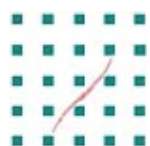


# ANNUAL REPORT 2008

BELGIAN INSTITUTE FOR POSTAL SERVICES AND TELECOMMUNICATIONS



BIPT



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## MESSAGE FROM THE COUNCIL

The Belgian Institute for Postal Services and Telecommunications hereby presents its fifteenth annual report, looking back on the activities carried out by the Institute in 2008. Two economic sectors fall within BIPT's brief: posts and telecommunications, now called electronic communications. The Council would like to shed some light on a number of facts of the past year.

1. ON 7 MAY 2009, THE BRUSSELS COURT OF APPEAL PARTIALLY ANNULLED THIS DECISION, BUT BELGACOM COMMITTED ITSELF TO CONTINUING TO CARRY OUT THE CURRENT CONTRACTS, SO AS TO GUARANTEE LEGAL CERTAINTY. THE INSTITUTE IMMEDIATELY STARTED ITS ANALYSES AGAIN IN ORDER TO DETERMINE THE NECESSARY MEASURES.

In January, the analyses of markets 11 and 12 were adopted<sup>1</sup>. The European Commission rejoiced at this and supported BIPT's efforts to consolidate competition on the Belgian broadband market. BIPT also launched the consultation procedure relating to the future communications networks (next generation networks) and the future form of access to these networks (next generation access). Based on those opinions as well as on the remarks from the Competition Council, the community regulators and the European Commission, the Institute drafted a decision in November, some of the provisions of which show a sense of innovation, which ECTA<sup>2</sup> acknowledged.

In February, the Institute moved from the hill of Saint Josse to the Boulevard du Roi Albert II, within a stone's throw of the Gare du Nord train station. This location has the advantage of maximum accessibility for both visitors and staff, who in addition have the pleasure of moving into brand-new and modern offices. At the same time the radio landscape of the French Community was altered according to a long-expected frequency plan. The Institute was consulted by the Conseil supérieur de l'audiovisuel but it also intervened by imposing an administrative fine to put an end to the harmful interference.

In March, the Institute made public the opinion regarding the regionalisation of telecommunications. That opinion was formulated in January 2008 at the request of the Minister for Economy, the Self-employed and Agriculture following the proposal to transfer the telecommunications regulation to the Regions, as suggested by the Prime Minister in his report on the institutional reform to the King. In its conclusions BIPT stressed the importance of the impact on the corporate world and consumers on the one hand and the fact that the introduction of the cooperation agreement with the community regulators was still too recent on the other hand. Today, after 18 months of being in force, the cooperation agreement can be considered a tangible proof of the spirit of cooperation in which the Institute and its counterparts operate.

In April, several documents were published relating to the mobile operators' termination rates. After this matter was settled for the year 2008, it was again examined closely in collaboration with a consultant assisting the Institute in drawing up a new cost model that will be the groundwork for the regulation of the MTRs (Mobile Termination Rates) during the 2009-2012 market analysis period. The future tariffs will be influenced by the European Commission's recommendation, which encourages both the symmetry and the reduction of the tariffs.

In that same month, BIPT published a communication on the results of the customer satisfaction survey regarding La Poste for the year 2007 as well as an opinion on the Taxipost LLS and Taxipost 24 h parcels.

In May, BIPT consulted the market on the renewal of the existing GSM licences. The need for spectrum for the UMTS services in the frequency bands (900 MHz) is likely to grow as it is used more and more. The future decision whether or not to renew the existing licences will therefore prove to be of the utmost importance to the development of UMTS for the Belgian consumer.

In June, decisions were adopted regarding Belgacom's offer for bitstream access (BROBA); among other things these enable the alternative operators to provide services based on BROBA ADSL2+. To cut a long story short, transport costs decreased by 40 to 60%. In addition the qualitative and the quantitative aspects of the BROBA offer also made it possible to significantly reduce the costs.

2. THE EUROPEAN COMPETITIVE TELECOMMUNICATIONS ASSOCIATION WAS CREATED IN 1998 AND DEALS WITH MATTERS OF REGULATION AND COMMERCIAL INTERESTS OF NEW TELECOMMUNICATIONS OPERATORS, INTERNET PROVIDERS AND THE PROVIDERS OF PRODUCTS AND SERVICES TO THE COMMUNICATIONS INDUSTRY.

At the end of July, BIPT imposed a 3,090,000 euro fine on Belgacom for not having reduced the fixed to mobile rates. This was a first. The operator had chosen to pass on only part of the cuts of the mobile operators' termination rates to the residential and the non-residential customers.

At the end of August, BIPT shared its suspicions of price squeeze regarding the price of the leased lines as for BROTSOLL Ethernet because Belgacom had set wholesale prices that were identical to the retail prices in case the line ended "customer sited", i.e. when the equipment is located on the alternative operator's premises. At the same time the Institute asked the sector what cost elements should be taken into account and also to give its opinion on the method planned.

The consultation on the future Royal Decree regarding radio access in the 2500-2690 MHz frequency band was launched in September 2008. This text leaves the market players with a considerable margin to decide for themselves for which applications they will acquire the corresponding user rights, as well as to choose the location to develop their networks and offer their services to the public.

A consultation regarding the national numbering plan started in late October. It deals with maintaining the available numbering capacity for the provision of electronic communications services by all market players (small or big, new or established operators) while the numbering space is at risk of depletion in a number of zones.

By the end of October BIPT had finished the analysis of the retail market for fixed telephony, upon which the European Commission asked BIPT to ensure that all remedies at the wholesale market level, including the ones imposed on the wholesale markets for access to infrastructure and broadband access, would efficiently contribute to the introduction of sustained competition on the retail markets, by changing the remedies for the retail market if necessary, in order to resolve the problem of the high prices.

Finally, in December, the Institute asked for comments on the practical implementation of the legally imposed method for the distribution between the providers of the costs relating to the database of the social element of the universal telecommunications service.

The execution of the Institute's tasks that are briefly discussed in this document was made possible thanks to all officials. The Council would like to thank them for their motivation and their daily efforts.

Michel Van Bellinghen  
Member of the Council



Georges Deneff  
Member of the Council

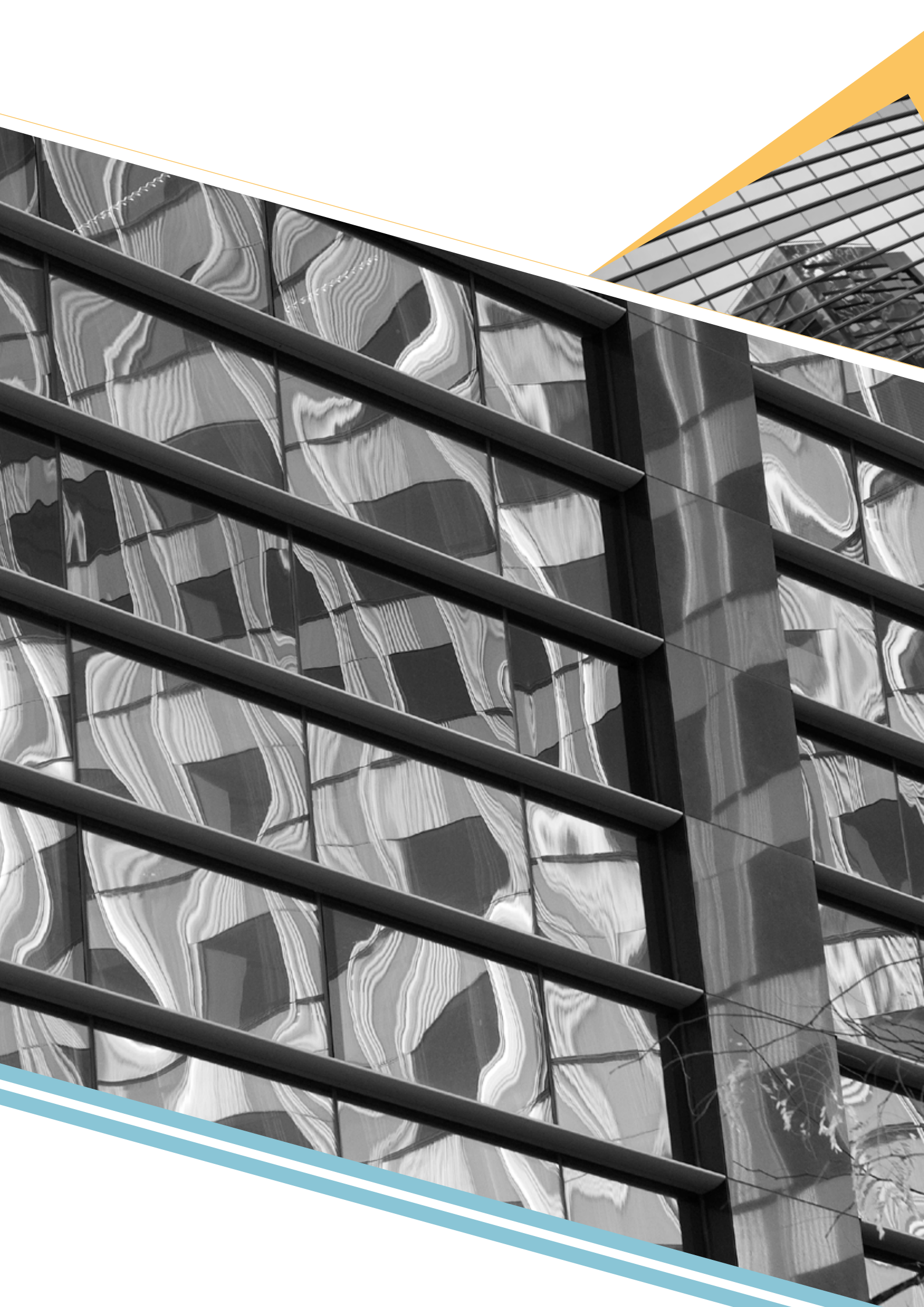


Catherine Rutten  
Member of the Council



Eric Van Heesvelde  
Chairman of the Council





# § 1

## OUR IDENTITY

### Tasks

Historically the postal and telecommunications sectors have long been characterised by the existence of public service monopolies. This market model was challenged by the first attempts at a controlled introduction of forms of competition in the early 80s. In the fully liberalised market of electronic communications and that of postal services, which is now being liberalised, the Belgian Institute for Postal Services and Telecommunications carries out tasks of economic regulation, technical organisation and compliance with the regulatory frameworks. BIPT ensures that interests of sector players and users are protected for the benefit of the community. Four keywords underpin its actions: independence, transparency, cooperation and dialogue.

In the implementation of this new policy, two concerns have guided the legislator. On the one hand, the introduction of the market mechanism into the electronic communications sector and at a slower rate in the postal sector, and on the other hand safeguarding the citizens' interests.

### Fields of activity

The national federal authorities have empowered the Belgian Institute for Postal Services and Telecommunications with the management of two sectors: the electronic communications and the postal sector. Recently that scope was extended to broadcasting in Brussels, insofar as this falls within the power of the Federal State.

The Belgian legislator created the Belgian Institute for Postal Services and Telecommunications by an act of law, promulgated on 21 March 1991, in order to ensure the management of the electronic communications and postal services sectors. Its designation clearly indicates it: the Institute is competent in both areas of activity. BIPT started its activities in June 1993. The Act of 17 January 2003 transformed BIPT into an institution of public interest with a status of its own, thus ensuring its independence of government.

#### ELECTRONIC COMMUNICATIONS

Within the space of about fifteen years, telecommunications have undergone a technological revolution. These technical developments took place alongside the progression of market liberalisation in Europe. The notion of "electronic communications" covers all forms of communication, by radio waves and fixed lines (copper wire, coax cable, optical fibre). This "open" and flexible definition allows for future technological developments and reflects the principle of technological neutrality, which is one of the essential mechanisms within the European regulatory framework on electronic communications.

BIPT exercises its powers through two kinds of activities in particular.

- The first concerns new regulatory tasks in the liberalised telecommunications markets. BIPT makes the necessary arrangements in order that the regulatory framework is observed, competition can develop fully and correctly, 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. Certain resources, such as the electromagnetic spectrum or the numbering reserve, are scarce: a regulator is needed in order to share, regulate and monitor their use with accuracy.

The Institute carries out yet more technical tasks of public interest.

## BROADCASTING IN BRUSSELS-CAPITAL

Since the coming into force of the Act of 16 March 2007 amending the Act of 30 March 1995 on broadcast distribution networks and the pursuit of broadcasting activities in the bilingual Brussels-Capital Region, BIPT has become the broadcasting regulator of federal competence in Brussels, i.e. for broadcasting bodies which are established there and which neither fall within the competence of the French Community nor the Flemish Community.

## POSTAL SERVICES

The postal service is also involved in a process of liberalisation. BIPT has logically been entrusted with the task of overseeing compliance with the regulatory framework and the smooth operation of the liberalised part of the market. Moreover BIPT is in charge of monitoring certain aspects of the management contract binding La Poste to the State. That management contract regards the terms for the execution of certain tasks by La Poste, as well as the financial contribution of the State.

# Values

**The general interest requires an assessment of the advantages and disadvantages for all parties concerned: the operators, the various categories of users and government. Special attention should be paid not only to boosting competition but also to protecting the users (mainly residential users) against potential market abuse.**

## INDEPENDENCE

The Act of 17 January 2003 bestowed on the Belgian Institute for Postal Services and Telecommunications a status that guarantees its independence. The governing body of BIPT is the Council, composed of four members, including a chairman, who has a casting vote in case of a hung vote. The Council takes its decisions autonomously and independently of the Government. It has no links whatsoever with the operators active on the relevant markets. Obviously, any party involved can challenge the Council's decisions before a competent court of law.

## TRANSPARENCY

As an administrative authority, BIPT has an obligation to motivate its actions while observing the confidentiality of certain pieces of information concerning companies and/or their products. In addition, the Institute's articles of association 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. The decision-making process is preceded by consultations. BIPT then sends out its draft opinions or decisions and studies the comments given on these drafts. 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).  
As for the cooperation with the Communities, the Competition Council, the European Commission and the regulatory authorities in other Member States, readers are referred to page 25 and following.

## 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 OF THE COUNCIL, IS IN CHARGE OF:**

- the general coordination of the Institute's policy;
- drawing up the management plan;
- external communication;
- the coordination of the support services of IT/Translators, Personnel and Training, Budget, Billing and Logistics.

### **CATHERINE RUTTEN, MEMBER OF THE COUNCIL, IS IN CHARGE OF:**

- the Department for economic analysis of the telecoms market: all economic aspects regarding telecommunications, including the tariffs of the public service (market analysis, SMP, tariffs, cost models, calculation of universal service costs, statistics), access and interconnection (BRIO, BROBA, BRUO);
- the International Telecoms Relations Department: coordination of activities in the ERG, the IRG, European bodies, the ITU, the WTO and CEPT;
- the Budget and Logistics Department: BIPT budget, accounting (collection of revenues and management of outgoings), Purchasing Department, equipment.

### **GEORGES DENEFF, MEMBER OF THE COUNCIL, IS IN CHARGE OF:**

- the Postal Services Department: strategy, legal and economic aspects, monitoring of compliance with legislation (authorisations, universal service, quality standards, tariffs) and of the management contract of La Poste, international postal bodies;
- the Department for monitoring, public service, consumers, telecoms universal 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, implementation of the legislation on telephone tapping and emergency services;
- the IT and Translation Departments: management and purchasing of IT equipment and software, management of the internal network and development of software and translation of documents (French – Dutch – German – English).

### **MICHEL VAN BELLINGHEN, MEMBER OF THE COUNCIL, IS IN CHARGE OF:**

- the Department for the legal aspects of telecommunications: regulatory framework of telecommunications and radio communications, general legal support to other departments, disputes, conciliation, international treaties, protection of privacy, Ethics Commission (excluding La Poste);
- the Department for technology, use of telecommunications and radio communications: (international and national) spectrum coordination, 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 radio communications licences and of voice telephony and fixed networks licences, declarations of telecommunications services, management of the numbering plan, domain names, number portability, use of numbers;
- the Personnel Department: status of BIPT staff, sector committee, training.



# §2 BIPT AND ELECTRONIC COMMUNICATIONS

## Legal framework

In the area of telecommunications, technological innovation continues to dictate in large part how the regulatory system progresses. Digitisation for instance has made it possible to offer several types of content through networks of different kinds such as the cable network or the telephone line. At the same time, the Internet has become a global platform for a range of electronic communications services. Thanks to their convergence, the information and communications technologies have opened up new possibilities. The European legal framework for electronic communications responds to this technological convergence, and extends and adapts the advantages of liberalisation to electronic communications in general.

