ranging from public security to private telephony – the access to the spectrum must be arbitrated clearly and the frequency bands must be allocated according to priorities governed by the general interest. The electromagnetic spectrum can indeed equally be used for the communication between workers on a building site as for the A.S.T.R.I.D. radio communication network, devoted to the exclusive use of the Belgian rescue and security services (380-385/390-395 MHz band).

The operation of wave transmitters and receivers also has to meet strict standards in order to avoid interferences between users.

Finally, it is important that operators possess sufficient technical expertise.

Scarce resources and liberalisation

The public authorities first integrated these imperatives regarding the electromagnetic spectrum a long time ago. Bodies or administrations exercising supreme authority on user and policing rights ensured that the system was technically well organised and operated, while strictly managing the access to frequencies in accordance with general imperatives and technical constraints.

However, the liberalisation of the telecommunications markets in Europe has also influenced the authorities' attitude towards spectrum management. New principles such as technological neutrality, the secondary market, etc. were introduced.

Nevertheless, the organisation of the system and the allocation of frequencies can still be regulated by a stringent policy. The use of frequencies consequently constitutes the only restriction to the principle of free access to the telecommunications market.

A BIPT competence

The Belgian legislator entrusted the task of spectrum management to the Belgian Institute for Postal Services and Telecommunications by the Act of 17 January 2003, art. 14, 3°. The bodies, administrations or services competent in these matters, among which the NCS (National Spectrum Monitoring Department), were integrated into BIPT in the mid-nineties and have since then constituted one of its cornerstones.

Numbers, another scarce resource

European regulations recognise another scarce resource namely telephone numbering. BIPT is also responsible for this, assuming the general management of the system and the allocation of numbers. This management is essential, notably as regards "portability": it is a prerequisite to any competition.

Technical tasks of public interest

Other specifically technical tasks in the world of telecommunications have been entrusted to BIPT: the Institute is actively involved in the protection of citizens with regard to electromagnetic fields, in the security of networks and in the protection platform against the spread of computer viruses.

2.7. MANAGEMENT OF THE ELECTROMAGNETIC SPECTRUM, LICENCES AND FREQUENCIES

The users of the electromagnetic spectrum are numerous and varied. Transmission by waves transcends borders and markets. Owing to the need to strictly and comprehensively manage this scarce resource, the individual stations and the public or private radio communications networks are subject to an authorisation or licence granted by the Belgian Institute for Postal Services and Telecommunications. BIPT also assigns frequencies themselves. Some radio communications users are subject to an official recognition of their competences.

Many diverse users

Within BIPT, the area of authorisation and allocation of frequencies covers a wide range of activities at the service of a large number of very diverse users.

Thus, in 2004, when licences were awarded to isolated users (radio amateurs, CB radio operators), a frequency plan was drawn up for the Deurganck Dock in the port of Antwerp. BIPT services have also started to examine the SNCB network project (the GSM-R network, i.e. GSM communication inside trains, signalling, security etc.). BIPT's services were also required for occasional events such as the Tour de France, the presence of which in Belgium for 6 days in 2004 required the award of 85 licences and the assignment of 552 frequencies.

Authorisations for the stations of public and private radio communications networks

Most network installations using frequencies of the electromagnetic spectrum (radio communication), whether public or not, are subject to an authorisation or licence.

This notably concerns the public mobile telephony (GSM) networks, which must conform to technical rules for using the electromagnetic spectrum bands, which apply to them under the awarded licences.

The other frequency users subject to an authorisation cover three categories.

- Among the individual users, 22,050 CB (Citizen Band) radio operators and 5,000 radio amateurs renewed their annual licence in 2004. Those who have had their station authorised make up all licensed private operators in the country.
- BIPT granted 1,800 authorisations to professional users of mobile radio networks (taxi, transport and security companies, intervention or maintenance teams etc.), while 6,500 authorisations were granted for fixed (radio relay links) or mobile networks, used in a private area (radio communication network on an industrial site, equipment of construction cranes, etc.).
- Finally, the public authorities applied for and obtained 1,200 authorisations.

Networks not using frequencies.

In accordance with the European directive, obtaining a licence is no longer systematically required since July 2003 in order to set up and operate a telecommunications network in Belgium. When this infrastructure does not utilise the electromagnetic spectrum, a declaration registered with BIPT is sufficient (see page 23). On the basis of these very comprehensive declarations (model forms are downloadable on the website), the Institute can perform a technical analysis of the file. At the same time, it keeps its generic knowledge of the existing networks in Belgium up to date. In 2004, only one declaration of a non-public network (in other words not offering services to a paying clientele) not using frequencies was filed with BIPT. It concerns a police network.

Frequency management

The technical and administrative management of applications for network authorisation is mostly coupled with the assignment of the frequencies themselves. BIPT was assigned the task of managing the electromagnetic spectrum in Belgium. It is committed to assigning frequencies to users and to coordinating these radio communications activities within the framework of a general plan.

The organisation of the spectrum, which requires a large technical expertise, is an evolving and daily task. The number of files treated in 2004 is testimony to this: no less than 4,063 administrative files were processed. Moreover, the BIPT services treated about 5,000 allocation, alteration, cancellation or temporary allocation files.

Number of cases in mobile services treated under the Vienna/Berlin agreement	2004
number of new frequency assignment cases	1,683
number of cases of modification to frequency assignment	495
number of cases regarding cancellation of frequency assignment	1,178
Number of coordination cases	
outgoing coordination cases	83
incoming coordination cases from France	778
incoming coordination cases from the Netherlands	55
incoming coordination cases from Germany	131
incoming coordination cases from Luxemburg	9
Number of cases in fixed services completed (radio relay link) under the Vienna/Berlin agreement	114
Temporary frequency assignments	
temporary frequency assignments to the Tour de France	552
temporary frequency assignments to the Grand Prix Spa-Franchorchamps	529
other temporary frequency assignments	2,212

Comprehensive information

The electromagnetic spectrum has to be managed with precision and rigour to guarantee good-quality transmission and to avoid interferences. This activity is part of a long-term approach, under a general policy of developing and adjusting frequency plans.

Within this context, a new computer system for managing terrestrial radio networks was brought into operation by BIPT in 2004. Thought out in-house by the Institute's experts, this system can simultaneously manage the allocation of frequencies, the issuing of authorisations and the bookkeeping of the networks.

In 2004, BIPT updated the national frequency plan in accordance with the rules of European harmonisation. This plan is available for consultation on the BIPT website but also in the comprehensive nomenclature of the European frequencies collated by the European Radiocommunications Office (Http://www.ero.dk/).

International coordination

BIPT is also responsible for coordinating frequencies for satellite links (earth stations, networks, etc), radio relay links and correspondence with the ITU Radiocommunications Office.

Moreover, as waves do not stop at borders, 1,583 files regarding international frequency coordination were processed by the Institute in 2004.

Licensing of operators

Whether the system functions well depends on the competence of its operators. For this reason, BIPT organises examinations for radio amateur certificates and for maritime radio operator certificates. The examinations for operators of aeronautical stations fall under the Federal Public Service for Mobility and Transports.

In 2004, 168 radio amateurs, 884 VHF maritime operators and 203 GMDSS operators passed the exam (89.8%, 90.8% and 81.9% of the entrants).

In May 2004, BIPT brought a computer-based examination system into operation. Twelve workstations are designated to this activity within the Institute. Multiple choice questionnaires have already been prepared for radio amateurs and maritime VHF operators. A similar computer examination is being devised for GMDSS operators (SRC). It will be operational in 2005.

In 2005, BIPT will also reform the authorisation system for radio amateurs, as wished by their representative organisations. From now on, the first step will be a basic certificate granting limited rights of practice to the radio amateur. He can extend these later on by taking other examinations.