### THE ACT ON ELECTRONIC COMMUNICATIONS

Belgium promulgated its Act on electronic communications on 13 June 2005. As already stated, the European directives subject all electronic transmission networks and services to the same regulatory framework on the basis that the telecommunications, broadcasting and information technology sectors have started to converge. As powers in broadcasting are shared with the Communities, the scope of the Act of 13 June 2005 was restricted to telecommunications.

The regulatory framework introduced by the Act is characterised by a higher level of flexibility. This Act puts an end to the system whereby a licence is required for conducting telecommunications activities. From now on, in order to start a specific activity, a company merely has to introduce a relatively brief notification with the Institute. The approval or the agreement of the Institute is not required but the operator must obviously provide and update the information enabling the Institute to keep an overall view of the market. In practice, after the notification, the Institute sends a declaration to the operator specifying that the latter has made a valid notification and that it can start developing its activities but this declaration is not an authorisation from BIPT vis-à-vis the operator concerned. It is a mere confirmation.

In September 2008, the Institute completed part of an internal project thoroughly investigating the conformity of the Act of 13 June 2005 on electronic communications with the European guidelines and its practical applicability and drew up policy proposals ad hoc. That part was mainly concerned with the transposition of the Authorisation and Access Directives into the Belgian federal telecommunications legislation. The results of this study and the policy proposals were forwarded to the Minister of Enterprise and Simplification, who asked to cast the proposals into concrete drafts for a programme act and subsequently for an act amending the Act of 13 June 2005.

Afterwards BIPT's drafts were integrated into more extended draft bills<sup>3</sup> drawn up by BIPT, also dealing with the following topics:

- the completion of procedural provisions regarding the appeal against decisions of BIPT and the Competition Council, acting as dispute settlement authority in postal and telecommunications matters;

3. IT REGARDED MORE IN PARTICULAR THE FOLLOWING DRAFT BILLS:  
— DRAFT BILL AMENDING THE ACT OF 17 JANUARY 2003 ON THE APPEALS AND THE SETTLING OF LAWSUITS FOLLOWING THE ACT OF 17 JANUARY 2003 ON THE STATUS OF THE REGULATOR OF THE BELGIAN POSTAL AND TELECOMMUNICATIONS SECTORS;  
— DRAFT BILL PERTAINING TO VARIOUS PROVISIONS ON ELECTRONIC COMMUNICATIONS.

- guaranteeing legal certainty, when decisions by BIPT have to be annulled;
- optimising the procedure that may result in the imposition of an administrative fine;
- enabling BIPT to annul the wrongful invoking of confidentiality (or the lack of answers to a question by BIPT relating to confidentiality), to fulfil its obligations regarding motivation and transparency;
- explaining the aspects on which the Competition Council may give its opinion, whether or not binding, within the framework of the market analysis procedures and streamlining the conditions to do so;
- updating the provisions relating to the emergency services and the introduction of a fund for the emergency services;
- extending the complementary (with regard to the universal service) service of providing for broadband access at an affordable price to institutions for primary education;
- simplifying the obligations to supply a detailed basic invoice;
- ensuring the cooperation of the operators to the study of the Ethics Commission into a possible breach of the Ethical Code by a service provider and the participation in the implementation of final decisions of the Ethics Commission for telecommunication;
- better adjusting the distribution of public pay phones to the real needs.

## THE COOPERATION AGREEMENT WITH THE COMMUNITIES

Following the judgment of the Court of Arbitration of 14 July 2004 a cooperation agreement was finally concluded on 17 November 2006 between the Federal State and the three Communities. This agreement arranges the management of electronic communications as far as it falls under a competence shared between the federal level and the Communities. After a process of approval by the respective legislative assemblies it came into force at the end of September 2007.

In the part relating to regulation the chief principle underpinning the cooperation agreement of 17 November 2006 is that each competent authority is required to inform the others about its draft decisions. The other regulators will then be given a short time span in which to examine them and if need be to respond by activating the cooperation procedure. In that case the Conference of Regulators (CRC), which is composed of the federal and community regulators, convenes to reach an agreement on the measure planned. If no consensus is reached, the political level will be able to take up the matter and then it will be up to the ministers of the respective governments to find an agreement.

After the cooperation agreement had come into operation the various regulatory bodies convened in accordance with that agreement to draw up the CRC's internal regulations, which then will have to be approved by an "interministerial" committee of the Federal State and the Communities.

## DISPUTES

Among the ten actions brought against decisions of the Institute in the course of 2008 the following cases, which are especially important for the economic regulation of the sector, deserve particular attention:

1. Belgacom Mobile, BASE and Mobistar brought an action before the Brussels Court of Appeal against the BIPT Council Decision of 29 April 2008 completing the Decision of 11 August 2006 regarding market 16 for voice call termination on individual mobile networks relating to the regulation of the mobile operators' terminating rates.
2. Belgacom brought an action before the Brussels Court of Appeal against the BIPT Council Decision of 25 July 2008 imposing on Belgacom an administrative fine for non-compliance with the Decision of 11 August 2006 regarding the tariffs for calls to mobile networks.
3. Belgacom, Mobistar and BASE contested the Decision of 25 November 2008 regarding the renunciation of the tacit renewal of the licences for the installation and operation of two GSM mobile telephony networks (Mobistar and Proximus) and the network of the DCS<sup>4</sup> 1800 operator (BASE) before the Brussels Court of Appeal.

The disputes regarding market analyses were also marked by a judgment from the Brussels Court of Appeal of 4 April 2008. The Court suspended the supplement of 18 December 2007 to the BIPT Council Decision of 11 August 2006 on the regulation of the mobile operators' terminating rates as of 2008.

## Economic regulation

### MARKET ACCESS

The Institute handles all notifications of the operation of fixed and mobile telecommunications networks and the telecommunications services provided on them.

Registrations 2008	
Type of service	Total
Public telephony service	6
Public network	2
Voice services	25
VoIP service	13
Calling cards	3
Carrier Select/Carrier Preselect	7
Other voice service	2
Other services	23
Leased lines	6
Internet access	14
Other	3
Total number of registrations	56

### MARKET ANALYSES

Market analyses are essential to the regulatory framework as they determine to a large extent what obligations will be imposed on the electronic communications sector. In this regulatory framework market definition and analysis of the market situation are inspired by competition law. The relevant markets for example are no longer defined by law but by the national supervisory body on the basis of EC recommendations that are regularly revised and contain a list of the markets that the European Commission considers to be susceptible to ex ante regulation. Since the introduction of the 2002 regulatory framework the European Commission has published two recommendations: the first on 11 February 2003 containing a list of 18 markets and the second on 17 December 2007 with a list of 7 markets. The most notable difference between the two recommendations is the greatly shortened list of relevant markets that are susceptible to ex ante regulation: few of the markets that the European Commission thought in 2003 to require ex ante regulation in most of the European countries, still needed to be on that list four years later in the Commission's opinion; at one point two relevant markets were even merged into one because the division that still made sense in 2003, proved to be superseded in 2007. The table below contains the relevant markets from both recommendations and indicates which markets correspond to which.

Relevant markets from the 2003 Recommendation	Relevant markets from the 2007 Recommendation
1. Access to the public telephone network at a fixed location for residential customers	1. Access to the public telephone network at a fixed location for residential and non-residential customers
2. Access to the public telephone network at a fixed location for non-residential customers	
3. Publicly available local and/or national telephone services provided at a fixed location for residential customers	
4. Publicly available international telephone services provided at a fixed location for residential customers	
5. Publicly available local and/or national telephone services provided at a fixed location for non-residential customers	
6. Publicly available international telephone services provided at a fixed location for non-residential customers	
7. The minimum set of leased lines	
8. Call origination on the public telephone network provided at a fixed location	2. Call origination on the public telephone network provided at a fixed location
9. Call termination on individual public telephone networks provided at a fixed location	3. Call termination on individual public telephone networks provided at a fixed location
10. Transit services in the fixed public telephone network	
11. Wholesale unbundled access (including shared access) to metallic loops and sub-loops	4. Wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location
12. Wholesale broadband access	5. Wholesale broadband access
13. Wholesale terminating segments of leased lines	6. Wholesale terminating segments of leased lines, irrespective of the technology used to provide leased or dedicated capacity
14. Wholesale trunk segments of leased lines	
15. Access and call origination on public mobile telephone networks	
16. Voice call termination on individual mobile networks	7. Voice call termination on individual mobile networks
17. The wholesale national market for international roaming on public mobile networks	
18. Broadcasting transmission services, to deliver broadcast content to end users	

It is customary to indicate the markets by the number they were given in the recommendations; below the market numbers of the first recommendation receive the extension "(03)" and those from the second recommendation "(07)".

When a market is no longer included in that list, it does not mean, however, that it does not have to be analysed any more: the obligations imposed following a market analysis can only be abolished through another market analysis. Moreover it is possible for an NRA (National Regulatory Authority) to conclude that the European-based considerations that drove the Commission to remove a market from the list, do not or not yet apply domestically.

In order to determine whether a market is susceptible to ex ante regulation, the European Commission proposes the three-criteria test. This test is described in the preamble of the recommendations on relevant product and service markets within the electronic communications sector of 11 February 2003 and 17 December 2007.

The three criteria are:

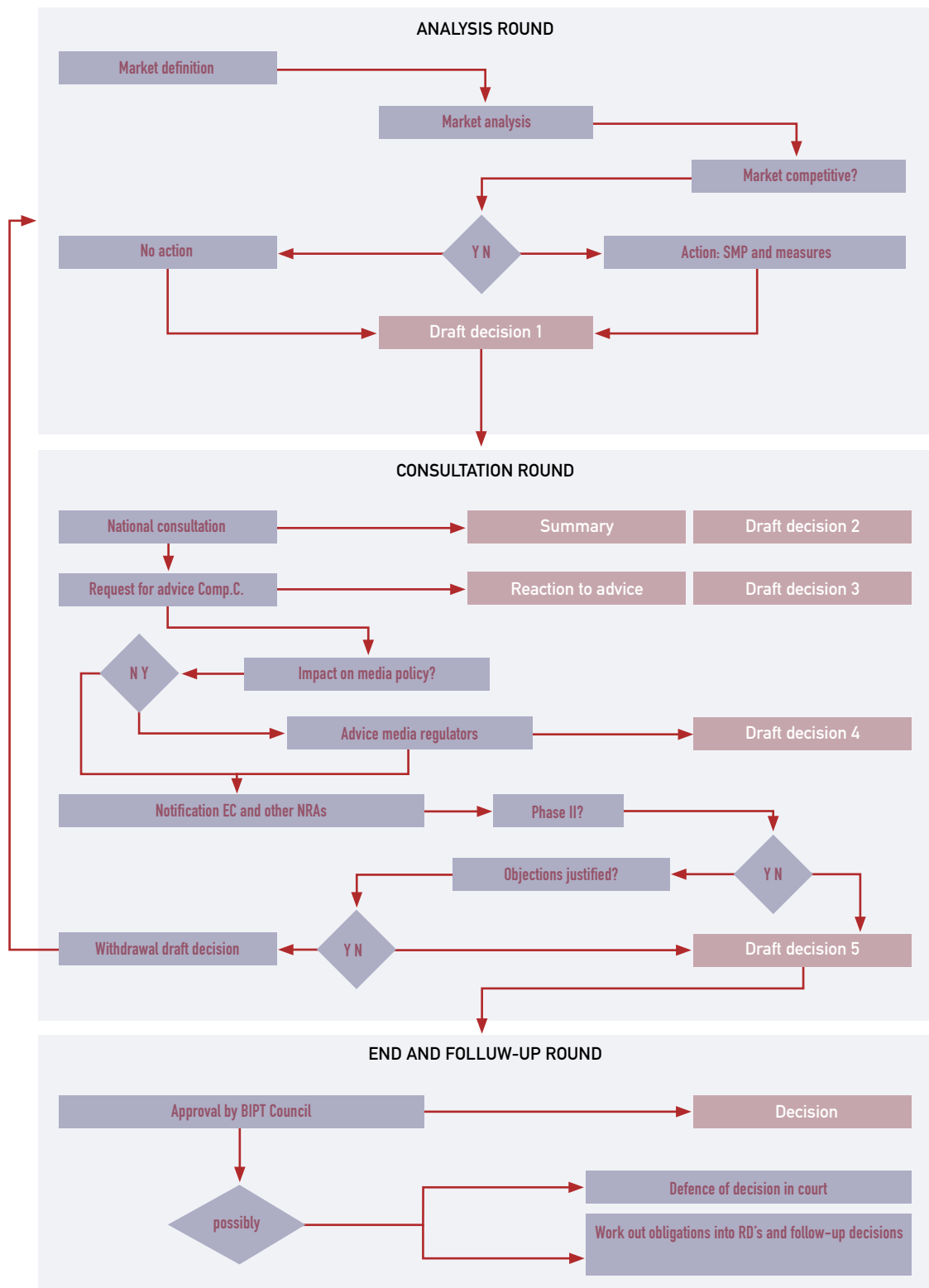
- the presence of barriers to market entry and the development of competition. These may be of a structural, legal or regulatory nature;
- dynamic aspects, in other words the question whether a market shows characteristics as a result of which it will tend towards effective competition within the relevant time horizon without a need for regulatory intervention ex ante;
- the relative efficiency of competition law.

The three criteria should be met cumulatively: if one criterion has not been met, the test is negative and the market concerned is not eligible for ex ante regulation; in other words, carrying out an SMP analysis and determining appropriate obligations are useless.

The European Commission has stipulated that this test does not have to be carried out for the markets that are listed in the recommendation, unless an NRA thinks that such a market is not susceptible to ex ante regulation. If an NRA does want to regulate a market that is not listed in the most recent recommendation, that NRA should perform the three-criteria test.

The market analysis procedure can roughly be divided into two rounds: the analysis round and the consultation round. The analysis round includes the market definition, the market analysis, the determination of SMP companies and the definition of obligations. The consultation round consists of submitting for consultation the draft decision drawn up during the analysis round to, consecutively, the sector, the Competition Council, in some cases the media regulators, the European Commission and also the other national regulators.

Below you will find a diagram of the steps to be followed by BIPT in the course of the market analysis procedure.



All things considered 2008 was a transition year as regards the market analyses. The approval and publication of the analysis of markets 11(03) and 12(03) can be considered as the finishing point of the first round from which we conveniently leave out market 18. It should be noted that the European Commission rejoiced in January 2008 at the way in which BIPT handled the regulation of very high bitrate Internet (VDSL). To take into account the evolution to next generation core networks and local loops (NGN<sup>5</sup> /NGA<sup>6</sup>), a decision was taken to adapt the measures laid down in the Market Analysis Decision of 10 January 2008 to the evolving market situation awaiting a second market analysis. At page 7 of its 2008 report ECTA, the European Competitive Telecommunications Association, emphasised the fact that the method adopted by BIPT for the regulation of the next generation networks is positive and is going in the direction of progress and technological neutrality.

The second round of the market analyses set in with the analyses of markets 3(03) and 5(03), the retail markets for the national telephone services at a fixed location. Those markets are indeed not included in the new recommendation but BIPT was obliged to carry out the analysis anyway since the previous market analysis decision had imposed remedies and since competition problems had been found on those markets that justified further ex ante regulation. The markets are tested against the three criteria and BIPT came to the conclusion that they are still susceptible to ex ante regulation. Moreover, Belgacom still had a significant market power and had to fulfil obligations for the new regulatory period although not all previous obligations were maintained.

A number of developments on and related to markets 4(07) and 5(07) drove BIPT to call in a consultant again: the broadening of the market definition in the new recommendation, the geographical segmentation implemented by a number of NRAs, the evolution towards NGN/NGA and the emergence of “triple play”. Preference was given to Analysys Mason, which also helped BIPT during the first round of the market analyses.

The tables below provide an overview of the progress made for the relevant markets and of the obligations imposed on these markets. The market analyses concluded before 2008 are set against a pale grey background.