2.8. GUARANTEES FOR SPECTRUM USERS

Managing the electromagnetic spectrum is aimed at guaranteeing that radio communications work properly for a wide range and a large number of users. The battle against interferences takes priority, in the form of preventive or, if need be, repressive actions. In addition to its informative, advisory and managerial tasks, the Belgian Institute for Postal Services and Telecommunications monitors the conformity of equipment, carries out checks and if necessary, exercises police authority.

Guaranteeing a well operating spectrum

The general concept of the frequency plan, the organisation and the balanced sharing of the spectrum resources on the one hand and the allocation of licences and the obligation for some operators to sit examinations on the other, all guarantee that the electromagnetic spectrum operates well.

This complex approach reduces potential interferences to the bare minimum, but nevertheless does not eliminate them completely. The technical complexity of equipment sometimes requires adjustments on site. Moreover, some users violate regulations.

The "wave police", i.e. the NCS (National Spectrum Monitoring Department), have a long-standing experience and deploy their activities from five monitoring centres across the country (Anderlecht, Liège, Seneffe, Antwerp and Ghent).

Its field actions are facilitated by twenty measurement vehicles, which are fully equipped and regularly updated according to technological developments. In addition to this mobile equipment, six fixed measurement stations are under construction to automatically monitor frequencies.

About sixty people make up the NCS's staff. Most of its members have the capacity of criminal investigation officer, which proves to be essential for "wave police" actions.

Preventive battle against radio interferences

Electromagnetic spectrum users holding an authorisation are liable to pay a fee. In return for this annual contribution, they receive maximum protection against interferences caused by other users. If they act in accordance with the clauses stated in their licence, they can also rest assured that they will not cause electromagnetic interferences to others, whether these are direct users of the electromagnetic spectrum or not.

The prevention of interference is an unabated battle. But preventive action enables to limit corrective actions, which very often require long investigations. As the radio networks are subject to declarations and licences, the NCS attempts to check their conformity in terms of frequencies, output, height of antennas and other aspects, as soon as they are set up.

In 2004, the NCS thus monitored the compliance with technical regulations of 1,900 infrastructures, giving priority to the most important networks, namely those of the professional users. The number of preventive interventions keeps increasing (in 1999, 775 cases occurred).

As a result, the number of complaints is in constant decline: while there were 1,800 complaints in 1999, this figure was cut by half in 2004. This trend reversal can also be explained by the emergence of technologies that are increasingly refined and effective.

Treatment of interferences

Every citizen in Belgium may report to the NCS any radio interference of which he allegedly is the victim. Moreover, the security and emergency services, for whom radio transmission quality is essential, have access to a permanent service 24 hours a day. It was called upon 65 times in 2004.

The variety of complaints is wide, ranging from citizens annoyed by interferences in their television set or radio (it should be noted that in 90 % of the cases, the equipment of the private user is at the root of the problem) to the aeronautical user, who experiences interference in a particular frequency, even including the

crane driver who, on a building site in Brussels, experiences interference in his local communications caused by transmissions from another crane driver on a site in Antwerp.

The Monitoring Centre for Mobile Radiocommunications (CCRM) is a private non-profit organisation, financed for 50 % by BIPT and for 50% by users in the maritime and the aeronautical fields, which are sensitive areas. It ensures a continuous monitoring on the frequencies concerned (the lowest) in accordance with the standards of the International Telecommunication Union and when it records interference, asks BIPT to intervene.

In all these cases, the NCS identifies the origin of the interference. It takes the necessary measures, both technical and legal, when the interference results from a breach (non-observance or absence of licence, equipment that does not conform). In 2004, the NCS produced and submitted 174 official reports to the public prosecutor's office.

Participation in major events

Major events, such as the Tour de France in 2004, mentioned earlier, or the Formula One Belgium Grand Prix or the Dutroux trial require specific actions.

These events are limited in time but mobilise many frequencies and users, who are subject to the same rules that apply to permanent users. On these occasions, the frequencies department commits itself to the award of temporary licences and allocation of frequencies and the NCS ensures a presence on site in order to resolve interference problems as quickly as possible.

Conformity of equipment

Any radio and terminal telecommunications equipment employing the electromagnetic spectrum, is likely to suffer interference or to create interference for other users if it is not technically suited. This applies equally to the antenna of a mobile phone network as to the remote control of a toy car. Interferences are very often caused by such devices, because they do not comply or because users do not observe regulations.

In Europe, all devices are subject to the technical regulations of a 1999 European directive called the "R&TTE" directive (http://europa.eu.int/eur-lex/).

The presence of a CE marking implies that the manufacturer, who is fully responsible for the conformity of his equipment, has observed the relevant regulations.

Technological advances have meant that in Europe, more and more devices are categorised under "Class 1" (only requiring this CE marking). They are not subject to any restrictions on marketing and usage. The complete list and the technical regulations can be consulted at: http://europa.eu.int/comm/enterprise/rtte/equip.htm.

Nevertheless, in Europe, neither the use of frequency bands or the operating conditions for equipment are harmonised. When national restrictions exist, devices must carry the ⓘ sign. Notices on packaging and specific documents must explain all regulations and restrictions or even bans as to the use of the device in each country of the Union.

These devices are also subject to an administrative declaration with the ad hoc national authority, which is BIPT in Belgium, before they are marketed in a particular country. In 2004, 1,972 devices were registered with the Institute.

Monitoring of equipment

BIPT was also assigned the task to monitor conformity of equipment which is actually put on the market. These actions cannot of course be exhaustive or systematic and are therefore carried out by means of spot checks in particular areas. Thus in 2004, the seven inspectors with the capacity of criminal investigation officers, intensified their investigations on public markets, which bring together innumerable small travelling businesses, in Brussels, Tessenderlo, Charleroi and Seneffe. They also increased the number of checks on mail parcels containing equipment ordered on the Internet and at Customs entry points at airports.

A large number of seizures, involving more than 10,000 devices (double the number of 2003), among which large numbers of remote-controlled toys (following the implementation of a new European directive on these devices in 2004) and many official reports (360) were recorded in 2004. This does not necessarily reflect the state of the market but shows how important the targets for these checks are in the attempt to clean up certain challenging commercial sectors.

Harmonising standards

In 2004, inspections focused on the administrative conformity of equipment, notably on the affixing of markings and the observance of the documents mentioned earlier.

BIPT took part in a European market monitoring campaign which revealed that at European level, 70% of devices do not conform. As the area of harmonisation (class 1) should gradually expand, inspections will increasingly monitor observance of technical regulations.

This type of monitoring is also essential in order to pre-

vent that manufacturers and importers who meet their legal obligations suffer unfair competition from other traders who are not so scrupulous.

Matters of equipment and frequency plan management are often closely linked. For instance, it is Belgium's objective to free up a frequency for the benefit of the mobile telephony networks by 2009. This frequency is currently reserved for a particular type of indoor cordless telephone, the CT1. The sale of these terminals has been banned in Belgium since December 2004. Nevertheless, the frequency will be reserved until 2009 for devices still in operation.

2.9. MANAGEMENT OF TELEPHONE NUMBERING

Telephone numbering is also a scarce resource. It is a key for access to the telecommunications markets. The Belgian Institute for Postal Services and Telecommunications is in charge of the numbering plan. It has introduced mechanisms that ensure the portability of numbers and it monitors whether these function effectively.

Numbering, a prerequisite to competition

Numbers are essential for an operator who wishes to provide telecommunications services. Without numbers, communications are impossible. The allocation of numbers is also a key to competition. It must be fair not only in terms of quantity (having enough numbers to develop a clientele) but also in terms of quality (no operator wishes to have 48-digit numbers if their competitors have 5-digit ones!).

European regulations have acknowledged that telephone numbering is a scarce resource. We can make the same observation as on frequencies. On the one hand, if we do not want allocated numbers to comprise too many digits, we have no unlimited quantity of available numbers. On the other hand, we must ensure that numbers are not allocated twice. In short, general management of the numbering plan is imperative. This task is entrusted to the regulatory body, viz. the Belgian Institute for Postal Services and Telecommunications.