Progress situation of the market analyses (situation on 31 December 2008)

Market analysis	Round	Phase						Notification		Date of decision
		Analysis round	National consultation	Opinion Comp. Council	Opinion media regulators	European notification	Decision adopted	Code	Comments	
Market 1(03)	1	✓	✓	✓		✓	✓	BE/2006/0400	None	19-06-2006
Market 2(03)	1	✓	✓	✓		✓	✓	BE/2006/0401	None	19-06-2006
Market 3(03)	1	✓	✓	✓		✓	✓	BE/2006/0435	Comments	11-08-2006
Market 3(03)	2	✓	✓	✓		✓	✓	BE/2008/0798	Comments	06-11-2008
Market 4(03)	1	✓	✓	✓		✓	✓	BE/2006/0436	None	11-08-2006
Market 5(03)	1	✓	✓	✓		✓	✓	BE/2006/0437	Comments	11-08-2006
Market 5(03)	2	✓	✓	✓		✓	✓	BE/2008/0799	Comments	06-11-2008
Market 6(03)	1	✓	✓	✓		✓	✓	BE/2006/0438	None	11-08-2006
Market 7(03)	1	✓	✓	✓		✓	✓	BE/2006/0551	None	17-01-2007
Market 8(03)	1	✓	✓	✓		✓	✓	BE/2006/0439	None	11-08-2006
Market 9(03)	1	✓	✓	✓		✓	✓	BE/2006/0440	None	11-08-2006
Market 9(03)bis <sup>7</sup>	1	✓	✓	✓		✓	✓	BE/2006/0456	None	07-03-2007
Market 10(03)	1	✓	✓	✓		✓	✓	BE/2006/0441	None	11-08-2006
Market 11(03)	1	✓	✓	✓	✓	✓	✓	BE/2007/0735	Comments	10-01-2008
Market 12(03)	1	✓	✓	✓	✓	✓	✓	BE/2007/0736	Comments	10-01-2008
Market 13(03)	1	✓	✓	✓		✓	✓	BE/2006/0552	Comments	17-01-2007
Market 14(03)	1	✓	✓	✓		✓	✓	BE/2006/0553	None	17-01-2007
Market 15(03)	1	✓	✓	✓		✓	✓	BE/2007/0610	None	02-05-2007
Market 16(03)	1	✓	✓	✓		✓	✓	BE/2006/0433	Comments	11-08-2006
Market 16(03)bis <sup>8</sup>	1	✓	✓	✓		✓	✓	BE/2007/0655	Comments	18-12-2007
Market 17(03) <sup>9</sup>	1									
Market 18(03)	1	✓								

The table below lists BIPT's conclusions for each of the finalised market analyses. The degree of competition on the market concerned is indicated as well as the measures imposed by BIPT upon the operators.

7. NOTIFICATION OF 11 NEW COMPANIES

8. ADAPTATION OF MTRs AND GLIDE PATH

9. ANALYSIS NO LONGER RELEVANT AFTER INTERVENTION BY EUROPEAN COMMISSION ON THAT MARKET

### Result of the completed market analyses

Market analysis	Round	Conclusion		SMP company (companies)	Obligations (article of law)								
		Competitive	Non-competitive		Non-discrimination (58)	Transparency (59)	Separate accounting	Access and interconnection (61)	WLR <sup>16</sup> (61)	Price monitoring and CAS <sup>17</sup> (62)	Carrier (pre)select (63)	Measures at retail level (64)	Minimum package rental lines (65)
Market 1(03)	1		●	Belgacom	✓	✓	✓	✓	✓	✓	✓	✓	
Market 2(03) a <sup>10</sup> , 2(03)b <sup>10</sup>	1		●	Belgacom	✓	✓	✓	✓	✓	✓	✓	✓	
Market 2(03)c <sup>10</sup>	1		●	Belgacom	✓	✓	✓	✓		✓	✓	✓	
Market 3(03)	1		●	Belgacom								✓	
Market 3(03)	2		●	Belgacom								✓	
Market 4(03)	1	●											
Market 5(03)	1		●	Belgacom								✓	
Market 5(03)	2		●	Belgacom								✓	
Market 6(03)	1	●											
Market 7(03)	1		●	Belgacom	✓	✓				✓			✓
Market 8(03)	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 9(03)a <sup>11</sup>	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 9(03)b <sup>11</sup>	1		●	Telenet and Versatel	✓	✓				✓ <sup>15</sup>			
Market 9(03)c <sup>11</sup>	1		●	BT, Coditel, COLT, MCI, Mobistar and Scarlet	✓ <sup>13</sup>	✓				✓ <sup>15</sup>			
Market 9(03) bis	1		●	3 Stars Net ... <sup>14</sup>	✓ <sup>13</sup>	✓				✓ <sup>15</sup>			
Market 10(03)	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 11(03)	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 12(03)	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 13(03)	1		●	Belgacom	✓	✓	✓	✓		✓			
Market 14(03)	1	●											
Market 15(03)	1	●											
Market 16(03) a <sup>12</sup>	1		●	BMB and Mobistar	✓		✓	✓		✓			
Market 16(03) b <sup>12</sup>	1		●	BASE	✓ <sup>13</sup>			✓		✓			

10.  
2A: ANALOGUE ACCESS; 2B: ISDN-2; 2C: ISDN-30

11.  
9A: OBLIGATIONS FOR BELGACOM, 9B: OBLIGATIONS FOR VERSATEL AND TELENET; 9C: OBLIGATIONS FOR OTHER NOTIFIED COMPANIES

12.  
16A: OBLIGATIONS FOR BELGACOM MOBILE (BMB) AND MOBISTAR; 16B: OBLIGATIONS FOR BASE

13.  
ONLY EXTERNAL NON-DISCRIMINATION

14.  
...BRUTÉLÉ, EQUANT, IPNESS, REALROOT, SCARLET EXTENDED, SOUND & MOTION, TELE2, TOLEDO, WAVECREST AND WEEPEE STUDIO'S

15.  
ONLY PRICE MONITORING (DIFFERENCE BETWEEN 9B AND 9C/BIS IS GLIDE PATH)

16. WHOLESALÉ LINE RENTAL

17. COST ACCOUNTING SYSTEM

In addition to the actual market analyses and following a judgment by the Brussels Court of Appeal a decision was published better motivating and specifying the obligation to publish Key Performance Indicators (KPIs). This enhances the transparency with regard to the quality of the wholesale services provided by Belgacom to the OLOs (Other Licensed Operators).

Following a judgment by the same Court of Appeal BIPT was also forced to review its decision relating to market 16. The new tariffs imposed by the complementary Decision of 18 December 2007 did not meet with the approval of the judge and a Decision of 29 April 2008 reinstated the tariffs from the first market analysis decision.

In 2008 as well the SMP company in question attacked BIPT's market analysis decisions. Belgacom took the conclusions of the Decision regarding markets 11(03) and 12(03) to the Brussels Court of Appeal.

## REGULATION OF THE OPERATOR WITH SIGNIFICANT MARKET POWER AS REGARDS ACCESS AND FIXED TELEPHONY

### FAIR CONDITIONS

After the confirmation of its status as an SMP operator in 2006 Belgacom remained subject to a certain regulation regarding access to its infrastructures, and also for certain wholesale and retail services.

As such Belgacom is under the obligation to propose reference offers for interconnection (BRIO), local loop unbundling (BRUO) and bitstream access (BROBA). These reference offers are designed to establish the tariffs and conditions under which Belgacom opens up its network to alternative operators.

### BRIO

As regards fixed telephony, the BRIO offer lists the conditions under which Belgacom makes its interconnection network accessible to other operators. The interconnection network is the part of the network beyond the local loop.

However, the BRIO is much more than a mere table of tariffs for the conveyance of calls on sections of networks. This document also includes quality standards, technical specifications regarding the services offered or the existing infrastructure, ordering procedures, delivery times, etc. The BRIO can be consulted on Belgacom's website.

Since a judgment from the Brussels Court of Appeal of 16 June 2006 Belgacom is no longer obliged to propose a new BRIO offer every year. The current BRIO offer has no deadline anymore. However, any change made by Belgacom to the BRIO offer has to be communicated to BIPT before its publication. BIPT may then exercise its power to require amendments, if need be, even before publication.

Furthermore, BIPT is often compelled to intervene to guarantee the development of fair competition on the market. The decisions of BIPT are preceded by a consultation of the companies concerned. The public consultations are published on the Institute's website.

As BIPT no longer has to organise negotiations regarding and the publication of a new BRIO version each year, it can put its resources to use for the future regulation of IP interconnection, resulting from the introduction of the NGN technologies in the core network.

The table below lists the consultations launched in 2008 concerning BRIO and/or interconnection as well as the sector's response rate.

Consultations in 2008	Publication date	Number of respondents
Consultation of 18 December 2007 regarding the interconnect tariffs for the access to value added services of other operators	18/12/2007	4
Public consultation of 20 August 2008 regarding capacity-based charging for interconnection	20/08/2008	7
Consultation on the BIPT draft decision regarding the interconnection rates 2008-2010	15/10/2008	5

The table also mentions the decisions taken in 2008 in this matter and indicates any legal appeals.

Decisions in 2008	Adoption date	Challenged in court
BIPT Council Decision of 11 January 2008 regarding the interconnect relations between Belgacom and XtraCom	11/01/2008	no
BIPT Council Decision of 20 February 2008 on the 2008 interconnect tariffs of Belgacom for the access to value added services of other operators	20/02/2008	no
BIPT Council Decision of 19 March 2008 regarding the interconnect relations between Belgacom and XtraCom	19/03/2008	no
BIPT Council Decision of 21 April 2008 regarding the interconnect relations between Belgacom and XtraCom	21/04/2008	no
BIPT Council decision of 26 November 2008 on the interconnect tariffs of Belgacom for the 2008-2010 period	26/11/2008	no

Special attention should be paid to the Decision of 26 November 2008 on the interconnect tariffs of Belgacom for the 2008-2010 period. With this Decision BIPT decided to stabilise the tariffs of a series of interconnection services that Belgacom provides to the alternative operators (and thus not to allow an increase) in order to ensure more legal certainty and to encourage investments by all market players. The choice for this stabilisation stems from the elements examined (cost model results, traffic volume development, migration to the next generation networks, etc.). It should be noted that following that decision Belgacom decided not to attack a number of the Institute's decisions regarding interconnection.

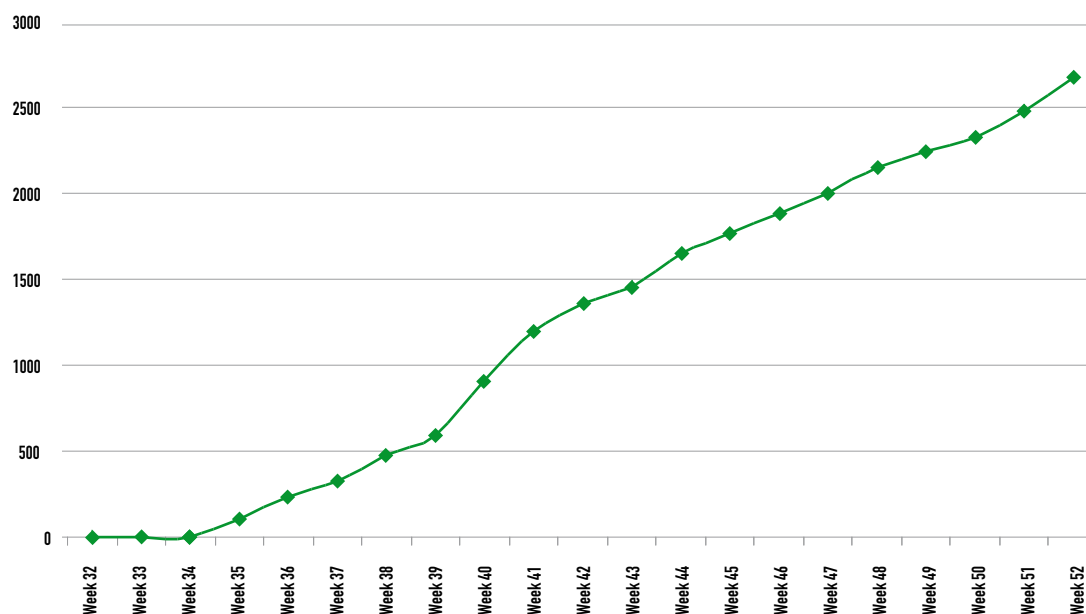
### BRUO, BROBA EN WBA<sup>18</sup>

The BRUO, BROBA and WBA offers are aimed at providing a wholesale broadband offer. The BRUO offer grants alternative operators fulltime access to all or part of the transmission capacity of the final wire, which connects the subscriber to the network. Through BROBA the alternative operator leases capacity from Belgacom on the connection equipment (DSLAM) as well as ATM transmission capacity in Belgacom's ATM network to access it and interconnection with this network. In the new WBA offer the alternative operator also leases capacity but it is provided through Belgacom's Ethernet network and VDSL2 connection equipment. These offers are particularly important with regard to Internet access as they enable operators to present an alternative offer without having any customer access infrastructure (BRUO) and without having the same high-density infrastructure as Belgacom (BROBA & WBA). By doing so they contribute to boosting competition and diversifying the offer both on the Internet access market and the market of Virtual Private Networks.

### New reference offers

On 18 January 2008, Belgacom submitted a proposal to BIPT integrating ADSL2+ into the BROBA offer. Following several business meetings and consultations the Institute drew up a number of decisions laying down the qualitative and the quantitative aspects for the implementation of ADSL2+. As of 1 July 2008, ADSL2+ is available to the alternative operators through the BROBA offer.

Cumulated number of BROBA ADSL2+ lines requested in 2008 (Source: BIPT)



The Market Analysis Decision of 10 January 2008 obligated Belgacom to also make VDSL2 available based on a bitstream offer. In August 2008, Belgacom sent a draft regarding this matter to the Institute. During the autumn of 2008, the Institute discussed this new offer with the sector through preliminary consultations and business meetings and laid the foundation of a draft decision that was published early February 2009.

### Tariff adjustments

During the completion of the review of all monthly and one time fees, the cost model for collocation was adapted. The floor space costs decreased and the energy tariffs increased in conformity with the market.

As a result of the new NTP<sup>19</sup> process, which considerably limits the number of customer visits in case of installation or migration, the installation tariffs were divided into 'with customer visit' and 'without customer visit' and the installation fees for the alternative operators decreased.

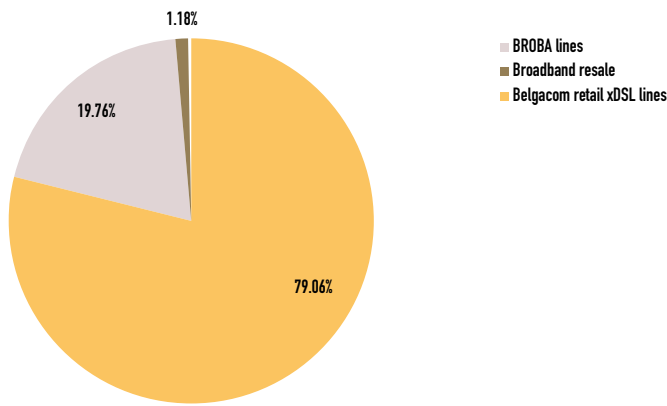
	Raw Copper	Without voice
Activation without visit	25,44	40,98
Activation with visit	91,93	99,62
Activation – 2007 tariff	51,32	80

The launch of the Full VP<sup>20</sup> process entailed a reduction of the number of physical manipulations during the migration of bitstream clients and thus a reduction of the migration costs.

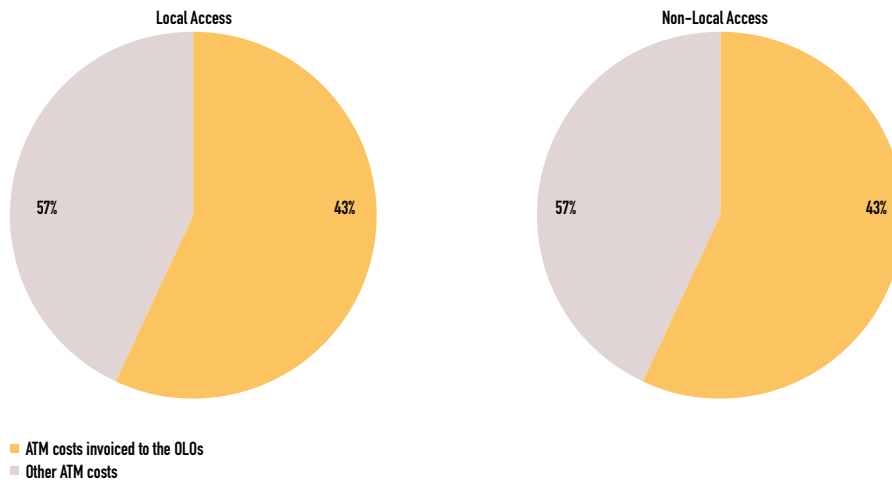
	2007	2008	delta
Change owner BROBA with voice	€ 34.82	€ 21.78	-37%
Change owner BROBA without voice	€ 36.76	€ 24.11	-34%

In October 2008, the monthly rental fee for BROBA was reviewed. Especially the ATM transport costs were lowered by 40 to 60% because based on their market share the OLOs paid a disproportionately large part of the ATM costs compared to Belgacom.