Internet domain names are essential for the Internet as well as the Belgian economy itself to work well. The numbering service has made further efforts, in consultation with non-profit organisation "DNS.be" to further enhance the stability, certainty and security of domain names under the top-level domain ".be".

These tasks are fulfilled within a general reference framework, at European as well as at world level.

A numbering framework has also been devised for mobile virtual networks (Mobile Virtual Network Operators ; operators who, without having a network, are currently preparing to offer mobile telephony services).

As far as numbering is concerned, BIPT has kicked off a sector consultation on the infokiosk services. A very high number of complaints are filed by consumers who have dialled such numbers and were redirected to foreign-based numbers without their knowing. Moreover, these concerns are generally shared by other European regulators (see page 44).

For the first time, short numbers were allocated to a new telephone enquiry service. This marks the liberalisation of the telephone enquiries market.

Number portability

The portability of numbers is of critical importance for the markets. It is often off-putting for a client to have to change numbers if he wants to change providers. It is therefore an obstacle to competition.

The mechanisms thought out by BIPT and which at present operate as a matter of routine, are often quoted as examples in Europe, especially by the European Commission. In 2004, the two units created by BIPT in consultation with the sector continued to work to general satisfaction. They are the "Number Portability Task Force Fixed Networks" and the "Number Portability Task Force Mobile Numbers". These platforms bring operators together under the chairmanship of BIPT, and have been operational since 1998 and 2002 respectively.

BIPT also exercised its monitoring role over the non profit making association "Number Portability", which manages the central database. Guidelines were issued for Belgacom's "farewell letter". This is the last letter sent by Belgacom to customers who wish to transfer their number to another operator.

Carrier pre-selection

The pre-selection of the operator (four digits dialled before the number) is another prerequisite to competition in fixed telephony. The mechanisms devised in conjunction with the sector and monitored by BIPT also work to perfection.

Procedures regarding activating and deactivating carrier preselection are submitted to assessment and are adjusted when necessary, in the interest of a properly working market.

2.10. TECHNICAL TASKS OF PUBLIC INTEREST

The Belgian Institute for Postal Services and Telecommunications fulfils yet other tasks of public interest. Its strong technological expertise makes BIPT especially qualified to carry out activities relating to electromagnetic fields and the security of networks.

Antennas and electromagnetic fields

Public opinion is concerned about the impact that exposure to electromagnetic fields and RF radiations has on people. In this respect, the Belgian legislator has entrusted special tasks to the Belgian Institute for Postal Services and Telecommunications. These aim for an even balance between the principle of precaution and further development of the telecommunications networks. Even if the management of antenna sites is not a matter for the economic regulation of the market, development of supply does nonetheless depend on their availability.

Transmission antennas can be submitted to a preliminary analysis of the RF radiation, in order to obtain the necessary planning permissions. In 2004, the new antenna installations for the development of UMTS networks brought the number of treated files to 2,456, which represents a slight change in comparison with 2003 (3,805 files).

The Institute has taken the necessary measures to cut the file processing time, notably by increasing its workforce. 91.15% of files had been submitted by the GSM operators. The remainder came from the A.S.T.R.I.D. network (the radio communication tool of Belgian rescue and security services), the VRT, the RTBF, local radios and radio amateurs. Thanks to the present standards, the levels reached were so low that not one measurement on site was required.

This information is entered in a database on antenna sites, which is managed by the Institute. It lists more than 7,000 antennas with their technical data. In the course of the year 2005, all this information will be available on the BIPT website, complemented by cartographic and technical documentation.

BIPT, through the long experience of the National Spectrum Monitoring Department (NCS, see page 38), has an extensive expertise in measuring electromagnetic fields surrounding transmission sites. In this context, BIPT carries out measurements on behalf of the Ministry of Health at the request of the public or the authorities. Between the start of 2002 and the end of 2004, the Institute analysed 265 sites.

Network security

The security of networks, the protection of information circulating on them and the protection of users who are connected to them are major concerns for modern societies using technology and telecommunications. The development of the information society can only be harmonious if its technological bases are secure.

The last few years have shown that this has not always been the case: spread of innumerable viruses and the damage they cause to users, espionage and piracy via the networks, etc.

Since May 2000, BIPT has taken initiatives on network security. Following the significant damage caused by the spread of the "I love You" virus, a special cell was created within the Institute: the E-Security Platform. This service is staffed for 24 hours a day and seven days a week and offers as such a point of contact that can be reached at all times. By ensuring this watch service and disseminating information, BIPT limits the risks of computer viruses spreading. The virus page on the BIPT website is updated and 30,000 addressees are registered on the "biptvirus" mailing list. In addition, a new means for raising virus alarms was brought into operation in December 2004, namely a service for reporting new virus outbreaks by SMS. In 2004 three such virus alerts led to updates of the relevant web pages. These pages describe viruses and appropriate measures to tackle them. These alerts were then relayed by e-mail. The SMS service, which has only been in operation for a short while, had activated more than 600 registered addressees in December. The registration procedures for the electronic mailing and SMS lists feature on the website.

Securing networks

More generally, BIPT participates in numerous activities relating to network security both at national and at international levels (cross-reference to international pages). The Institute thus contributed to the proceedings of the working group set up in October 2003 by the Government in order to draw up a plan for securing networks in Belgium. Some parts of the BIPT contribution to Comixtelec also concern the protection of networks in the event of a crisis. As they are governed by the management contract between the State and Belgacom, these are discussed elsewhere.

BIPT contributes to the drafting of legislative texts enabling to resolve certain fundamental problems of public security. Among them is a draft royal decree on the identification of callers by emergency services – including from prepaid cards. At the end of 2004 however, no legal provision had yet taken effect. Since the text has not been passed, many nuisance calls are made to these services, disrupting the fulfilment of their vital task. The Institute for its part started to look into the impact of VoIP (telephony over Internet) on this particular issue in 2004.

2.11. TECHNOLOGICAL MONITORING, NATIONAL AND INTERNATIONAL INSTITUTIONAL INVOLVEMENT

The Belgian Institute for Postal Services and Telecommunications constantly improves its technical expertise through its international relations. It can thus influence certain technical decisions and anticipate them.

International relations

International involvement is a real priority for BIPT. In a sector that is in permanent technological development and going through a process of harmonisation at European level, it is essential to ensure an active presence at all levels of standardisation and technical decision-making and at all preparatory stages to new regulations. This enables to anticipate future measures or even to influence them as they are elaborated.

For instance, BIPT took part in different technical working groups and project teams of the European conference of postal and telecommunications administrations (CEPT):

- FM WG : working group on frequency management;
- FM-PT22: group that draws up standards and methods for harmonised monitoring;
- RA-PT11: group that examines common policies and coherent legislation on frequencies;
- RA-PT2R2 and PT/Rainwat: two groups that deal with the management of frequencies at sea and on inland waterways.

As for numbering, the Institute chaired, also within the ECC, the working group "Numbering, Naming & Addressing". It adopted new projects on the harmonisation of short numbers in Europe, the numbering for Voice over IP and the battle against the abuses of international numbers for infokiosk applications, which are currently topical concerns in Belgium.

BIPT participated in the meetings of the Radio Spectrum Policy Group (RSPG). This involvement is particularly important since this group of experts is carrying out a prospective and strategic analysis of the European policy on spectrum planning and frequency allocation on behalf of the European Commission. BIPT also participates in the Radio Spectrum Committee (RSC). This committee assists the European Commission in defining, elaborating and implement-ing the common policy on the radio spectrum. It is made up of representatives of the member states and is chaired by a representative of the Commission.

The committee examines the propositions of the Commission on the prevailing technical measures aimed at harmonising conditions regarding the availability and use of the radio spectrum. It is furthermore responsible for issuing opinions on the mandates that

the Commission entrusts to the CEPT regarding the harmonisation of radio frequency allocation and availability of information.

Within the International Telecommunication Union (ITU), the Institute participated in the Regional Conference on radio communications that laid the technical foundations for introducing digital terrestrial television.

With regard to network security, BIPT takes part in the activities of NATO's Civil Communications Committee and chairs a working group on the deployment of computer emergency response teams in various countries in the event of a crisis. Finally, the Institute fol-lowed the proceedings for the establishment of the European agency ENISA (European Network and Information Security Agency), which will be operational in mid-2005. Its main task will be to provide information and advice to member states.

BIPT and the postal sector

3.1.
LEGAL FRAMEWORK AND TASKS OF BIPT

The European Union is gradually evolving towards a full liberalisation of postal services. The opening up of the market is accompanied by essential national regulation. In Belgium, the Belgian Institute for Postal Services and Telecommunications has been empowered with this regulation, which is currently limited but is bound to develop. In 2004, in the period leading up to the publication of the implementation decrees, this task could only be partially fulfilled. In parallel, BIPT supervises the provision of the universal service by La Poste and the observance of the management contract with the State.

Gradual liberalisation in Europe

The European Commission's 1992 Green Paper set out the orientation for European legislative texts on the postal sector. On this occasion the concept of universal service came into being, which called for regulation and standards of quality. The 1997 European directive implemented these principles and in the process, launched the opening up of the market.

Competition was first introduced in the so called "non-reserved" niche markets. Services falling under the policy of liberalisation have steadily been extended as new deadlines were set by the 1997 and later the 2002 directives (see box below).

The European definition of domains that may be reserved is the following :
"From 1 January 2003, domestic letter post, whether by accelerated delivery or not, with a maximum weight of 100 grams and a price less than three times the public tariff for letter post in the lowest weight class of the fastest category can be reserved to the extent necessary to ensure the prolongation of the universal service. From 1st January 2006 these standards will be reduced to two and a half times the public tariff and to a weight inferior to 50 g".

In Belgium for example, this tariff is equivalent to € 0.50.

Working towards a completely open market

By the end of 2006, the Commission will have assessed the situation and, depending on the results, will make a proposition to the Council and the Parliament in order to confirm or not the full liberalisation of the market on 1 January 2009. If this is the case, there will be no more "reserved area" from then on. It should be noted that, insofar as the States have the power to anticipate the deadlines set by the directives, in a number of countries (the Netherlands, Great Britain, Germany, Spain, Nordic countries), the reserved share of the market is already, sometimes very clearly, smaller than is allowed by the directive.

The European Commission forecasts that the share of the market open to competition will reach 60%[1] by the end of 2007. One can imagine that this projection will add substantial weight to the argument for a full opening up of the market.

1 • source : "Main Developments in the European Postal Sector", wik-Consult, July 2004

BIPT, the Belgian regulator

The two relevant European directives on postal services have been transposed into Belgian law. The Royal Decree of 9 June 1999 designated BIPT as the regulator of the postal sector. The Act of 21 January 2003 establishing the new status of the Institute ensured the functional separation between the regulatory body and La Poste, which is an essential guarantee for the independence required by the directives.

BIPT's activities as a regulator however ran into legal obstacles in 2004.

In the past, BIPT has participated in the preparation of the draft royal decrees laying down the regulated fields. The texts were adopted by the Council of Ministers and were adapted according to the remarks expressed by the Council of State in July 2003, but they have not yet been published.

For a sector in search of legal certainty, this "vacuum" poses problems. As an example, the European direc-tive on the liberalisation of the postal sector provides for the introduction of a licensing and declaration policy for operators. BIPT will be entrusted with this task. But legally, the details of implementation were not yet laid down by the end of 2004.

Universal service

The concept of universal service covers a range of services that a State believes must be available to all users across the whole territory, regardless of their location, at a specified level of quality and at a transparent and non-discriminatory tariff. This concept features in the European directives.

The scope of the universal service is laid down by the Belgian Act of 21 March 1991. It should be pointed out that the concept of a universal postal service covers a wider range of activities than those of the "reserved" domain (monopoly) allowed by the directives on liberalisation (see page 48).

By not altering the scope of the universal service and maintaining liberalised market segments, the national legislator wanted to make sure that, when no alternative operator appears to be interested in these segments of activity, the service would nevertheless be available and guaranteed by the historical operator.

Management contract

In Belgium, the management contract between the State and La Poste entrusts the latter with the tasks of the public service. BIPT was given the role of monitoring these postal services, their quality and cost. It should be mentioned in passing that the management contract also includes parts over which BIPT has no managerial authority: payment of pensions at home, basic bank service, fishing licences, etc.

BIPT nevertheless has the duty to check the validity of the invoice that La Poste forwards to the State for all its public service tasks.

3.2. ECONOMIC CONTEXT OF THE SECTOR

Postal activity mobilises a large workforce. This socially important sector has been weakened by the emergence of "virtual carriers" who provide substitute products. In parallel, the concentration of postal activities in the hands of a small number of companies continues in Europe. The search by La Poste for a partner, which was officially announced at the end of 2004, draws all its importance from this context.

1.6 million jobs in Europe

The postal sector employs close to 1.6 million people in Europe, who account for around 1% of total employment in the 25 member states of the European Union. It generates a turnover of € 90 billion, the equivalent of 1% of the total Gross Domestic Product of the 25 states.

52,000 jobs in Belgium

La Poste employs 42,000 people in Belgium. In 2004, La Poste's consolidated sales figure came to more than € 2.5 billion and it reported a € 34 million operating profit.

To the traditional activities of La Poste should now be added the courrier express business. It generates a turnover in the regions of € 1.8 billion and employs nearly 10,000 people in 600 companies of all sizes. The large businesses employ half of this workforce. Apart from La Poste (EMS, Taxipost), the four major international integrators (DHL, FEDEX, TNT, UPS), as well as the postal services of neighbouring countries are also active in this market.

The remainder of the jobs is spread among small companies and the self-employed, who operate in very limited niches: local or specialised express mail, parcel delivery at distribution points, delivery of products purchased by mail order or on the Internet, etc.

Slowdown in activities

The industrialised nations generate 90% of global income from postal activities. However, stagnation or even a general downturn in postal traffic can be observed. This trend is down to the boom of the Internet and the emergence of substitute products. E-mail, electronic invoicing, viewing of bank statements via the Internet, online catalogues, targeted direct marketing or the printing of online documentation can all substitute items sent by post.

In Europe, growth in mail volume has long ceased to coincide with trends in Gross Domestic Product. In Belgium, where business correspondence makes up a substantial part of overall mail (85% of La Poste's sales figure) and where the Internet connection rate is very high, this trend is even stronger. In 2003, the drop in the total number of mail items handled by the postal sector was estimated at 3% (this is a global trend).

Diversification of activities

On top of this momentous trend comes the gradual

slip in the historical postal companies' reserved market share. Moreover, the liberalised segments (parcel and express services) are among the most profitable.

In response to this, the historical postal operators have diversified their offer. The Belgian La Poste for instance, offers through its various subsidiaries such services as document handling, digital printing, direct marketing, paper distribution or total solutions for secure communications including via the Internet. This shows that the historical postal operators are equally exerting themselves, notably in the sector of substitute products mentioned above.

Concentration in the sector

In the same way as partial privatisation, the process of economic concentration also seems to gain ground in Europe. Alliances have been forged between Deutsche Post and DHL, between the Dutch Post and TNT and between Scandinavian operators.

This can only strengthen the trend towards an oligopoly in a European market where 75% of letter post is controlled by the six largest postal operators, while more than 50% of the express and parcel delivery markets is held by only five companies.

Seeking a Belgian partnership

In this context, the decision taken in October 2004 to seek a partner for La Poste is an important one: "The Belgian state and La Poste have set themselves a number of objectives, which they intend to meet within the framework of a strategic partnership. The main objectives are to strengthen La Poste's financial position and core activities as well as to support La Poste in its process of modernisation, aiming to make it more modern, more efficient and more customer-oriented" (press release of 8 December 2004).