Division of the xDSL market (numbers S2 2007 - Source: BIPT)



Comparison between the amounts that were actually invoiced to the OLOs and the total ATM costs



The graphs below show the decrease of the BROBA and BRUO tariffs.

Cost per bitstream line – Mass market operator



	jan/06	jan/07	jul/07	okt/07	feb/08	okt/09
user line	€ 12.19	€ 10.60	€ 9.15	€ 9.15	€ 9.15	€ 9.22
local access	€ 0.46	€ 0.24	€ 0.24	€ 0.24	€ 0.24	€ 0.06
non-local access	€ 2.39	€ 2.39	€ 2.39	€ 2.39	€ 2.39	€ 0.71
installation (over two years)	€ 3.23	€ 3.23	€ 3.23	€ 3.05	€ 2.45	€ 2.38
Cost per user	€ 18.27	€ 16.46	€ 15.01	€ 14.83	€ 14.22	€ 12.37

Consultations	Consultation date	Number of respondents
BROBA ADSL2+	12/03/2008	4
Collocation tariffs	16/04/2008	4
Addendum NTP process	16/04/2008	2
BROBA rental fee	30/04/2008	4
Blocks & Tie Cables - tariffs	23/04/2008	2
Full VP tariffs	7/05/2008	3
BROBA – ATM tariff structure	18/06/2008	4
BROBA rental fee	3/9/2008	5
Decisions in 2008	Adoption date	Challenged in court
Introduction of the VDSL2 technology in the framework of BRUO	30/1/2008	
BROBA ADSL2+ - qualitative aspects	4/06/2008	
BROBA ADSL2+ - one time fees	11/06/2008	x
BROBA ADSL2+ - rental fee	25/07/2008	x
Collocation tariffs	25/6/2008	
Addendum NTP process	11/6/2008	
Blocks & Tie Cables - tariffs	2/7/2008	x
Full VP tariffs	20/08/2008	
BROBA rental fee	22/10/2008	
BRUO & BROBA Annex K - Migrations	19/11/2008	

## NGN/NGA

During its general meeting on 9 April 2008 Belgacom declared that in the context of the modernisation of its network and the switch to Ethernet technology in its core network and the use of VDSL2 for the access network it wanted to close down about 10% to 15% of its exchanges.

On 13 June 2008 Belgacom submitted its future plans to BIPT. The impact of closing down 65 exchanges is considerable. Although only 10 to 15% of the number of exchanges is involved, 40% of the BRUO lines and 14% of the BROBA lines are affected while there is collocation space in 52 of these exchanges.

As regards the BRUO lines, unbundling from the street cabinet instead of from the exchange is not a satisfactory alternative. An Analysys Mason study commissioned by BIPT shows the limited viability of subloop unbundling: only a limited number of street cabinets can be unbundled in case support services are present, the alternative operators have a market share of at least 18% and the return per client increases by 10 to 15 euro.

Moreover there are a number of exchanges on the list for which a new collocation space was planned for the coming months. It is very likely that these investments will not take place if the Institute does not provide more transparency soon enough about what will happen with these planned close-downs. The withdrawal of this additional investment can have far-reaching consequences for competition on the Belgian broadband market.

BIPT added an addendum to the Market Analysis Decision of 10 January 2008 containing additional measures as an answer to the effects of the closedown of the exchanges, the transition/switch from ATM to Ethernet for the core network and the migration of the exchange to the street cabinet in the context of VDSL2. By means of the additional measures in the Decision of 12 November 2008 the Institute wants to offer more transparency to all market players regarding the future network developments. It wants to avoid market players pulling out and it wants to boost broadband competition.

## SEPARATE ACCOUNTING, MODELLING AND COST ACCOUNTING SYSTEM

BIPT has the task of verifying whether Belgacom's wholesale tariffs indeed reflect the costs that the SMP operator has to bear, while preserving a return on investment. To accomplish this task complex technical-economic models are needed, as well as reliable financial and non-financial data.

Setting interconnection tariffs in particular can be done by taking either a top-down or a bottom-up approach. In the first case, 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 and among the services that use these network elements. The bottom-up model on the other hand is put together on the basis of the volumes of traffic to be routed by an operator, whereby these volumes determine the optimum dimensions of the different layers in the network.

In principle, the bottom-up model better reflects the situation of an efficient operator. Depending on the case BIPT uses a top-down and/or a bottom-up model.

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

The table below lists the consultations ad hoc launched in 2008 as well as the sector's response rate.

Consultations in 2008	Publication date	Number of respondents
Consultation on the BIPT draft decision regarding the publication of a declaration of conformity for the separated accounts of Belgacom for the year 2003	6/08/2008	2
Consultation on the BIPT draft decision regarding the publication of a declaration of conformity for the separated accounts of Belgacom for the year 2004	6/08/2008	2

The table below mentions the decisions taken in 2008 in this matter and indicates any legal appeals.

Decisions in 2008	Adoption date	Challenged in court
BIPT Council Decision of 23 January 2008 regarding the cost of capital to be applied in the Belgacom reference offers	23/01/2008	no
BIPT Council Decision of 18 June 2008 on the publication of a declaration of conformity for the separated accounts of Belgacom for the year 2002	18/06/2008	no
BIPT Council Decision of 22 October 2008 on the publication of a declaration of conformity for the separated accounts of Belgacom for the year 2003	22/10/2008	no
BIPT Council Decision of 5 November 2008 on the publication of a declaration of conformity for the separated accounts of Belgacom for the year 2004	5/11/2008	no

In addition BIPT drafted a Decision in 2008 regarding the conformity of Belgacom's cost accounting system for 2007. That Decision, which was adopted on 28 January 2009, entails that a declaration of conformity regarding Belgacom's cost accounting system is published based on an audit performed by a certified corporate auditor. A description of Belgacom's cost accounting system is annexed to the Decision published. This approach considerably increased the transparency on the market.

## MONITORING OF THE RETAIL TARIFFS

### *Fixed telephony*

On 11 August 2006, BIPT had taken a decision regarding the markets of call termination on each mobile network, in which it imposed on the mobile operators a gradual decrease of their terminating rates (decision on "market 16"). At the same date BIPT had also adopted a decision regarding the retail markets of publicly available telephone services at a fixed location (decision on "fixed telephony"), in which it imposed on Belgacom the obligation related to the bans of Article 64 of the Act of 13 June 2005, one of which is the ban on applying excessive rates.

By means of these two decisions BIPT aimed for residential and business customers to get maximum profit in terms of price by passing on the considerable cuts of the call termination rates on the mobile networks in the retail tariffs.

Since then BIPT has had to come to the conclusion twice that Belgacom had not completely passed on the cuts of the mobile call termination rates in its retail tariffs. In 2007 BIPT had urged Belgacom on two occasions to adapt its retail tariffs for calls from fixed to mobile. These notices of default had led to tariff cuts without the cuts of the mobile termination rates benefiting the users integrally. Consequently BIPT found that the violation, which had led to the notice of default of 18 October 2007, persisted. Taking into account the data of the file, BIPT imposed on Belgacom an administrative fine of 3,090,000 euro.

BIPT also saw to it that the cuts in the call termination rates for the operators Telenet and Versatel were passed on correctly.

The table below mentions the decisions taken in 2008 in the matter of retail tariffs and indicates any legal appeals.

Decisions in 2008	Adoption date	Challenged in court
BIPT decision of 25 July 2008 imposing an administrative penalty upon Belgacom for non-compliance with the decision of 11 August 2006 as regards tariffs for calls to mobile networks	25/07/2008	yes

## LEASED LINES

As already known, a leased line is a service that consists in providing a permanent transmission capacity between two points. This means that this capacity is completely allocated to one customer, who pays the operator a fixed monthly charge.

By virtue of the Decision regarding market 13 of 17 January 2007, published on 6 February 2007, Belgacom is required to draw up a reference offer for the market of terminating segments of leased lines, which it named BROTSoLL (Belgacom Reference Offer for Terminating Segments of Leased Lines). Belgacom delivered this offer, which was submitted for approval to the sector on 4 September 2007. The Institute studied the answers and following analysis of the market situation, it adopted on 30 January 2008 a decision in which a number of amendments to the reference offer are asked.

Meanwhile the development of a bottom-up cost model for the SDH technology (Synchronous Digital Hierarchy) continued – the method of which had been submitted for consultation on 9 August 2007 – resulting in a tariff proposal, which was submitted for consultation on 6 June 2008. Following the comments received, the final decision was adopted on 3 September 2008.

As regards the prices of the BROTSoLL Ethernet leased lines, the tariff obligation consists in applying reasonable prices. Because Belgacom had suggested wholesale prices that were identical to the retail prices in case the line ends “customer sited”, the Institute shared its suspicions of price squeeze on 21 August 2008. That same day it asked the sector what cost elements should be taken into account and also asked to give an opinion on the method planned. Belgacom suggested new tariffs and on 17 December 2008 the Institute announced that consequently the price squeeze test had to be redone.

The introduction of the wholesale offer for terminating segments of leased lines, resulted in the creation of an offer for Ethernet leased lines that may serve as backhaul for unbundling. The use of Ethernet connections for that purpose is an important step forward, giving the alternative operators the opportunity to introduce next generation material, which is cheaper. This should facilitate the broadband competition.

By drawing up a cost model for terminating segments of leased lines it was possible to introduce a tariff system that is better adjusted to the network architecture. According to a communication by Belgacom addressed to the investors this should reduce the costs for the competing services by 15 million per year. Because of the lack of such a model high wholesale prices were maintained, resulting in commercial offers that were far more attractive than the regulated offer while the latter already had to be cost-oriented.

ECTA found the approach chosen by Belgium regarding Ethernet regulation very interesting (ECTA report, pages 7 and 25).

A draft decision was drawn up to apply the principles of the KPI Decision to the wholesale market for terminating segments of leased lines. The draft was submitted for consultation on 10 July 2008 and subsequently delivered to the Competition Council. Early 2009 it was notified to the European Commission.

Decisions in 2008	Adoption date	Challenged in court
BIPT Decision of 30 January 2008 regarding the qualitative aspects of the BROTSoLL offer	18/02/2008	Yes
BIPT Decision of 3 September 2008 regarding the quantitative aspects of the BROTSoLL offer	19/09/2008	Yes, action for suspension and on the substance. The action for the suspension introduced by Belgacom was dismissed in a judgment by the Court of Appeal on 23 December 2008

Consultations in 2008	Publication date	Number of respondents
Draft decision regarding the quantitative elements of BROTSoLL - SDH	06/06/2008	5
Draft decision KPI BROTSoLL	10/07/2008	2

## REGULATION OF THE OPERATORS WITH SIGNIFICANT POWER IN THE MOBILE TELEPHONY MARKET

### TERMINATION RATES

Following BIPT's Decision of 11 August 2006 regarding market 16 and at the request of the European Commission to abide by the principle of tariff symmetry of the MTR charges, these tariffs were adapted on 1 February 2008 on the basis of a complementary decision adopted on 18 December 2007 to lay down the tariff adjustments for the years 2008 and 2009.

In its judgment of 4 April 2008 the Brussels Court of Appeal nevertheless suspended these new MTR rates for call termination on mobile networks. Consequently BIPT adopted a new complementary decision regarding market 16 on 29 April 2008 to determine the MTR rates for the year 2008 according to the levels mentioned in the original Decision of 11 August 2006. The MTR rates were adapted on 1 May 2008 and on 1 July 2008 in conformity with this new decision.

Analysys Mason Ltd was selected as a consultant to help BIPT with the development of a new cost model, which is to underpin the regulation of the MTR charges during the new market analysis period (2009-2012). Preference went to the development of a bottom-up model instead of the top-down approach adopted in the 2005 generic model, specifically taking into account the draft EC recommendation on the regulation of the call terminating charges in the European Union.

## COOPERATION IN THE FIELD OF ECONOMIC REGULATION

### COOPERATION OF THE SERVICE WITH THE BELGIAN COMPETITION AUTHORITIES

The Act of 17 January 2003 on the appeals and the settling of lawsuits following the Act of 17 January 2003 on the status of the regulator of the Belgian postal and telecommunications sectors has entrusted the Competition Council with the task of settling certain disputes between operators, both in the field of electronic communications and the postal sector. To look into these disputes the Institute appoints a representative to assist the officials of the competition authority in their tasks. This was the case in 2007 when a dispute arose between Belgacom and Mobistar about the tariffs for access to the Belgacom network. Furthermore, the Act of 13 June 2005 on electronic communications provides for the intervention of the

Competition Council in drawing up decisions the Institute has to take in the context of the market analysis imposed by the new European regulatory framework. The opinion given by the Competition Council on that matter is not binding to the Institute except as regards the imposition of certain remedies.

In 2008 the Competition Council gave advice on the following analyses:

- 11-08-2008: Draft Decision regarding the impact of NGA/NGN;
- 08-09-2008: Draft Decision regarding markets 3(03) and 5(03);
- 13-10-2008: Draft Decision completing the Decision of the analysis of market 13 as regards the KPIs

## COOPERATION WITH THE COMMUNITY REGULATORS

The judgments of the Court of Arbitration of 14 July 2004 and of 13 July 2005 confirmed that cooperation between the Federal State and the Communities is necessary in order to manage certain parts of the electronic communications domain taken into account the ever-growing technological convergence of telecommunications and audiovisual services. The scope of these matters and the practical approach are determined in a cooperation agreement between the Federal Government and the Communities. Four regulatory authorities are involved in that agreement: BIPT, the VRM<sup>21</sup>, the CSA<sup>22</sup> and the Medienrat.

The cooperation agreement stipulates that the draft decisions of one of those four regulatory authorities relating to infrastructure that can be used for both electronic communications and broadcast transmission, have to be sent to the other three regulatory authorities and then have to follow a procedure, consisting of four different phases:

- phase 1: a preliminary evaluation that takes maximum 14 days;
- phase 2: a second evaluation that takes maximum 7 days and is required in case comments were made during the preliminary evaluation;
- phase 3: a referral to the CRC, a body composed of representatives of the four regulatory authorities, at the request of one of the parties involved;
- phase 4: a treatment by the ICTRT, an interministerial committee that can only intervene if the CRC has not found a solution after 75 days.

In 2008, 18 draft decisions were submitted in the context of the cooperation agreement. In most cases the procedure did not go beyond phase 1: only in two cases phase 2 was reached.

Nummer	Draft decision	Date of submission	Phase
1	Integration of VDSL2 in BRUO	3 January	1
2	BROBA 2008 ADSL2+	25 April	1
3	BROBA 2008 ADSL2+ one time fees	21 May	1
4	Addendum "NTP process"	23 May	1
2+	BROBA 2008 ADSL2+	23 May	2
5	Call for candidates for Fixed Wireless Access	27 May	1
6	Collocation tariffs	29 May	1
7	Blocks & Tie Cables - tariffs	6 June	1
8	Notice of default Mac Telecom 3400-3600 MHz band	6 June	1
9	Temporary licence Telenor Mobile Aviation AS	25 June	1
10	BRUO and co-mingling contracts: suspension of service provision to E-Leven	4 July	1
11	Full VP tariffs	22 July	1
12	BROBA rental fee	1 August	1
13	Addendum NGN and NGA	22 August	1

21. FLEMISH  
MEDIA REGULATOR

22. CONSEIL  
SUPÉRIEUR DE  
L'AUDIOVISUEL  
(HIGH COUNCIL  
FOR AUDIOVISUAL  
MATTERS)

13+	Addendum NGN and NGA	17 September	2
14	BRUO-BROBA Annex K	27 October	1
15	Granting of user rights in the frequency band for 900 MHz cordless CT2 telephones	7 November	1
16	Non-tacit renewal of 2G licences	21 November	1
17	ADSL2+ Annex M	26 November	1
18	ONAIR Switzerland	4 December	1

Apart from these formal ways of cooperation there is also informal cooperation with the community regulators and the competition authorities through business meetings and also because these bodies are invited by BIPT to attend internal trainings organised for BIPT's staff regarding for instance VDSL, cable technology, Ethernet IMS (IP Multimedia Subsystem).

## COOPERATION WITH THE EUROPEAN COMMISSION

Article 7 of the Framework Directive lays down that the NRAs are to notify their market analyses and the obligations they intend to impose on the operators with a significant market power on the markets analysed, to the European Commission and the NRA's of the other Member States. According to that same article the European Commission has a right of veto regarding the definition of the relevant markets as well as for the identification of operators with a significant market power on those markets but it may only advise on the obligations imposed by the NRAs in order to solve the competition problems on the markets analysed.

In 2008, BIPT notified three draft decisions. The Commission commented on some of those.

Code	Draft decision	Comment by the EC
BE/2008/0750	Motivation and specification of KPIs for markets 1, 2, 8, 9 and 10	No comment
BE/2008/0798-0799	Markets 3(03) and 5(03): national telephone services at a fixed location for residential and non-residential customers	The European Commission admits that there are competition problems on these markets, in particular the high prices and the fact that wholesale tariff cuts are not passed on. It therefore asks BIPT to ensure that the related wholesale measures are applied rigorously and adapted if necessary and to tackle the high price level through retail regulation in the meantime. It is deemed necessary to review the markets promptly. BIPT is therefore requested to start a new market analysis within a year.
BE/2008/0801	Addendum markets 11(03) and 12(03)	The European Commission suggests verifying in a new market analysis whether VDSL bitstream access can substitute existing bitstream access.

## MONITORING OPERATORS' AND SERVICE PROVIDERS' ACTIVITIES

A special cell is in charge of permanently enforcing the different legal provisions on the obligations carried by operators and service providers.

That department either acts of its own accord or on the basis of complaints from operators or service providers, or even at the request of other departments within the Institute by carrying out investigations on site when they suspect violations in the cases that they handle.

It is thanks to its actions that the Institute is able to:

- monitor compliance with universal service obligations;
- safeguard fair competition;
- prevent market players from misusing any market power they may have in a specific sector;
- check compliance with the common rules imposed on the provision of services and the installation of infrastructure.

In their capacity of criminal investigation officers, the officials of that cell are also authorised to track down and report all offences within the framework of telecommunications law.

Very often, they work in collaboration with the police services and the public prosecutor's offices or the ancillary departments cooperating with the police services, taking action in order to:

- curb fraud against operators, service providers and consumers, which tends to increase on a permanently evolving market;
- monitor respect for the confidentiality of communication and the protection of privacy.

Based on experience acquired in the field, the department also contributes to the Institute's ideas on measures that need to be taken to achieve effective regulation of the market.

At the end of 2008 two extra officials joined the department to fulfil the additional tasks of monitoring that are brought about by the increase of diversity in the services offered by the operators.

The checks of the operators regarding the application of certain provisions of Title IV of the Act of 13 June 2005 on electronic communications, launched during the previous year, were continued; during the first six months seven questionnaires were addressed to over 260 companies that have declared an activity in the electronic communications sector.

On the grounds of internal requests by the Licensing Department and the Consumer Department, 10 specific checks were carried out because an electronic communications service had not been declared or because the letters had remained unanswered.

In addition the Monitoring Department treated, in direct cooperation with the operators, 32 files that had incomplete or incorrect answers as well as 4 files relating to more moot questions.

## User protection

**Liberalising the market and introducing competition are aimed at bringing prices down on the one hand and diversifying the product offer and improving quality on the other hand. However, market forces should not be exerted at the expense of any category of users. This concern features in European laws and regulations. BIPT monitors the proper operation of the protective mechanisms.**

### THE CONSULTATIVE COMMITTEE ON TELECOMMUNICATIONS

The Consultative Committee on Telecommunications is a forum on which all stakeholders of the sector have a seat. The Institute carries out the Committee's secretarial work, both at plenary level and in the various working groups. In these working groups the recommendations given by the Committee are prepared. Only when the working group is preparing recommendations on the activities of the Institute, the latter is not involved in any way, thus ensuring that the Committee can draw up its recommendations in full independence.

The Committee renders, either on its own initiative or at the request of the competent minister or of the Institute, recommendations on any matter relating to telecommunications. Furthermore, the Committee gives recommendations on the activities of the Institute, the general terms and model contracts of the electronic communications service providers and also on certain aspects of the universal service.

In 2008 the Committee rendered four recommendations, including a memorandum to the Government, entitled "Information society: with renewed dynamism back to the top!" and recommendations on the Institute's activities. Otherwise all opinions issued by the Committee since 2006 can be consulted on the Committee's website ([www.rct-cct.be](http://www.rct-cct.be)) and downloaded.

## THE ELECTRONIC COMMUNICATIONS UNIVERSAL SERVICE

The universal service principle means that in a market open to competition, all users should be guaranteed access to a minimum package of services of a given quality and at affordable prices.

This package of services currently comprises:

- access to a basic fixed public network (allowing among other things functional Internet access) and to a fixed telephony service;
- a social element involving the provision of a social telephone tariff to certain categories of people;
- the provision of public payphones;
- the provision of a universal directory enquiry service;
- the provision of a universal directory.

The Act of 13 June 2005 stipulates that the providers are designated for each element separately except as regards the social element – to which a separate method applies –, following an open procedure.

The Commission doubts, however, whether the Belgian legislation on the financing of the universal service complies with Articles 12 and 13 of Directive 2002/20/EC (Universal Service Directive). In that context and as the Royal Decree implementing Article 92 regarding the universal service financing mechanism had not been published, the Institute thought it appropriate to postpone the launch of these designating procedures.

Belgacom, however, continues to provide all elements of the universal service until 1 January of the year that will follow the designation by the King of the provider or the providers for each element of the universal service (except for the social element).

The social element of the universal service consists of the provision by all operators of special tariff conditions to certain categories of beneficiaries. The social element system applies since the Act of 13 June 2005, and more in particular Article 74, came into effect.

## MONITORING OF UNIVERSAL SERVICE OBLIGATIONS

As regards universal service, the first task of the Institute is to monitor the proper fulfilment by the universal service providers of their obligations. Given the transitional period regarding the provision of the universal service elements other than the social element, the monitoring of the execution of these elements only concerned Belgacom in 2008.

The Institute also drew up the report on the universal service covering 2007. On the one hand this report describes the result of the verification carried out by the Institute of the correct fulfilment of the universal service obligations by the provider. On the other hand it meets the obligation for the Institute laid down in Article 103, paragraph 2, of the Act of 13 June 2005 on electronic communications to report to the minister on possible adaptations of the universal service obligations.

Since 30 June 2005 the monitoring task of the Institute concerning the social element of the universal service has consisted in verifying whether operators do fulfil their obligation to provide the social telephone tariffs to the customers who belong to one of the categories of beneficiaries. The aim is therefore to monitor if the granting conditions are correctly applied by operators, if the latter grant the correct discounts and if these discounts are applied to their standard tariffs. In this context BIPT monitors compliance with the social tariffs granting procedure laid down in the Royal Decree of 20 July 2006. It also verifies the list of standard tariffs on which operators apply tariff discounts.

In the course of the year only theoretical checks of the quality of the services based on various statistical data could be carried out.

As to the directories, with each publication a check is made to make sure that all legal requirements have been met.

The Institute analysed whether Belgacom's reasons justifying its intention to adapt the 1207/1307 directory enquiries service's rates are valid and verified whether the request corresponds to the legal provisions. That analysis resulted in a positive answer to Belgacom in June 2008.

The universal service provider was contacted on several occasions to ensure that the access for the emergency services to the subscribers' database is granted in all circumstances.

In cooperation with Belgacom measures were taken to apply the application procedure to make available the data of the operators, as stipulated by the Royal Decree of 27 April 2007 on the supply of the data necessary to the making of the universal directory and the provision of the universal directory enquiry service.

Furthermore a letter was addressed to the Minister in order to consider a number of changes to the Ministerial Order of 27 April 2007 laying down the criteria of edition of the universal directory and fixing the general information that the universal directory must contain.

## UNIVERSAL SERVICE COSTS

Because of the current procedures at European level questioning the conformity of the Belgian legislation on the financing of the universal service with Articles 12 and 13 of Directive 2002/20/EC (Universal Service Directive), the Institute thought it preferable to suspend the calculation of the compensation payable by the operators for the social element of the universal service.

Because the compliance of the Belgian legislation on financing was also questioned for other elements of the universal service, and since the provider had not communicated a cost estimate for the provision of these elements, the Institute did not start to calculate the net costs for the universal service activities other than the social element.

## IMPLEMENTATION OF THE NEW REGULATORY TASKS CONCERNING SOCIAL TARIFFS

Article 22, § 2, of the annex to the Act provides for the creation within the Institute of a database of beneficiaries of the social telephone tariff. This database has been operational since 2 May 2006 and makes it possible to check when entering the application whether a customer or any other member of his household, does not already benefit from a social tariff with another operator.

According to the procedure for the granting of social telephone tariffs, mentioned in Article 3 of the Royal Decree of 20 July 2006 laying down the operating conditions of the social element of the universal service regarding electronic communications, for each application submitted to operators, the Institute also checks if the applicant meets the granting conditions for the social tariff.

These checks carried out by the Institute's officials are partly computerised ensuring that first a request is made to the data of the Crossroads Bank for Social Security. When the Crossroads Bank for Social Security does not possess certain data, the Institute contacts the customer so that the latter returns a number of certificates to the Institute.

During 2008, a little over 41,000 new applications for social tariffs were entered into the database of beneficiaries of social telephone tariffs. Among them, about 29,000 required a "manual" treatment by the "STT" Department (Social Telephone Tariffs) created within the Institute.

As allowed by the ECA<sup>23</sup>, the Institute also works on the systematic verification of the files that are more than two years old. In 2008 more than 18,000 old files were checked.

## THE ETHICS COMMISSION

The Ethics Commission for the provision of premium rate services on electronic communications networks is entrusted with the task of ensuring the observance of the conditions under which premium rate services are offered to the public through electronic communications networks. This covers for example voting by telephone or text message on various TV shows (e.g. Eurovision Song Contest or Miss Belgium), downloading logos and ringtones for mobile phones, calling a central premium rate number to find out about duty doctors or chemists in a specific area or to consult the latest weather forecast, making dates via dating services, etc.

For these services mostly 0900 numbers or short five-digit SMS codes are used.

The law decrees that the rules for a correct offer of these services and number series that may be used for that purpose have to be laid down in an ethics code, which is proposed to the King by the Ethics Commission. The procedures the Ethics Commission will follow were laid down in a Royal Decree of 1 April 2007 (Royal Decree of 1 April 2007 regarding the procedure for and the practical rules relating to the functioning of the Ethics Commission for the provision of premium rate services on electronic communications networks, Moniteur belge, 12 April 2007).

The law also decrees that BIPT provides the secretariat for the Ethics Commission.

In accordance with its legal tasks BIPT provided secretarial and generally operational support to the activities of the Ethics Commission, which started on 19 January 2007.

This included among other things the organisation and minuting of meetings of the Ethics Commission, the management and internal completion of a project for the creation of a proper website for the Ethics Commission for telecommunications, the implementation of the solution found to complaints regarding premium rate numbers that BIPT or the Ethics Commission received themselves, assisting the Ethics Commission in the formulation of opinions on matters that fall within the scope of the Ethics Commission for telecommunications, the preparation and the representation of the Ethics Commission as regards international forums (especially the IARN<sup>24</sup>; see [www.iarn.org](http://www.iarn.org)) and the management of a project to achieve a proposal for an ethics code, as stipulated in Article 134, § 2. of the Act of 13 June 2005.

Since 12 December 2008, the Ethics Commission's activities can be followed on the website [www.telethicom.be](http://www.telethicom.be).

## PROTECTION OF PRIVACY

On 15 March 2006, the European Union adopted a directive on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks services and amending Directive 2002/58/EC. This directive was published in the Official Journal on 13 April 2006.

The main goal of this new European normative instrument is to harmonise the provisions of the Member States relating to the obligations regarding the retention of certain data that were generated or processed by the providers of publicly available electronic communications services or of public communications networks. This text aims at guaranteeing the availability of these data for the purpose of investigating, detecting and prosecuting serious violations as described by each Member State in its national law.

The Institute prepared a draft transposition of this directive into Belgian national law and communicated this draft to the competent political authorities on 24 October 2006.

A new draft has been developed in cooperation with the Federal Public Service of Justice and the Federal Computer Crime Unit and was sent to the Private Office of Minister Van Quickenborne on 17 April 2008.

This new draft was also subjected to a public consultation, which ended on 16 June 2008. This consultation can be looked into via the following link: <http://www.ibpt.be/ShowDoc.aspx?objectID=2808&lang=nl>

A summary of this consultation is available since 21 July 2008 on the Institute's website via the following link: [http://www.ibpt.be/nl/408/ShowDoc/2845/Consultations/Synth\\_se\\_de\\_la\\_consultation\\_concernant\\_la\\_transpos.aspx](http://www.ibpt.be/nl/408/ShowDoc/2845/Consultations/Synth_se_de_la_consultation_concernant_la_transpos.aspx)

Upon publication of this report the directive on the retention of data had not yet been published in the Moniteur Belge.

Moreover, BIPT started thinking about a possible rephrasing of the legal provisions on the respect for privacy in the electronic communications sector. The results of this reflection are expected in the course of 2009.

## THE TASKS OF GENERAL INTEREST

One of the Institute's missions is to see to the integrity and safety of the public electronic communications networks. Among other things, the Institute has to coordinate the initiatives relating to the quality and safety of these services. In this context it regularly takes part in the meetings of the Coordination and Crisis Centre of the Belgian Government.

Moreover, the Institute cooperates with the Joint Commission on telecommunications (Comixtelec) in conformity with Article 14, § 2, 4<sup>o</sup>, of the Act of 17 January 2003 on the status of the regulator of the Belgian postal and telecommunications sectors. In this context the Institute drew up a draft royal decree to adapt the Comixtelec's tasks to the new electronic communications environment. This draft was submitted for approval to the Minister in order for it to be submitted to the King for signature during the first six months.

## TARIFF SIMULATOR

The telecommunications regulatory framework stipulates that BIPT has to provide for a tool on its website which the public at large can use to compare the tariff plans of the different operators offering electronic communications services on the Belgian market.

With the support of an external consultant BIPT developed a computer programme based on which the consumer can evaluate which offer has the most advantages for him taken into account his user profile, for the following services:

- fixed telephony;
- mobile telephony;
- broadband and Internet access.

Because of developments in the telecommunications sector and different comments formulated by the sector further adjustments were required with a view to the launch in 2009.

There will be a fourth phase in the project following the integration of the three previous steps and the addition of access to television in order to create a final tool.

# Technological monitoring, involvement in national and international institutions

At national level, the Belgian Institute for Postal Services and Telecommunications is actively involved in the forum of the Consultative Committee on Telecommunications. At international level, it keeps abreast of technological developments and constantly assesses their effect on regulation. Harmonisation between European regulators is aimed at adopting the same interpretation of the economic situation in order to create a genuine single European market for telecommunications. BIPT is involved in all international forums where future directions are set out.

## THE CONSULTATIVE COMMITTEE ON TELECOMMUNICATIONS

As mentioned before at page 28 the Consultative Committee is a forum in which the various stakeholders of the sector are represented. Because of its composition the Committee acts as a privileged observatory of the developments and trends in the sector. BIPT actively participates in the Committee's activities. BIPT not only sits on the Committee as an observer, it also performs secretarial duties for the plenary meetings and the working groups.

## EUROPEAN INSTITUTIONS

In 2008 the Council of the European Union mainly discussed the proposals for directives amending the current regulatory framework, which was adopted in 2001, published in 2002 and implemented as from July 2003. The Commission sent those proposals for directives to the Council and the European Parliament in November 2007. The latter two institutions finished their first reading in the last quarter of 2008; the second reading and probably the completion of the agreement will take place in 2009.

The Commission proposed a review of the scope of the universal service but did not propose to include mobile communications and broadband, as some Member States would have wanted. However, it starts a consultation initiating the debate on the role of the universal service in achieving the goal to make broadband available to all European citizens in 2010. It should be noted that as part of the European Economic Recovery Plan the Commission proposed in November 2008 to mobilise extra European funds to finance any projects that aim at providing broadband to under-served and high-cost areas.

The Council and the Parliament also worked on reviewing the regulation on roaming tariffs for calls, SMS messages and mobile data transfer in Europe. The review will be finished in 2009.

Within the framework of COCOM (Communications Committee) the Commission tried to have a draft regulation adopted relating to the terminating rates for fixed and mobile calls, which would force Member States to introduce new accounting systems and strict tariff symmetry. There is still a lot of reservation about this case and the vote in February 2009 turned out to be negative.

The Commission also started a consultation on next generation networks and access. The results were transposed into a draft recommendation that was submitted to COCOM at the end of 2008 and which will probably be finalised in the course of 2009.

## IRG-ERG

Also in 2008 the IRG/ERG working programme was especially ambitious. Very particular attention was given to the European Commission's proposals to review the European regulatory framework and the negotiations that went on during the entire year between the various EU institutions: the Commission, the European Parliament and the Council. In all likelihood these negotiations will be concluded in 2009.