3.3. ECONOMIC REGULATION

In 2004, the Belgian Institute for Postal Services and Telecommunications issued several opinions relating to disputes between operators in which La Poste considered its monopoly on certain services to have been violated against. Following up on this, BIPT provided a better definition of the concept of "service clearly distinct from the universal service", thus clearly drawing the boundaries of the monopoly.

Disputes among operators

The legislative framework which ensues from the European directives sets the boundaries for activities that may be reserved for an operator and continue to be controlled by a monopoly. It is the regulator's task to monitor the observance of these boundaries. For instance in 2004, BIPT issued a decision on a complaint by La Poste against six private companies. La Poste deemed these new operators to be in breach by developing activities which fall under the postal monopoly. In these cases, the Institute found that the services concerned were "clearly distinct from the universal postal service".

Drawing the monopoly boundaries

In the same process, a reflective exercise resulted in a more accurate definition of services which are "clearly distinct from the universal postal service" and which can therefore not be the object of a monopoly. Information on these clarifications has been made public in a communication, after sector consultation.

The communication describes the full set of criteria which BIPT takes into consideration to determine whether a service may be open to competition. Such analytical grid will prove particularly valuable in the future.

In 2005, when the royal decree setting out BIPT's competence in these matters (reference) comes into force, the Institute will implement the procedures, which include on the one hand the award of licences to providers of the non-reserved universal postal service and declarations of companies active in the non-universal postal sector on the other.

Regulatory tasks set to grow

These developments have confirmed the need for implementation decrees officially laying down the powers and tasks of the Institute. For instance, the BIPT Communication of 11 February 2004 on services clearly distinct from the universal postal service was required to elucidate the situation.

In future, the tasks of actual economic regulation will be increasingly important in a liberalised market. In time, the question of network access will arise more acutely: as the regulator for the postal sector, BIPT will have to enforce the principles of transparency and non-discrimination.

3.4. CONSUMER PROTECTION

Within the framework of the third management contract with La Poste, the Belgian Institute for Postal Services and Telecommunications has been assigned the task to check whether the operator observes the quality objectives set by the State as regards the postal service. These are measured on the basis of standards that are harmonised at the European level. BIPT also has the task of calculating the cost of the universal service and verifying the invoices forwarded by La Poste to the State.

Calculating the cost of the universal service

The universal service was created by law in order to guarantee a minimum package of postal services of a defined quality, to be offered at a reasonable price to all users. Through the management contract, the State has entrusted La Poste with these services, even if a number of these are also open to competition (see page 49). In effect, the universal service may in part or in full be entrusted to the care of several operators. In a context of competition, it is only proper that these providers are not put under an unfair financial burden.

Calculating the cost of this burden is a task at which BIPT is well experienced. In early 2004, in order to take better into account the newly created "Prior" and "Non Prior" mail categories, the Institute revised the classification of products eligible for the universal service, in consultation with La Poste.

The calculation is founded on complex economic cost models and La Poste's internal analytical accounts. For the year 2003, the calculation has led to the conclusion that the burden borne by La Poste is not unfair.

Harmonising the measurement of service quality

Since January 2004, the European Commission has imposed a harmonised method for measuring quality in postal services. The performances of universal service providers, notably in terms of mail delivery times, must be measured on the basis of the European norms (EN). By doing so, they can be compared more easily between one country and another. As early as in 2003, BIPT and La Poste anticipated these regulations by applying the European norms on their own initiative. BIPT, which monitors the whole measuring process as implemented by La Poste, published its findings on 2003 in early 2004.

Measuring mail service quality

In 2004, this process was again monitored. The first change to the third management contract sets an objective for 2004 of at least 93% D+1 and 97% D+2 for mail sent at the "Prior" tariff. The abbreviation "D+1" represents the delivery of items on the first working day, except on Saturdays, after these were posted before the last effective post-box collection, were brought in at the post office or were collected on the spot.

As for the quality measurement of items sent at the "Prior" tariff, 34,935 test items were sent between January 2004 and December 2004. The result came to 87.5% for D+1 and 96.6% for D+2.

In addition, the abovementioned changes to the third management contract also recommended, at the request of BIPT, the integration of quality objectives for items sent at the "Non Prior" tariff. When La Poste adopted the "Prior" and "Non Prior" categories, the Institute had indeed issued the opinion that new quality standards had to be set and integrated in the management contract. These were set at 93% at least for D+2 and 97% at least for D+3. 30,474 test items, which were sent as part of measuring the quality of mail items sent at the "Non Prior" tariff, produced a result of 93.7% for D+2 and 97.2% for D+3. The objectives of the management contract in terms of Non Prior mail items have consequently been met.

Assessments and quality checks

In 2004, BIPT organised a consultation with La Poste in order to assess the 2003 results and improve performance. BIPT continues to monitor this matter closely.

Quality objectives also exist for the delivery times of daily newspapers under postal subscription. A three-party agreement was signed between the State, La Poste and publishers of the daily press. It lays down quality standards and pricing for the distribution of newspapers. La Poste had committed itself to delivering 82% of dailies before 7.30 am, while observing specific objectives for the respective provinces.

The agreement entrusts BIPT with the task of monitoring compliance with this quality standard on the delivery time of papers in private letter boxes. A first survey was conducted in November 2003 among 80,000 subscribers (half of which replied). A complementary survey conducted in June 2004 confirmed the first results: these came to just under 80%. In 6 of the 10 provinces, they failed to meet the agreed objectives.

Survey on customer satisfaction

The Institute has lent its support to La Poste for the customer satisfaction survey which it regularly conducts among its client base. This survey was founded on an identical method to the one applied in 2003 in order to guarantee the comparability of results. The topics polled were:

- sending and receiving letters;
- sending and receiving parcels;
- newspapers and periodicals;
- registered or recorded items;
- customer information;
- post offices and their infrastructures;
- quality of service offered in post offices;
- general satisfaction with La Poste.

The survey took place from June until and including December 2004. A first analysis already shows a higher satisfaction rate among professional customers.

3.5. TECHNOLOGICAL MONITORING, NATIONAL AND INTERNATIONAL INSTITUTIONAL INVOLVEMENT

Postal services need to look beyond their borders. The Belgian Institute for Postal Services and Telecommunications, while constantly paying attention to the expectations of Belgian society, plays a particularly active role in international bodies where future orientations are set out.

Tuned in to society

BIPT assumes the secretariat and provides the funding for the Consultative Committee on Postal Services. This is an important role in observing and mobilising an institution which is a true national consultative forum. The Consultative Committee, which is representative of Belgian society and postal market players, can issue political authorities and/or BIPT with recommendations on the postal sector and its developments. It publishes and forwards to the Chambers a detailed annual report.

Exchanges between European regulators

In Europe, the regulators of the different Member States organise special exchanges within CERP (European Committee for Postal Regulation). In 2004, BIPT continued to assume the chairmanship of this organisation, which is a testimony to the recognition by its peers. The Institute is active within the different working groups of this Committee, be they technical, regulatory, economic or reflective. For instance, a forum was organised in Vilnius on network access, one of the key challenges of future liberalisation.

Apart from constituting a special interest community sharing the same concerns, the regulators jointly reflect on harmonisation in a European space which is subject to the same regulation, thus facilitating exchanges. In 2004 for instance, efforts towards harmonising quality standards and cost calculations were pursued. Uniform or comparable criteria governing these exchanges are indeed crucial in evolving towards a true single market. Working groups on market data or good regulatory practices share identical views.

In 2004, an important part of the European regulators' activities within CERP were conducted in conjunction with the postal operators (PostEurop). Through these fruitful exchanges, common European positions were elaborated, to be taken at the important Congress of the Universal Postal Union (UPU).

European quality standards

The technical committee TC 331 on Postal Services was given the task of harmonising quality standards and technical specifications at European level. This technical standardisation is essential in making the various national networks more interoperable and

improving efficiency of the universal service in the Union. European efforts for standardisation were already important in the context of liberalisation, which has seen a soaring number of operators. They have now become even more crucial since the Union was enlarged with new Member States. The Institute keeps abreast of the work on European standardisation of quality standards. The adoption of these standards will be the main challenge in 2005.