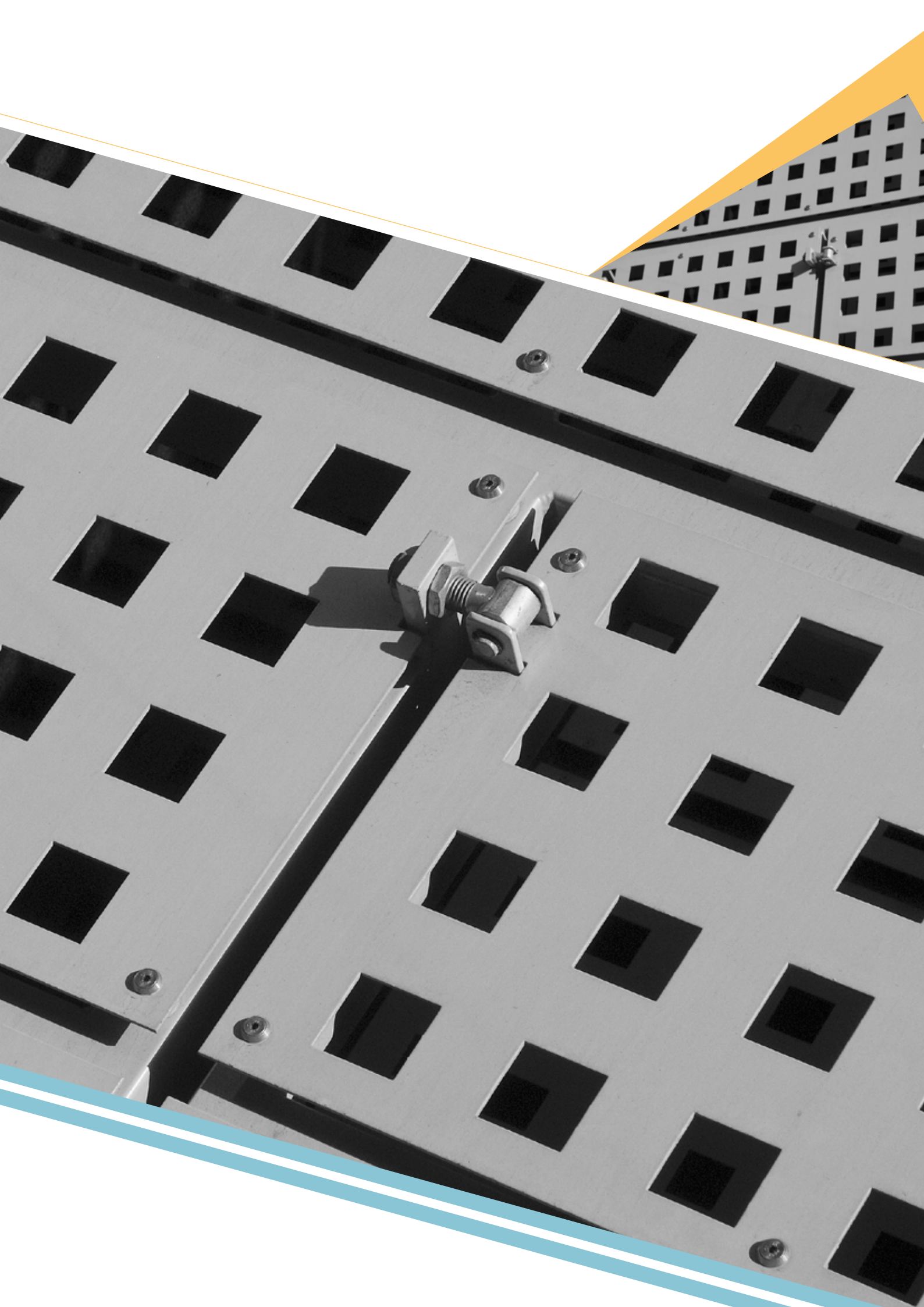
## CEPT AND THE ITU

BIPT also plays an important role in the work of the European Conference of Postal and Telecommunications Administrations (CEPT). Among other things it attended the CEPT meeting in Malta on 10 June, where the foundation was laid for the reorganisation of CEPT.

The Institute also sits on the Administrative Council of the European Radiocommunications Office in Copenhagen. This office supports CEPT's tasks.

## WTO

Within the WTO the negotiations about the services are deadlocked and therefore have not resulted in significant developments in the field of electronic communications.



# §3

## MANAGEMENT OF TECHNICAL MATTERS AND OF THE ELECTROMAGNETIC SPECTRUM

### Management of the electromagnetic spectrum, licences and frequencies

The management and monitoring of the spectrum fall within the brief of BIPT, which assigns the frequencies and delivers the licences. The users of the electromagnetic spectrum are numerous and varied.

#### FREQUENCY MANAGEMENT

BIPT is assigned the task of managing the electromagnetic spectrum in Belgium. This encompasses both the daily management of frequency assignments and coordinations and the long-term policy on frequency plans and adjustments.

Frequency assignments for landmobile services are governed by the HCM<sup>25</sup> Agreement (previously the Vienna/Berlin Agreement) and constitute one of the main activities of the department.

Number of files processed regarding mobile services under the HCM Agreement Number of coordinations	2008
Coordinations from Belgium	216
Incoming coordinations from France	269
Incoming coordinations from the Netherlands	82
Incoming coordinations from Germany	222
Incoming coordinations from Luxemburg	3

Number of files per category	Annulled	Modified	New
1st category	95	478	312
2nd category	0	0	16
3rd category	127	187	39
4th category			
5th category			
6th category	472	857	1298
7th category			
8th category			

25. HARMONISED  
CALCULATION  
METHOD

## INDISPENSABLE INTERNATIONAL COORDINATION

Although BIPT is not responsible for the planning of frequencies for broadcasting, its Frequency Management Department is responsible for the daily requests for coordination and the application of international agreements (Geneva 1975, Geneva 1984, Stockholm 1961, Wiesbaden 1995, Chester 1997, Maastricht 2002) as well as the application of the LEGBAC Agreement.

This department is also responsible for coordinating frequencies for satellite links (earth stations, networks, etc.) and radio relay links as well as for the correspondence with the ITU Radiocommunication Bureau.

Types of files	Number
1961 Stockholm Agreement 1997 Chester Agreement (DVB-T <sup>24</sup> ) 2006 Geneva Agreement	429
1984 Geneva Agreement	2 456
1975 Geneva Agreement	2
1995 Wiesbaden Agreement/2002 Maastricht Agreement (T-DAB <sup>27</sup> )	0
1993 Vienna Agreement/2001 Berlin Agreement (general) – HCM 2005	81
Earth stations (Art. 9), satellites (Art. 9), radio relay links	1 105
Miscellaneous (coordinations, interference, temporary frequencies, information, ...)	917
Comixtelec	192
ITU – Radiocommunication Bureau and Conferences	198
CEPT – ERO <sup>28</sup> – ECC	78
Satellite organisations (Eutelsat, Intelsat, ESA <sup>29</sup> ...)	1
<b>Total</b>	<b>5 459</b>

A few important achievements by the Frequency Management Department in 2008 were:

### Radio interfaces

A new version (V2.1) of radio interface B10 regarding short range radio communications equipment destined for wireless microphones, certain intercom systems, hearing aids and radio equipment for broadcast links, laying down the conditions under which the use of such equipment is allowed on the Belgian market, was approved by the Council and published on the Institute's website.

In order to keep abreast of the quick market development in radio equipment the notification procedure of new versions of four other existing radio interfaces was also completed, namely regarding short range devices for non-specific applications, for inductive applications, for medical telemetry and for analogue or digital PMR446.

### *The Decision of the Council of 26 November 2008 on the granting of user rights in the frequency bands used for the 900 MHz cordless CT1+ telephones<sup>30</sup>*

The operation of the GSM frequency bands at 900 MHz is subject to specific limitations because of the presence of analogue systems of cordless CT1+ telephones (system in the E-GSM band: 885 – 887 MHz & 930 – 932 MHz). Those cordless CT1+ telephones were introduced at the beginning of the nineties and were legally allowed to be marketed until December 2004. After that deadline a reasonable period, of five years for example, still has to be allowed for, in which the use of these telephones has to be accepted.

Considering the difficulties with electromagnetic compatibility between these analogue systems and the digital GSM system it is likely that the frequencies concerned will not be used until the number of CT1+ telephones in use has strongly diminished and unless there are enough guarantees that the equipment still in use will not experience any interference.

A public consultation was held regarding the early granting of rights to use these radio frequencies to BASE. Following the consultation the Council approved a decision which also provides for a test phase.

#### *Consultation at the request of the Private Office of the Minister of Enterprise and Simplification on a draft Royal Decree concerning radio access in the 2500-2690 MHz frequency band*

The purpose of Commission Decision 2008/477/EC of 13 June 2008 on the harmonisation of the 2 500-2 690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community is to harmonise the availability and efficient use of the 2 500-2 690 MHz frequency band.

This decision makes it obligatory for the Member States to designate the 2 500-2 690 MHz frequency band for these systems and subsequently make them available in accordance with the parameters set out in the annex to the decision. The deadline is six months after entry into force of the decision. As requested by the Minister BIPT has held a public consultation about a draft Royal Decree. A report including the conclusions and an opinion were given to the Minister in charge.

#### *Consultation on a draft decision concerning the evacuation of the 3400-3450/3500-3550 MHz frequency band*

The EC approved Decision 2008/411/EC on the harmonisation of the 3 400-3 800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community.

In Article 2.1 of this decision it is stipulated:

“No later than six months after entry into force of this Decision Member States shall designate and make available, on a non-exclusive basis, the 3 400-3 600 MHz band for terrestrial electronic communications networks, in compliance with the parameters set out in the Annex to this Decision.”

As a consequence the 3400-3600 MHz band has to be evacuated and made available for wireless access networks (such as Wimax<sup>31</sup>). On 22 October 2008 the BIPT Council approved the draft decision concerning the part of the band that has to be evacuated by the VRT. This decision was submitted to a public consultation.

#### *The Council Decision concerning the non-tacit prolongation of the licences to establish and operate the 2 GSM mobile phone networks (Mobistar and Proximus) and the mobile phone network of the DCS 1800 operator (BASE).*

The licences for establishing and operating the GSM mobile phone networks are expiring within the foreseeable future. In 2005 BIPT held a public consultation about this issue. At the time the results were published on the BIPT website. The consultation learned that it was necessary not to prolong the existing 2G licences tacitly but to cancel them. As a result the terms under which the user rights for the 2G frequencies are granted, can be adapted. In this regard an opinion on drawing up a royal decree was also given to the Minister.

#### *Landmobile services*

The planning of frequencies for private mobile use was further elaborated.

The technical “Landmobile Services” cell coordinated and assigned the frequencies for numerous temporary events, among which the Grand Prix and the 24 hours of Francorchamps and various concerts.

As for managing the frequencies for landmobile services, the arrears built up before, was largely made up.

Other accomplishments of the Frequency Management Department can be found at page 48 and following.

## SHARED USE OF ANTENNA SITES

For the purpose of site sharing, the law provides for a database manager. This task is currently performed by the non-profit-making association R.I.S.S. The R.I.S.S. has had the database itself accommodated in the offices of the Institute, which now also ensures the processing of the sites in the database.

During 2008 BIPT continued working on developing online access to the locations of the antenna sites which are available for site sharing. This access involves a website featuring a map of Belgium with a zoom function to the required region, and showing where the operational sites are located. Also the locations for which a building permit has been applied for or those accepted for a specific site can be checked.

The available data were submitted to a thorough quality check in order to guarantee correct coordinates and address details. New sites that are added, are also checked.

BIPT also oversees the smooth operation of site sharing. To this effect, BIPT attends the R.I.S.S. meetings to take note of the decisions on the one hand and to offer the necessary support in the guidance process on the other.

## LICENCES FOR PRIVATE RADIO COMMUNICATIONS NETWORKS AND INDIVIDUAL STATIONS

The table below lists the total number of issued licences on 31 December 2008 in the different categories of individual stations or private radio communications networks.

Number of licences for private radio communications networks and individual stations			
		Permanent	Temporary
1st category	Private mobile networks	1,064	216
2nd category	Fixed networks	261	-
3rd category	Public administrations	879	13
4th category	Private mobile networks at the common 27 MHz frequency	1	X
5th category	Radio amateurs	5,582	X
6th category	Fixed and mobile networks within the limits of one property	4,563	1,066
7th category	Remote control of scale models	Exempted from licence	
8th category	CB <sup>32</sup> radio telephones B27	19,461	X
Satellites	Satellite networks	27	100

## RECOGNITION OF OPERATORS

### Operators on board aircraft

In 2008 the BIPT Council renewed the licences of Aeromobile and OnAir, awaiting the publication of the legal framework.

### Trunk networks

The SatPlan company was granted a licence to operate a radio positioning network on the Belgian territory.

### Radio amateurs

#### Examinations

The number of candidates for the basic licence amounts to 132 (165 in 2007). 95 candidates have taken the HAREC<sup>33</sup> exam compared to 106 the year before. The success rate for the basic licence is 75% and 46% for the HAREC exam, which is a lot more difficult.

### Maritime radio communications

#### Examinations

451 candidates took the SRC exam (compared to 396 in 2007) with an 82% success rate. 1,343 candidates turned up for the VHF exam (compared to 1,301 in 2007), 1 114 of which passed (83%).

For the GOC<sup>34</sup> and the ROC<sup>35</sup> exams the number of candidates were respectively 125 of which 110 passed and 109 of which 85 passed.

### Licences

In 2008 the total number of ship station licences amounted to 13,324 (compared to 11,970 in 2007), distributed among 9,731 pleasure boats, 3,160 commercial river vessels, 291 seagoing vessels and 142 fishing boats.

### Aeronautic radio communications

#### Certificates

In 2008, the Institute granted 392 operator certificates for an aeronautical station on the basis of examinations organised by the FPS Mobility and Transport, as compared to 293 in 2007.

#### Licences

Currently 1,576 licences for aeronautical stations are managed by the Institute: 918 for installations on board aircraft and 658 for portable stations.

## Guarantees for spectrum users

**Managing and monitoring the electromagnetic spectrum guarantee that radio communications work properly for the benefit of all users. The electromagnetic fields generated by electrical and electronic equipment may cause interference to the operation of other equipment. The fight against these interferences is imperative. For this purpose, prevention and repression are complementary policies; however, BIPT clearly favours the former. Indeed, its officers inform, advise, monitor, check and if necessary, report the offenders. Goods may also be confiscated.**

### SPECTRUM MONITORING

#### Tasks

The NCS (the National Spectrum Monitoring Department) is responsible for “policing the radio waves” in the broad sense of the word. In addition to the directorate in Brussels, the NCS has five monitoring centres across the country, in Anderlecht, Liège, Senefte, Antwerp and Ghent. Its tasks can be broken down into five main categories:

- dealing with radio interference: every citizen and every authority can report to the NCS any radio interference of which they claim to be a victim. The NCS technicians, who have professional measuring equipment, track down the source of the interference and take the necessary measures to eliminate it;
- preventive checks on professional radio networks: most new radio networks are monitored by the NCS technicians. This ensures that these networks are set up in accordance with their licences and that the frequency, capacity and antenna height are compliant with the plans of the Frequency Management Department. It also means that the use of illegal transceivers can be curtailed;
- checks during major events: the NCS is present at various events that attract a large number of radio frequency users, to ensure that licences are observed and to resolve cases of radio interference;
- collaboration with the police services and the public prosecutor’s offices: these regularly make use of BIPT’s expertise in the field of radio communications;
- tasks of particular expertise regarding the measuring of the electromagnetic field: in particular, the task of monitoring compliance with the standards governing exposure of the public to non-ionising radiation has been carried out by BIPT since 2001.

Besides these tasks a special effort was made in 2008 relating to the FM broadcasting issue. On 22 June the French Community’s frequency plan came into force. At the same time the provisions of the Royal Decree of 26 January 2007 on the ether police concerning the frequency modulation in the 87.5 MHz-108 MHz band became effective, enabling the Institute to take action against stations broadcasting without a licence. The Institute has made efforts to introduce this frequency plan as effectively as possible, in cooperation with the Community bodies and associations representing the world of broadcasting.

Moreover, new tasks were assumed relating to the search for pirate radio stations (which are used for various purposes).

### Supplementary tasks

To enable them to perform their general task of policing the radio waves, the NCS members have the capacity of a criminal investigation officer and regularly join forces with the police services.

All security services have 24/7 access to an NCS duty service.

The NCS has fully equipped measurement vehicles at its disposal in order to conduct activities in the field. In 2008 a new vehicle was purchased, thus bringing the number of measurement vehicles up to twenty-three, and three vehicles were replaced.