Universal Postal Union

With its 190 member countries, the UPU is the main forum for global cooperation between postal services throughout the world. It convenes in congress

every five years. It was important for Europe to make its weight felt at the last assembly, where 750 draft resolutions were considered. The UPU enables to maintain a true universal network offering modern products and services and facilitating exchanges between national postal services.
BIPT coordinated at the Belgian level the entire organisation of the 23rd UPU Congress, which brought together 2,000 delegates, observers and guests from 15 September until 5 October 2004. During this Congress, which was held in Bucharest, numerous questions and technical provisions were discussed and decided on for improving operation of and collaboration between postal services across the world (extra-territorial offices of exchange, terminal dues, etc.). BIPT was particularly actively involved in the proceedings of certain commissions ("General matters and Structure of the Union", "Economic and Regulatory issues", "Quality of Service", "Development Cooperation",...).

Moreover, BIPT was elected on the UPU Council of Administration (CA) and will also join its Strategic Planning Group. La Poste has for its part been re-elected on the Postal Operations Council (www.upu.int). The results obtained in these peer elections are an expression of high-level international recognition.

The UPU has notably officially adopted new methods for running the organisation and has pursued its policy of openness. BIPT has substantially contributed to this, particularly to the examination of legal aspects. This reorganisation is oriented towards modernising and adapting UPU to sector developments. The welcoming of other partners than the historical operators was sealed with the creation of a Consultative Committee representing private operators. A study will also be conducted into enlarging the Postal Operations Council with new operators. The UPU restructures its bodies through a more rigid separation between operators and regulators.

Legislation

Decrees prepared by BIPT were published in the Moniteur Belge on 13 December 2004 in order to ensure the conformity of the management contract which abolishes La Poste's obligations regarding commercial effects and receipts.

A draft royal decree and a recommendation were prepared following a round table on the standards applicable to private letter boxes. These were submitted to the Consultative Comittee on Postal Services.
The draft royal decree on the recognition of newspapers and periodicals is currently under examination at the Minister's Private Office.

The Institute also sat on the "Internal Market" Interministerial Economic Commission in order to prepare the Belgian position vis-à-vis the "Bolkestein" draft directive on services in the internal market.

More generally, a complete analysis of the prevailing legislation with regard to postal matters has been initiated.

Functioning of the Institute

4.1. STAFF

The request for staff expansion tabled by the Belgian Institute for Postal Services and Telecommunications is pending. It is important that this request is met, in order to enable BIPT to fulfil its ever more complex and essential tasks.

More than 200 collaborators

218 people dedicate their expertise, their abilities and their commitment to the successful and effective operations of BIPT and the Mediation services. External observers often presume that these collaborators exclusively perform regulatory activities of a specifically economic nature.

In fact, the teams that are currently assigned to regulatory tasks (in the sense of competition management) comprise around 20 people. Of course, as market liberalisation continues to evolve, regulation will absorb increasing amounts of time and effort. The liberalisation of postal services is only in its infancy whereas that of electronic communications leaves national regulators ever more room for discretion.

In effect, a large part of BIPT staff are assigned to various tasks and are not confined to administrative work in the Brussels offices. The NCS staff (National Spectrum Monitoring Department) for instance, which totals 60 people (with the capacity of criminal investigation officers), is spread over five local outposts across the country. They very often engage in field work. The same goes for the services in charge of monitoring, whether this concerns equipment or observance of rules on liberalisation and public service. A dozen members of staff in charge of monitoring take "police-style" action where it is needed.

Nearly 60 people are in charge of managing technical and administrative files concerning declarations and licences, allocation of frequencies and the overall management of the electromagnetic spectrum and numbering.

The activities relating to the postal service are performed by a team of ten people.

It is worth pointing out that the twenty staff members of the Mediation service, which is incidentally totally independent of BIPT, are on the Institute's pay-roll.

Request for staff expansion

The new tasks that were assigned to BIPT by virtue of European regulations and the definite prospect of further liberalisation in the postal sector have prompted a request for expansion of staff numbers, which was tabled on 15 December 2003. It covers some 50 high-level posts, including some 20 positions for economists and lawyers and six for engineers.

The Institute believes it should settle the bulk of cases internally. Without ruling out external consultation, BIPT firmly believes that it should preserve within its walls the expertise and knowledge relating to its core activities, both for reasons of efficiency and cost.

The procedure for the expansion of staff numbers, which at the end of 2004 pursued its course within the Government Department, also covers 14 correspondents (clerical staff), eight technicians and two assistant technicians.

The Mediation service has requested an expansion by ten collaborators.

Collective labour agreement

The collective labour agreement that was signed in November 2004 was particularly important for the Institute. It integrated the necessary updates and harmonisations (on status, grade, promotion and remuneration) in the status of members of staff coming from various backgrounds. In this agreement, BIPT and the representative organisations have also made provision for the principle of an assessment scheme for staff performance, which will be fine-tuned in 2005.

The agreement formally awaits royal assent, which is expected towards the end of the second half of 2005, but will carry retroactive effect.

4.2.

EQUIPMENT

In 2004, apart from current investments relating to IT or certain project-specific services, the teams have focused on very important cross-department projects that will improve the Belgian Institute for Postal Services and Telecommunications' effectiveness and user-friendliness in fulfilling its tasks.

Improved IT security

Given the tasks entrusted to BIPT, the protection of the Institute itself against potential malice or even espionage is of vital importance. Irrespective of the indispensable continuity of service, BIPT holds extensive information of a sensitive and confidential nature, which needs protecting. For this reason, the Institute's IT security was completely screened, analysed and overhauled in cooperation with an external company in the course of 2004.

Cartographic equipment

BIPT relies on geographical maps for a large part of its activities, whether they concern monitoring, field actions, antenna sites, management and coordination of frequencies or coverage rates of mobile networks, to quote but a few examples.

The Institute completely renewed its cartographic and GPS equipment in 2004. Raster maps, which are very accurate and based on satellite pictures, show in great detail the physical lay-out of sites (for instance, this allows to establish whether there is a building on a spot chosen to erect an antenna). As for vector maps, these include all geographical and administrative data. This digital cartography will for instance be used to show antenna sites on the Institute's website. The spectrum monitoring department is equally considering using them to represent the results of its measurements on mobile network coverage.

Document management

The ability to create complete and cross-department files (certain files involve several services at the same time) is indispensable to the Institute's activities. Likewise, it is essential to gain fast access to required information and up-to-date documentation. In 2004, BIPT launched a sizeable project for document management. Its purpose is to file and digitally preserve all documents, whether they are of electronic or paper origin.

New website

The Institute has taken further steps in devising a new website. Creating such an implement, which forms the basis of BIPT's interactivity and openness, is a formidable undertaking.

4.3. CONSULTANCY

BIPT cannot operate in a total vacuum. It therefore invests in assistance and consultancy, notably in three distinct areas. Firstly, the Institute employs the services of solicitors for the appeals lodged against decisions of the Council. Secondly, as specific assistance from private experts is sometimes required for matters of a highly specialised nature, consultants are occasionally called upon. Thirdly, the acquisition, transfer and development of new skills are ensured by training, which is supplied by leading providers.

4.4. FINANCES

The 2004 budget is marked by continuity. Revenue, which stood at around € 30 million, shows a slight rise. This is proportionate to the index trend.

For the record, the Belgian Institute for Postal Services and Telecommunications' revenues comprise fees for frequency licences, numbering plans, licences and declaration of networks and telecommunications services, as well as declarations of operation regarding other services.

BIPT's IT services set up a new accounting system with the aid of an external company in 2004. A transfer to this new, more sophisticated and efficient system was effected in late 2004 and early 2005. This will improve revenue collection even further, while offering a speedier service.