In addition, the NCS has six fixed measuring stations, designed for the automatic monitoring of radio frequency use. Because of the move of the administrative offices the measuring station on the Astro Tower has to be dismantled and in 2008 a new location for this measuring station was searched for.

As usual, various operational tasks regarding the smooth operation of the department, such as purchasing and modernising the means of monitoring, were fulfilled in 2008.

As for cooperating with external bodies special emphasis was put on the collaboration with the CCRM (Centre de Contrôle des Radiocommunications des Services Mobiles or Centre for monitoring radio communications of mobile services).


Finally, the heads of the department participated in the following international working groups: CEPT/ERC/WGFM-PT22 (monitoring), CEPT/RA1 (enforcement), RAINWAT COMMITTEE (maritime), CEPT/WGFM-PT46 (maritime).

The table below provides a round-up of activities conducted in 2008.


NCS Interventions	
"Interference" cases	489
Preventive checks on professional users	999
Checks during events	102
Legal cases – tasks for the public prosecutor's office	469
Radiation measurements at transmission sites	285
Monitoring of broadcasts	97
Interventions by the duty service	130
Number of reports produced	133

## CONFORMITY OF EQUIPMENT

Radio and telecommunications terminal equipment cannot be marketed unless it meets the requirements of Directive 1999/5/EC of the European Parliament and the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (R&TTE Directive). According to the text the appropriate CE marking has to be affixed on all radio and telecommunications terminal equipment, on their packaging as well as on the accompanying documents.

The CE marking always includes the CE sign at the minimum. This sign looks like this: .

If a licence is needed for the use of the radio equipment or if the equipment uses frequencies, the use of which is not harmonised in Europe, the CE marking must include an alert sign (information sign).

In that case the CE marking at least takes the following form: .

The information sign alerts the user to the fact that limitations apply for using the equipment.

Radio equipment operating in frequency bands, the use of which is not harmonised in Europe (and which consequently bears the information sign in the marking) has to be notified to the Member State in which it is marketed. This is commonly known as the obligation of notification, as stated in Article 6.4 of the Directive. In 2008, 1,460 devices were notified in accordance with this procedure. This is a status quo.

As a number of provisions by the Commission regarding the harmonisation of the radio spectrum have taken effect, the number of notifications is expected to decrease.

Since 7 January 2008 the European Commission makes a “One Stop Notification” or OSN procedure available on its server. The person responsible for the notification according to Article 6.4 can send his notification to a single central address. The system then distributes the application to the administrations of the Member States who have accepted the OSN principle. Up to now, 23 countries, including Belgium, have done so. Sometimes BIPT receives the same notification both directly and by way of the OSN procedure.

Equipment operating in frequency bands the use of which is harmonised in the Community does not have to be notified to BIPT. This equipment is part of the so-called “Class 1” category.

It is advised to regularly consult the list of “Class 1” equipment. This list can be consulted directly on the site <http://www.ero.dk/rtte>, a subdivision of the ERO website. The technical parameters which this radio equipment has to comply with in order to fall under the “Class 1” category are also mentioned on this site and are linked to the reference number of the relevant subclass.

## MONITORING OF EQUIPMENT

It was noticed that a fairly large quantity of devices are still marketed that do not or only partially comply with legal requirements. These infringements create unfair competition and disadvantage those manufacturers and importers who do observe the legal obligations (more quickly on the market – less costs). Such monitoring is conducted in everybody's interest, from manufacturers, importers and vendors to users and public authorities. Market surveillance is considered to be one of the keys to the successful implementation of the R&TTE Directive. In a number of cases repressive measures were called for. The checks conducted in 2008 thus led to the seizures listed in the table below.

Equipment seized during checks in 2008			
Terminal equipment		Radio equipment	
Telephone equipment	9	Remote-controlled toys	1.926
		GSM equipment	922
		Remote-controlled mains sockets	658
		Door bells	216
		Remote controls (by radio)	120
		Wireless microphones (including in-ear systems)	82
		Remote-controlled vibrators	72
		Computer mice / keyboards	63
		Walkie-talkies	45
		Radio amateur equipment	42
		Bluetooth equipment (no GPS)	41
		Wireless intercom (baby alarms)	38
		Scale models	38
		Wireless cameras (also mini)	36
		Computer equipment (wireless)	34
		Wireless audio and video equipment	26
		Wireless dog collars	25
		Radar detectors	24
		PMR/LPD <sup>36</sup> transmitters	22
		Other	164
Total	9	Total	3.666

Once again, regulations were often found to be violated, wittingly and unwittingly. Nevertheless the administrative requirements for terminal equipment as such are fairly straightforward.

In the case of radio equipment operating in frequency bands, the use of which is not harmonised within the European Union, and which consequently has to bear the "alert sign" in the CE marking, it was often noted that there was no list of the countries in which such equipment may be used. BIPT believes that this information should always be included. This indispensable information has to be mentioned on the packaging as well as in the instructions for use. The Institute always takes action when this information is lacking. A potential buyer of such radio equipment needs that information to know whether the equipment may or may not be used. The use of such equipment in an unauthorised place may cause interference, with all ensuing consequences.

It was also noted that a great number of radio devices which do not comply with the prevailing legislation and have not been marketed in accordance with the former authorisation system, are still on the market. Moreover, some of these devices operate on frequencies that are not authorised in Belgium. In these cases too, the Institute invariably takes action. This is probably partly because of mail order becoming easier (via the Internet) and the often aggressive manner of advertising all kinds of cheap radio equipment (via spam mail). The buyer/importer has every interest in being adequately informed, as he bears all responsibility.

Many irregularities are still being found in the sector of radio controlled toys (remote control toy cars...). It occurs that these products comply with the Toys Directive (Directive 88/378/EEC amended by Directive 93/68/EEC), but that no heed was taken of the provisions in the R&TTE Directive.

Postal items containing radio equipment are also frequently checked. In 2008, 78 of such checks were carried out. Many of these items contain devices bought on the Internet – directly from the manufacturer or via an auction website (eBay for instance).

In many cases the equipment does not comply with the legal requirements and is seized. An alarming fact is that a lot of non-CE marked equipment is offered through these auction sites. This is also often the case with GSMs bought through the Internet in non-European countries.

During a check such equipment was always seized. The party concerned is always notified of this.

Any equipment that has no CE marking whatsoever, cannot be admitted to the Belgian market.

When violations are observed, these are always reported and the goods are seized in most cases. The violations are then followed up by the public prosecutor's office. That means that there is no point in approaching the Institute for information about any case. The public prosecutor's office then decides whether legal action is needed. In 2008, 647 initial reports were made. During the follow-up of the court cases, a further 53 reports were made.

In Belgium a BIPT licence (commonly known as a licence) has to be obtained before certain types of radio equipment can be possessed and used. Sellers of such equipment are required to have a general holder's licence. This general holder's licence is free of charge and can be obtained upon simple request. The sale of such equipment is not permitted to persons who do not have an individual licence. A monthly statement of sales has to be submitted to BIPT. This statement has to include the buyer's details.

Additional clarification and information on the R&TTE Directive are available at the European Commission's website: <http://europa.eu.int/comm/enterprise/rtte/>. Apart from the text of the Directive this website also contains further clarification and generally accepted interpretations. Useful information is also available at the BIPT website. It can be found under "Equipment" in the section "Radio Communications". If you have any questions, please mail to [equipements@bipt.be](mailto:equipements@bipt.be), or fax to 02 223 11 28.

## Management of telephone numbering

Numbers are essential in offering telecommunications services over telecommunications infrastructures. They are for both end-users and providers the key that provides access to services. BIPT constantly sees to it that the supply of numbers is sufficient and adequate for normal market development. To telecommunications operators equal access to adequate number series is of paramount importance, in terms of quality as well as quantity, for the balanced development of a competitive market. For end-users numbers contain information about the kind of services and the corresponding rates. For this purpose BIPT establishes numbering plans, which clearly state which destination corresponds to which number.

### REGISTRATION OF NUMBER CAPACITY

The Institute also carries out the actual number management, which includes tasks such as the allocation, reservation, withdrawal, transfer and monitoring of use (maintenance policy). The table below provides an overview of the number of files treated per number series for 2008

Number series	Destination	Reservations	Allocations	Cancellations	Transfers
1yxx	short numbers CSC <sup>37</sup> , VPN ...	(n) 2	-	1	-
4pq	mobile services	(n) 24	31	-	-
70-700	national services	(n) 1	2	-	-
77	services based on premium rate numbers	(n) 1	2	-	-
78	national services	(n) 1	-	-	-
79	special Internet access	(n) -	1		
800	freephone services	(n) 30	55		
90A x 1.000 numbers	services based on premium rate numbers	(n) 2	-	-	-
MNC	mobile network codes	(n) 2	-	1	-
ISPC	international signalling codes	(n) 20	12	9	-
NSPC	national signalling codes	(n) 51 (v) 10	149	-	-
PQYZ	geographical numbers	(n) 1	-	-	-
TMNC	TETRA mobile network codes	(n) 2	-	1	-
SMS/MMS	short SMS/MMS numbers	(n) 3 077	1 619	-	-

(where n = new reservation(s); r = renewal of existing reservation(s))

All available information on the national numbering plan – such as the lists of reserved and allocated numbers – is published on the website ([www.bipt.be](http://www.bipt.be)).

### POLICY MEASURES

Most policy measures taken in 2008 concern the further implementation of the Royal Decree of 27 April 2007 on managing the national numbering space and the grant and withdrawal of number user rights (Moniteur belge of 28 June 2007) (abbreviated hereafter as “Numbering RD”).

At the special request from the Gaming Commission Article 50 of the Numbering RD was implemented by first publishing a consultation document on 23 January 2008. Next, the BIPT Council laid down the subseries for games of chance for the provision of premium rate services on electronic communications networks by means of a decree.

The transfer of the GSM operators’ SMS/MMS numbering plan for short numbers to BIPT was carried out.

including the subscription phase. The necessary measures, both organisational and IT-wise, were taken to ensure the issue for the operators of the short SMS/MMS numbers of the value added services. In addition, further consultation took place to introduce the new numbering plan for Infokiosk services on 1 April 2008. The modified numbering plan for Infokiosk numbers was ultimately introduced without any major problems for the consumers. Various requests for temporary exceptions to the numbering plan were treated and resulted in an opinion to the Minister.

After further analysis of the impact on the market of the current regulatory framework regarding the numbering plan and following a written consultation of the market a draft royal decree was established and sent to the Minister. It included the advice to amend the Numbering RD regarding 1) maximum rates for calls from GSM phones to Infokiosk numbers and (2) the porting for nomadic VoIP numbers and (3) the clarification of the SMS/MMS numbering plan.

Within the framework of the review of the new regulatory framework by the European Commission the Number Management Department provided extensive comments and took a position on the Commission's proposals concerning numbering management.

In conformity with the European Commission's decision of 29 October 2007 the BIPT Council informed the market on 21 December 2007 about its policy regarding the provision of numbers 116111 and 116123 for respectively a child helpline and a psychological support helpline on the Belgian market.

Two decisions regarding applications for number block portability were treated. To that end each time a consultation was first started asking to provide BIPT with information for the purposes of a cost-benefit analysis. Finally, on 10 December 2008 a Council decision was adopted to keep stocks of geographical numbers up. Indeed, an analysis had shown that the number stock was in danger of becoming exhausted in a number of geographical number zones. Especially the 071 zone (Charleroi) was facing an acute problem.

The role of domain names on the Internet can be compared to that of numbers in the telephone network. The Internet Corporation for Assigned Names and Numbers (ICANN) is an international non-profit organisation that sees to the global coordination of the system of unique "Internet Identifiers" such as Internet domain names, IP addresses and other technical parameters. In addition, this organisation provides the coordination and operation of the DNS<sup>39</sup> root name server system. Within ICANN, the GAC (Governmental Advisory Committee), which is composed of government representatives, operates as an important advisory body. One of the main objectives of the Internet Informal Group (IIG) of the European Commission is to coordinate the different positions of the national authorities within the GAC. Moreover, the Numbering Management Department has followed the HLG (High Level Group on Internet Governance), as requested by the Minister. Among the major topics discussed in these organisations this year we find the review of the institutional framework in which ICANN operates, the introduction of IDN (Internationalized Domain Names), the introduction of IPv6 and the addition of generic top-level domain name extensions.

## NUMBER PORTABILITY

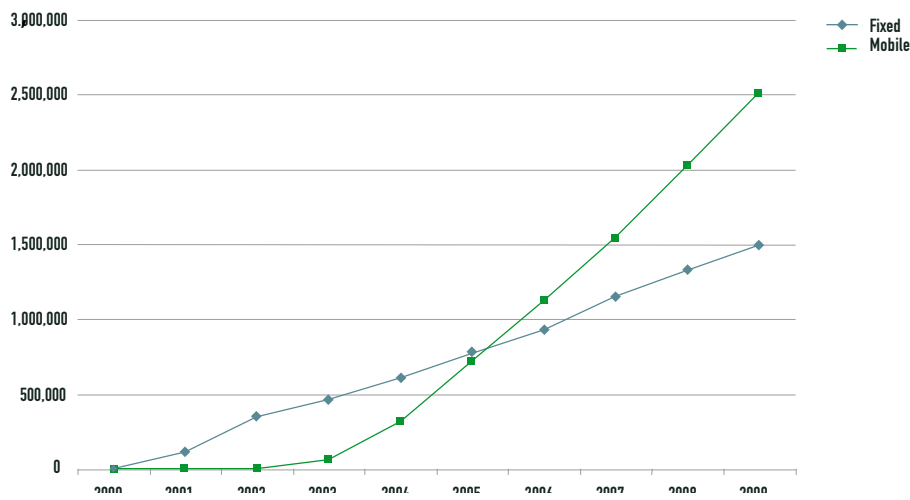
Number portability is a key priority in the telecommunications policy. There are two basic reasons for this. Every change of call number entails additional administrative work and costs for the end-user and has a substantial negative direct impact on potential customer contacts. Furthermore, there is increasing concern among new operators about being treated unfairly if potential customers had to change numbers. Research has shown that a lack of number portability seriously limits the chances of these newcomers.

The set-up costs for number portability of geographical and non-geographical numbers were reviewed. Based on two market consultations a cost model was established and the BIPT Council determined on 9 April 2008 the set-up costs per line or per number to be borne by the operator of the recipient network for the number portability of geographical and non-geographical numbers for the period from 1 May 2008 to 1 May 2011.

An analysis and an opinion were given to the Minister about the legislative proposal to extend the regulation relating to the transparency signal within the framework of number portability to fixed networks and to switch from an “opt-in” to an “opt-out” system.

The graph below shows the evolution in the number of ported fixed and mobile numbers.

Comparison total volume of ported mobile and fixed numbers



It should be noted that as a number can also be ported back to the first operator or be deactivated, the net number of ported numbers at a given time is lower than the sum of all number portings.

As you can see, the threshold of 2 million ported numbers was exceeded by the end of 2007. This means that about 25% of all mobile phone users and 18% of fixed telephone users have already used the possibility to port their number.

The Carrier Preselect and Select service

	Numbers with Carrier Preselect	Percentage of increase
1 January 2001	114,735	
1 January 2002	381,566	232.5%
1 January 2003	595,627	56.1%
1 January 2004	850,384	42.8%
1 January 2005	1,115,761	31.2%
1 January 2006	1,048,672	- 6%
1 January 2007	908,751	-13.3%
1 January 2008	837,849	-7.8%
1 January 2009	808,751	-3.5%

The decline in the number of net activations noted since May 2005 when the maximum number of activated numbers was reached, i.e. 1,135,000, continued in 2009 at a slower pace.

# Technical tasks of public interest

BIPT carries out yet more technical tasks of public interest. The law has bestowed on BIPT the status of expert in scientific fields such as the measurement of electromagnetic fields and the security of networks.

## ANTENNAS AND ELECTROMAGNETIC FIELDS

Following judgment 2/2009 of 15 January 2009 of the Constitutional Court BIPT is no longer authorised to check the electromagnetic radiation standards around antenna masts. This power now belongs to the Regions. The manner in which this power will be transferred concretely, will have to be settled in the near future.

## COMBATING MALICIOUS COMPUTER SOFTWARE

The security of networks, the protection against unauthorised access, the manipulation or destruction of the information circulating or saved on them and the protection of users who are connected to them belong to the technological bases that are essential for the development of the information society and are to be protected as well as possible.

The "I love You" virus in 2000 is a benchmark as regards consciousness-raising and awakening to the necessity of protecting networks. Following the damage caused at the time by the "I Love You" virus, the e-Security platform was set up within the Institute; it provides a duty service which offers a 24/7 point of contact.