As it has done every year since its creation, BIPT posted a balance surplus. In 2004, an amount of € 3 million was thus transferred to the Treasury.

The Institute's budget and accounts are drawn up by the Council and are approved by the Budget and Finance Ministers.

Practical information

5.1. GLOSSARY

Terms, abbreviations or acronyms mentioned in documents published by BIPT, and/or which are specific to the telecommunications and postal sectors.

2G, 2.5G: second-generation mobile telephony (GSM, GPRS).
3G: third-generation mobile telephony, enabling fast Internet access (see UMTS).
A.S.T.R.I.D.: public company providing a uniform and harmonised system of radio communications for all rescue and security services.
ADSL (Asymmetric Digital Subscriber Line): variation on xDSL technology, which makes use of high and inaudible frequency ranges and enables simultaneous transmission of voice and data (see xDSL).
ATM (Asynchronous Transfer Mode): technique enabling optimum use of capacity in backbone lines, which are the network's motorways, and thus ultra fast data transmission.
Backbone (backbone network): serving as the spines of the telecommunications system, backbones are high-speed international networks to which lower-capacity networks are connected.
Bandwidth: transmission capacity of a link; indicates the amount of information (in bits per second) that can be transmitted simultaneously.
Bitrate: volume of data carried over a given time span on a given network.
Bitstream: digital transmission.
Bluetooth: European standard for wireless communication, enabling the connection of two devices, e.g. a mobile phone and a computer, within a radius of up to 100 metres. It can replace infrared ports that are used for the same purpose.
Bottom-up: a bottom-up model is a cost model based on the traffic volumes that an operator needs to route, whereby these volumes determine the optimum dimensions of different layers in the network.
BRIO (Belgacom Reference Interconnect Offer): Belgacom, the historical operator, is required to publish a reference offer that includes the technical conditions and tariffs for its interconnection services used by other operators.
Broadband: the collective whole of technologies using either telephone or cable for high-speed data transmission. The economic stakes of this technology are high as the broadband penetration rate in Belgian households stands at 37.3%, while the coverage rate for DSL amounts to 100% of the public and 64% for cable.
Broadcasting: transmission of varied programmes by means of electromagnetic waves for entertainment or information purposes. In Belgium, the Communities have been empowered with this subject matter.
BROBA (Belgacom Reference Offer for Bitstream Access): Belgacom, the historical operator, is required to publish a reference offer that includes the technical conditions and tariffs for its bitstream access service used by other operators.
BRUO (Belgacom Reference Unbundling Offer): Belgacom is required to publish a reference offer that includes the technical conditions and tariffs for its local loop and subloop unbundling service used by other operators.
CASES (Cyberworld Awareness and Security Enhancement Structure): European structural project dedicated to the battle against computer viruses.
CCPC (Civil Communications Planning Committee): research committee within NATO on civil telecommunications.
CEPT (Conférence Européenne des Postes et Télécommunications): European Conference of Postal and Telecommunications Administrations. Body that assembles states of the European continent.
CERP (Comité européen de régulation postale): European Committee for Postal Regulation.
CMR (Conférence Mondiale des Radiocommunications): World Radiocommunications Conference.
Comixtelec: mixed commission on telecommunications created by the Royal Decree of 10 December 1957. Its main objective is to optimise the use of all means of telecommunication for the benefit of both military and civil authorities in the event of a crisis.
Convergence: this concept is used to denote the fact that telecommunications, IT and television technologies are merging together and can increasingly be provided over the same networks (cable, terrestrial or satellite radio networks) by using the same terminal equipment (IT terminals, mobile phones, television sets).
CPE (Customer Premises Equipment): terminals that can be connected to the network.

CPS (Carrier Pre Selection): procedure for the automatic selection of operators.
DECT (Digital Enhanced Cordless Telecommunications): european standard for wireless transmission in mobile or fixed telephony.
Domain name: the top-level domain name indicates the entity to which a website belongs (e.g. ".be" or ".com").
ECC (Electronic Communications Committee): European body for cooperation in the field of radio communications.
ENISA: European Network and Information Security Agency.
ENUM (Electronic Numbering): protocol enabling to link Internet domain names to telephone numbers. This allows the consumer to use a single telephone number through which he can be reached on several types of devices (mobile phone, fixed telephone, e-mail...).
ERG (European Regulators Group): group bringing together the European Commission and regulators of 25 Member States, with the purpose of furthering coordination and coherent application of the European regulatory framework.
ETSI (European Telecommunications Standards Institute): body created by CEPT with the task of standardising telecommunications.
GATS: General Agreement on Trade in Services. This is a set of multilaterally agreed rules that apply to international commerce and services (see WTO).
GMDSS (Global Maritime Distress and Safety System): global system for distress and safety at sea.
GPRS (General Packet Radio Services): system for packet-switched data transmission enabling higher speeds on mobile networks.
GSM (Global System for Mobile communications): radio transmission standard used for mobile telephony.
GSM Gateway or SIM Box: a device that converts calls from a fixed-line telephone to a mobile phone in a mobile-to-mobile call. The call is thus routed from mobile to mobile and the cost for calling from a fixed network to a mobile network is avoided.
Hotspot: public access points to the wireless Internet network.
IETF (Internet Engineering Task Force): international group of Internet engineers, system administrators, network operators and users. The IETF lays down operational standards for the Internet.
Improved Service Level Agreement: see ISLA.
Interconnection: links two networks together in order to allow customers of one operator to call all customers of other operators and to have access to services offered by other providers.
Internet: the collective whole of networks accessible to the public, which are interconnected by means of the IP protocol (Internet Protocol). The term also denotes services that are accessible through these networks.
Intranet: network reserved for the communications of a company or a group, based on the IP technology (Internet Protocol).
IP (Internet Protocol): data transmission protocol for the Internet. It is coupled with a control protocol called TCP (Transmission Control Protocol). Hence the TCP/IP protocol.
IP address: address identifying equipment connected to the Internet.
IRG (Independent Regulators Group): forum established in 1997 by European regulators in order to share experiences and exchange opinions on matters of common interest such as interconnection, prices, universal service...
ISDN (Integrated Services Digital Network): (see Hotspot).
ISDN (Integrated Services Digital Network): network capable of carrying pictures, sound and text.
ISLA (Improved Service Level Agreement): this is a contract concluded between Belgacom and an alternative operator whereby Belgacom guarantees a minimum service (for instance maximum waiting times for removing inconvenience). In case of non-observance, Belgacom is liable to pay a fine to the alternative operator. The designation "Improved" implies a higher level of quality (shorter waiting times for instance) compared to a "Basic" Service Level Agreement, which is an automatic inherent part of the agreement.
ISO (International Organisation for Standardisation): international body in charge of standardisation.
ISP: Internet Service Provider.
ISPA: Belgian Internet Service Providers Association.

ITU (International Telecommunication Union): international body placed under the aegis of the United Nations Organisation with headquarters in Geneva, entrusted with issuing standards for the telecommunications industry.
Leased line: A leased line is a service that consists in providing a permanent transmission capacity between two points. This means that this capacity is totally allocated to one customer, who pays the operator a fixed monthly charge.
LEGBAC: international agreements governing compatibility between FM broadcasting and aviation.
LoA (Letter of Authorisation): document by which a customer selects the operator who will route his phone calls by default.
Local loop: the collective set of radio or wire-based links between the subscriber's telephone and the subscriber switch that he is connected to. The local loop is thus the part of an operator's network that enables him to gain direct access to the subscriber. Its shared use is an important issue (see Unbundling).
Migration: the possibility of moving from one service to another.
MVNO: Mobile Virtual Network Operator. A virtual mobile operator markets mobile services without owning infrastructure of his own but by leasing capacity on one of the existing mobile networks.
NCS: National Spectrum Monitoring Department.
Network: any equipment for transmitting, connecting and switching signals, by radio, optical or electromagnetic means (wires).
Non-public network: network reserved for the proprietary use by its operator or a closed group of users.
Number portability: possibility for a subscriber to keep his telephone number (mobile or fixed within the same geographical area) when changing operators.
ONP (Open Network Provision): principle under which the ownership of the network and the provision of services on that network are split up. ONP allows the main operator of telecommunications infrastructure to grant other operators access to it.
Operator selection: possibility for a customer to choose between several operators by dialling a selection code before each call.
PAMR (Public Access Mobile Radio): mobile devices for public radio communication.
PMR (Professional Mobile Radio):): mobile devices for private radio communications.
Pre-selection: possibility for a customer to choose the operator who will route his phone calls, without having to dial a selection code before each call.
Price Cap: mechanism for capping price trends of a basket of services, taking into account levels of inflation.
PSTN: Public Switched Telephone Network.
Public network: network accessible to all.
R&TTE (R&TTE directive): the sector of radio communication equipment and telecommunications terminal equipment comprises all products that use the radio frequency spectrum (for instance remote-control car keys, mobile communication equipment, broadcast transmitters, etc.) and all equipment used in public telecommunications networks (such as ADSL modems, telephones, telephone switches). The R&TTE 1999/5/EC directive lays down the rules for marketing and installing these devices; it rescinded the former directive and national regulations on matters of homologation.
Radio communications: transmission by means of radio waves, of any kind of information, in particular sounds, texts, pictures, conventional signs, digital or analogue content, remote-control commands, signals for detecting or determining location or movement of objects.
Regulation: application of legal rules, economic processes and technical mechanisms, which allow electronic communications activities (services and infrastructures) to be deployed in accordance with the principles of competition, while protecting society and consumers.
Retail: sales to end consumers, whether residential customers or companies.
RSPG (Radio Spectrum Policy Group): committee assisting the European Commission in matters relating to the radio spectrum.
SDSL (Symmetric DSL): this technology does not allow simultaneous routing of voice and data, but routing at similar speeds upstream compared to downstream, adjustable from 64 Kbit/second to 2 Mbit/second, depending on

the needs and on the characteristics of the line. (see xDSL).
SMP operator: originally, this term denoted any operator holding more than 25% of the market and meeting other, more precise criteria set by BIPT. Under new European legislation, the concept of significant market power is more in line with that of dominance in competition law. BIPT analyses the level of competition in the market and designates itself the SMP players on that basis; it also sets out these SMP operators' obligations.
SMS (Short Message Service): messages of a maximum length of 160 characters that are sent over the mobile network.
SRC: the acronym SRC designates the "short range" certificate, which can be obtained by maritime radio operators.
Telecommunications: any transmission, broadcast or reception of signals (sound, pictures, data) by waves, cables or wires.
Terminal equipment: see R&TTE
Terminating rate: when a call travels from one network to another, the operator of the caller pays a terminating rate to the operator of the correspondent to compensate for the facility of "terminating" the call on this network.
Top-down: cost calculation model based on an operator's annual accounts or budget.
Transmission: transmission in the field of telecommunications refers to the routing of information over a network, either physical (copper wires, optical fibres,...) or radio-based.
UMTS (Universal Mobile Telecommunications System): international standard for third-generation mobile networks, which are suited for transmitting voice, data and pictures.
Unbundling: the infrastructure of the local access network requires investments that are prohibitive for the entry of new players on the market. The level of competition is affected by this. Unbundling aims to boost competition by enabling new competitors to offer broadband data transmission services. These services enable permanent Internet access, multimedia applications on the basis of digital subscriber line technology as well as voice telephony services.
Universal service: a number of basic services of a defined quality that must be provided at a reasonable price to all users across the territory.
UPU (Universal Postal Union): body placed under the aegis of the UN with headquarters in Berne.
VDSL (Very High Rate DSL): transmission system enabling very high speeds but over a shorter range than ADSL (see xDSL).
Voice over IP: voice telephony over the Internet.
Voice telephony: the term "voice telephony" refers to the historical telephone service, when telephones only transmitted the human voice.
VSAT (Very Small Aperture Terminal): ground station for telecommunications via satellite.
WAP (Wireless Application Protocol): protocol and format which allows access to the Internet via mobile phone.
Wi-Fi (Wireless Fidelity): protocol for connecting computers by radio waves. (see Hotspot).
WTO (World Trade Organisation): from 1948 until 1994, the General Agreement on Tariffs and Trade (GATT) laid down the regulatory framework governing international commerce to a large extent. The general agreement soon gave rise to an unofficial international organisation, existing in fact and itself unofficially named GATT, which evolved over the years through different rounds of negotiation. The last and most important GATT round, the Uruguay Round, which lasted from 1986 until 1994, led to the establishment of the WTO on 1 January 1995 (see GATS).
xDSL (Digital Subscriber Line): range of technologies enabling high-speed transmission through one or several pairs of copper wires by using very high frequency signals. xDSL comes in the form of ADSL SDSL, and VDSL. Each of these subgroups carries its own specific usage and characteristics.

5.2. ADDRESSES AND USEFUL CONTACT DETAILS

Belgian Institute for Postal Services and Telecommunications

Astro Tower
Avenue de l'Astronomie 14 Bte 21
1210 BRUSSELS
Tel. 02 226 88 88
Fax 02 226 88 77
info@ibpt.be
www.bipt.be

Office of Mr Marc Verwilghen, Minister for the Economy, Energy, Foreign Trade and Science Policy

Rue Brederode 9
1000 BRUSSELS
Tel. 02 213 09 11
Fax 02 213 09 22
info@kab.verwilghen.fgov.be

Office of Mrs Freya Van Den Bossche, Minister for Employment

Rue Marie-Thérèse 1
1000 BRUSSELS
Tel. 02 549 09 20
Fax 02 512 21 23
info@work.fed.be

The Mediation Service for Telecommunications

Place des Barricades 1
1000 BRUSSELS
Tel. 02 223 06 06
Fax 02 219 77 88
plaintes@mediateurtelecom.be
http://www.ombudsmantelecom.be

The Mediation Service of La Poste

Rue Royale 97 2nd floor
1000 BRUSSELS
Tel. 02 221 02 30
Fax 02 221 02 44
http://www.ombudsman.post.be/

Consultative Committee on Telecommunications
Secretary of the Committee
BIPT
Astro Tower
Avenue de l'Astronomie 14 Bte 21
1210 BRUSSELS
Tel. 02 226 87 58
Fax 02 223 88 77
piet.steeland@ibpt.be

Consultative Committee on Postal Services
Secretary of the Committee
BIPT
Astro Tower
Avenue de l'Astronomie 14 Bte 21
1210 BRUSSELS
Tel. 02 226 89 40
Fax 02 223 88 77
etienne.defrance@ibpt.be

Competition Council
North Plaza A 8th floor
Boulevard du Roi Albert II, 9
1210 BRUSSELS
Tel. 02 226 42 67
Fax 02 226 89 76

References to regulatory texts prepared by BIPT and published in 2004.

Promulgation date	Publication date in the Moniteur belge	Title
09/07/2004	15/07/2004	Programme Act (articles 51, 79 and 80, 301 to 317)
21/09/2004	20/10/2004	Royal Decree awarding the capacity of criminal investigation officer to certain members of staff of the Belgian Institute for Postal Services and Telecommunications
16/11/2004	13/12/2004	Ministerial Order amending the ministerial order of 12 January 1970 pertaining to the regulation of the postal service
19/11/2004	13/12/2004	Royal Decree amending the Ministerial Order of 12 January 1970 pertaining to the regulation of the postal service
22/12/2004	07/01/2005	Ministerial Order amending the Royal Decree of 19.10.79 on private radio communications
27/12/2004	31/12/2004	Programme Act (articles 298 and 301 to 307)

BIPT

Astro Tower
Avenue de l'Astronomie 14, box 21
1210 Brussels
Phone : +32 2 226 88 88
Fax : +32 2 226 88 77
info@bipt.be
www.bipt.be