By providing this duty service and offering information, BIPT wants to limit the risks of computer viruses spreading in Belgium. In the event of an alert the "virus page" of the BIPT website is quickly updated, the 30,000 members on the mailing list are informed of this update by e-mail and the subscribers to the SMS alert service receive a message informing them that a new virus has sprung up. The registration procedures for the mailing and SMS lists are explained on the website.

Since 2005 malicious programmes have undergone a change: nowadays they are seldom used anymore to establish a highly questionable reputation. They have become a sector which is commonly used for reprehensible commercial or criminal offences with a single objective: financial profit by deceiving, abusing and swindling the average user. This trend developed exponentially in 2008 blatantly illustrated by the massive electronic attack on the electronic communications networks of Lithuania (in Europe) and Georgia (at the European borders). A remarkable finding is the rise of "Cyber militias", i.e. groups who pursue nationalist or philosophical objectives, with or without support from the authorities.

## SECURING NETWORKS

By taking part in numerous activities regarding network security both at national and international level, BIPT provides the contribution of the Belgian regulatory authority for the electronic communications sector. The Institute is a contributor to the "Coordination Platform on Information Security" created by the Government in 2005. Its purpose is to provide a forum for exchanging information at the level of federal government on the protection of information and networks, and to promote and harmonise best practices within the federal authorities. It is, however, a consultative body and it cannot impose compulsory measures. Certain aspects of BIPT's contribution to Comixtelec also relate to the protection of the networks in the event of a crisis.

Considering the role of the Institute regarding the integrity and security of electronic communications services and networks, the minister in charge granted a staff extension in 2007, which given the circumstances was only to take place in the course of 2008. However, because of the current personnel shortage on the ICT security market, at the end of 2008, BIPT still had not succeeded in attracting personnel from outside the Institute.

BIPT has planned several initiatives for the newly recruited staff to carry out. The extended activities planned by the Institute in the area of computer security largely depend on the staff extension to be accomplished in order for the Institute to be more proactive in the future in the field of vulnerabilities before they are exploited by a malicious programme.

Those activities will in large part be driven by European initiatives in this matter. Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection imposes a number of measures in this field on the Member States.

In addition, at European level the European regulatory framework for electronic communications networks and services is being revised. The amendments proposed by the European Commission greatly amplify the obligations in the field of security and operational safety of networks and services. Monitoring and imposing these measures present a considerable challenge to the Institute.

In 2008 the Institute actively participated in the activities of ENISA, the European Network and Information Security Agency. ENISA regularly publishes documents regarding security matters for citizens, SMEs and governments. These documents can be consulted on the following site: [http://www.enisa.europa.eu/pages/05\\_02.htm#6](http://www.enisa.europa.eu/pages/05_02.htm#6).

Already in November 2007 the question arose as to whether ENISA's mandate would be renewed or whether the agency would be incorporated into the European regulator that the European Commission wishes to create. On 15 September 2008 the European Parliament agreed to a three-year extension of the agency's mandate.

## EMERGENCY SERVICES

Apart from investigating interference on the radio networks of the emergency services and eliminating it, BIPT also has the task to verify whether operators fulfil their legal duty to cooperate with the emergency services.

In 2005 the political authorities decided to incorporate into the Act of 13 June 2005 the obligation for operators to provide calling line identification for calls to Teleonthaal/Téléaccueil (mental health helpline), the Poison Centre, Zelfmoordpreventie/Prévention Suicide (centre for suicide prevention), Child Focus (the European Centre for Missing and Sexually Exploited Children) and children's telephone services.

Calling line identification is necessary for emergency services, not only to enable them to act efficiently, but also to combat malicious calls, the frequency of which rises year after year following the emergence of new technologies and new services offering means of communication that are virtually anonymous and hard to trace. Moreover, the provision of calling line identification by operators is a prerequisite for the measure on compulsory registration of anonymous prepaid cards of mobile networks (the number of which in Belgium was estimated at 1,500,000 in early 2005) to have any effect.

The provision that was incorporated into the Act of 13 June 2005 during the year 2005 regarding the calling line identification has given rise to a number of exchanges of ideas between the political authority and the emergency services involved. As a result the provision incorporated in 2005 was adapted in 2007 by the Act of 25 April 2007 pertaining to various provisions. After this adaptation the Ministerial Order of 4 June 2007 establishing the administrative and technical measures to enable emergency services to combat malicious calls was published in the *Moniteur belge* on 27 July 2007.

To clarify the provisions in the Ministerial Order of 4 June 2007 the Institute has arranged several meetings with the emergency services involved. In the second half of 2008 the three mental health helplines (106, 107 and 108) submitted files proving that their call centres comply with the provisions laid down in the Ministerial Order of 4 June 2007. At the start of 2009 the operators will be informed of this, so that they can identify the calling line for these services at all times.

"Nomadic" services based on IP technology appeared in 2006. These services allow the end-user to connect his terminal equipment to any IP connection point and then to use the service. A number of operators offer no-

madic voice services which give the impression to end-users to be similar to a public telephone service with additional facilities, such as nomadicity.

A BIPT consultation in 2006 already showed that no operator can guarantee the localisation of an emergency call when the caller uses a nomadic (voice) service by means of IP technology, which makes it nearly impossible for the emergency services to send assistance on site if the caller is personally unable to indicate his position to the emergency services at the time of the emergency call.

However, the European regulatory framework for electronic communications networks and services which is being revised at European level, contains an amendment proposed by the European Commission stating that all electronic communications networks and services have to be capable of providing location data to emergency services for calls to the European emergency number 112. As this number is automatically treated in Belgium as a 100 or 101 call, that proposal comes down to the provision of location data for emergency calls to urgent medical care services, the fire department and the police for Belgian end-users.

In 2007 the 116XYZ number series came into use. Number 116000 was granted to the European Centre for Missing and Sexually Exploited Children ("Child Focus"), which could also already be reached through the national Belgian emergency number 110. The official application from Child Focus to recognise 116000 as the emergency number in Belgium was submitted in May 2008. The regulatory text involved was drawn up by the Institute and has since completed the legislative procedure. The publication of the royal decree concerned is expected for the first quarter of 2009.

Decision 2007/698/EC of 29 October 2007 of the European Commission amending Decision 2007/116/EC with a view to the introduction of new reserved numbers starting with "116", reserves number 116111 for child helplines and number 116123 for emotional support helplines. On 12 December 2007 the BIPT Council published a communication on the BIPT website regarding the provision of numbers 116111 and 116123 for respectively a child helpline and an emotional support helpline on the Belgian market in conformity with the European Commission's decision of 29 October 2007. However, the existing Belgian emergency services that are apt to operate these numbers showed no interest because they were not prepared to give up their national three-digit number, which was a prerequisite for being allocated the 116XYZ number, and also because of the difficulty that arose from various languages having to be supported by a single (emergency) number.

## LEGAL INTERCEPTION OF ELECTRONIC COMMUNICATIONS

Judicial and police services may call upon BIPT officials with the mandate of a criminal investigation officer to lend them assistance with investigations in the field of electronic communications.

In addition, for the benefit of the department for criminal policy of the Federal Public Service of Justice, BIPT draws up a list of the operators' coordination cells for "Justice" and keeps it up to date.

The Institute attends the meetings of the "national consultation forum on telecommunications" of the judicial and police services in the capacity of technical adviser on electronic communications.

# Technological monitoring, involvement in national and international institutions

Exchanging knowledge and confronting points of view on technological developments are key tools in enabling people to take the right decisions. The officials of the Belgian Institute for Postal Services and Telecommunications are constantly in contact with their opposite numbers who work for foreign regulators. Through its active involvement in that respect, BIPT is able to follow and influence certain policies.

**THE FREQUENCY MANAGEMENT DEPARTMENT** of BIPT followed up the following files:  
*Radio Spectrum Policy Group (RSPG)*

In the RSPG an opinion on collective use of spectrum and an opinion on streamlining the EU regulatory environment for the use of spectrum were prepared. A public consultation was held on both subjects during the last few months. A state of affairs was established and a draft document was submitted on the result of an analysis report on best practices regarding the use of radio spectrum by national defence, security services and the public transport sector. However, no consensus could be reached yet about whether or not to include the "opportunity cost" in the analysis.

On the proposal of the European Commission a joint RSPG/ERG subgroup was created, which focuses on new competition challenges resulting from a more flexible management of spectrum.

*Radio Spectrum Committee (RSC)*

The Radio Spectrum Committee focused on the regulation of specific UWB equipment (ultra-wideband) among other things. A draft decision was submitted to the EU Member States, adding this specific equipment to the existing Decision 2007/131/EC of the European Commission on UWB equipment. This particularly concerns the addition of GPR (Ground Probing Radar), WPR (Wall Probing Radar) and BMA (Building Material Analysis) equipment using spread-spectrum technology.

The RSC also deliberated about the next steps regarding the WAPECS concept following the CEPT report and the WRC-2007 decisions.

A proposal to review the annex to Commission Decision 2006/771/EC on short-range devices was treated and will be submitted to the EU Member States to vote on it at the start of 2009. The aim is to have an annual review of this extended annex to this decision from now on.

*COCOM's "Authorisations" Working Group on 2 GHz MSS<sup>40</sup>*

The department continued to participate in this working group for the introduction of Pan-European systems for mobile satellite services in the 2 GHz band (2 GHz MSS) for the new hybrid satellite systems with a complementary terrestrial element that will be introduced in this 1980-2010 MHz frequency band. The deliberations on a joint selection and allocation procedure, the selection criteria and scores to be granted, the milestones to be met, the terms for spectrum sharing, spectrum requests and the validity period of user rights were continued. Furthermore, the European Commission launched a call for applications based on Decision 626/2008/EC of the European Parliament and the Council of 30 June 2008 on the selection and authorisation of systems providing mobile satellite services (MSS). This decision holds the obligation for the European Commission to organise a comparative selection procedure for the selection of operators of pan-European mobile satellite systems that use the 2 GHz frequency band. This decision also provides that the Commission is assisted by the Communications Committee. To that end the Communications Committee created in its lap the COCOM Working Group on the comparative selection procedure for mobile satellite services (MSS 2 GHz). This working group assists the European Commission in the selection and reports on this to the Communications Committee.

## CEPT

The Frequency Management Department attended several CEPT meetings such as the plenary ECC meeting, the WG FM (Frequency Management), the WG RA (Radio Affairs), the CPG (Conference Preparatory Group), TG4 (Task Group 4), ...). In that regard BIPT organised a meeting of the WG FM in Brussels in May 2008 and an international meeting of the WG RA in Liège in September. In December BIPT organised together with EUROCONTROL a big international meeting of the CPG working group to prepare the next ITU World Radio Conference in 2011 (WRC2011). This meeting was attended by no less than 110 participants from all over Europe.

## Regionale Radio Conferentie 2006 (RRC-06)

Following the Regional Radio Conference RRC-06 in Geneva and the GE06 Agreement reached there about the frequency plan to divide the digital TV channels between the participating countries, the activities for the transition were continued (gradual transition from analogue to digital transmitters). Several meetings with the neighbouring countries were organised and attended in that context. A transitional arrangement with France was agreed upon. This issue must of course be seen within an international context, taking into account the different transition dates applied by our neighbouring countries.

Since 4 June 2008 the **NETWORK SECURITY DEPARTMENT**, which makes staff available to partake in the Joint Commission on telecommunications (Comixtelec), has the chair for three years of the "Civilian Communications Planning Committee" working group, which belongs to the "Civilian Emergency Planning" branch of NATO. This working group studies subjects relating to electronic communications in case of crises in support of relief workers intervening in crisis situations and it formulates relevant recommendations. Belgium particularly participated in the activities aimed at integrating Computer Security Incident Response Teams (CSIRTs) into the emergency and crisis planning for electronic communications.

The **NCS (NATIONAL SPECTRUM MONITORING DEPARTMENT)** participates in the activities of the CEPT/ERC/FM-PT22 (Monitoring), CEPT/RA11 (Enforcement), CEPT/RR2 (Maritime) and Rainwat Committee (Maritime) working groups.

At the international level the **NUMBERING MANAGEMENT DEPARTMENT** continued to chair the NNA WG (Numbering, Naming and Addressing working group) within the ECC (Electronic Communications Committee). This working group of European administrations and regulatory authorities is aimed at exchanging information and knowledge on numbering problems and at harmonising numbering plans at European level. Specific results were achieved in various areas such as numbering for fixed-mobile convergence services, the ETNS (European Telephony Numbering Space), the evolution of calling line identification, the protection of end-users when using short SMS/MMS numbers.

Through the **EQUIPMENT DEPARTMENT** the Institute is also active in European forums (European Commission, TCAM Committee<sup>41</sup>, ECC<sup>42</sup>, Administrative Cooperation (ADCO), ETSI, EMC<sup>43</sup> Working Party, EMC SLIM<sup>44</sup>, ...), which strive for further European harmonisation.

41. TELE-COMMUNICATIONS CONFORMITY ASSESSMENT AND MARKET SURVEILLANCE

42. ELECTRONIC COMMUNICATIONS COMMITTEE

43. ELEC-TROMAGNETIC COMPATIBILITY

44. SIMPLER LEGISLATION FOR THE SINGLE MARKET



## Legal framework and tasks of BIPT

### AT THE EUROPEAN LEVEL

The Third Postal Directive<sup>45</sup> was adopted on 31 January 2008 during the European Parliament's plenary meeting and published after signing on 27 February 2008 in the Official Journal of the European Union.

The directive came into effect on the same day.

The Member States, including Belgium, should liberate the market by 31 December 2010. Only a certain number of Member States have until 31 December 2012 to open up their postal market. These are the Member States that have joined the European Union after the coming into effect of the Second Postal Directive, Member States of limited geographical size (Luxembourg) and Member States with a particularly difficult topography (Greece). At the same time it is the goal of the Third Postal Directive to maintain the universal service. The scope of the universal service remains unchanged. The challenge for each Member State is to reconcile both goals.

The European Commission offers the Member States technical support to transpose Directive 2008/6/EC. As such the Institute attended the Postal Directive Committee as well as the two working groups of the Postal Directive Committee and the High Level Conference in June 2008.

### AT THE BELGIAN LEVEL

In the course of 2008 BIPT advised the Government on the transposition of Directive 2008/6/EC. For the Government BIPT drew up numerous information notes on the content and scope of Directive 2008/6/EC.

In that respect BIPT also designated a consultant to estimate the net costs, if any, of the universal service after the liberalisation and to analyse the method for calculating the universal service cost.

The transposition into Belgian law is to be done by 31 December 2010. However, BIPT has already seriously and actively prepared the transposition.

In this context BIPT:

- took the initiative to advise the Minister informally on all aspects of the Third Postal Directive (definitions, financing of the universal service, declarations and licences, network access, exclusive rights);
- offered advice at the request of the Minister on all aspects of the Third Postal Directive;
- gave technical support to and followed the governmental negotiations (working groups between private offices of the ministers).

45. DIRECTIVE 2008/6/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 20 FEBRUARY 2008 AMENDING DIRECTIVE 97/67/EC WITH REGARD TO THE FULL ACCOMPLISHMENT OF THE INTERNAL MARKET OF COMMUNITY POSTAL SERVICES

## THE MANAGEMENT CONTRACT BETWEEN THE STATE AND LA POSTE

### Evaluation

Article 5 of the Act of 21 March 1991 on the reform of certain economic public companies prescribes that the management contract is verified each year and if needed adapted to the changed market conditions and technical developments, using the objective parameters laid down in the management contract. The Act is unclear as to who should perform this verification. Reacting to the evaluation made by La Poste, BIPT analysed the way in which the elements of the fourth management contract, monitored by BIPT, had been carried out in 2008.

### Customer satisfaction survey

In accordance with Article 18 of the fourth management contract La Poste has to conduct each year under BIPT's supervision a customer satisfaction survey relating to the way La Poste carries out its public service tasks. The results of this survey are published annually.

Satisfaction is determined based on 8 satisfaction indices. The first index is "general satisfaction" and is an answer to the question: "In general, how satisfied are you about La Poste?"

The seven other satisfaction scores relate to specific areas of investigation. For each area of investigation various questions are asked. The table below shows the results for each domain:

- sending and receiving letter post;
- sending and receiving parcels;
- newspapers and periodicals;
- registered items;
- client information;
- the physical state of the post office;
- the service in the post office.

In 2008 three new areas of investigation were added:

- Postal Points;
- customer service;
- eShops.

% satisfaction (score 5-7) <sup>46</sup>	Private persons						Companies					
	2003	2004	2005	2006	2007	2008*	2003	2004	2005	2006	2007	2008*
General satisfaction	77	80	81	82	80	82	79	77	80	82	83	82
Sending - receiving letter post	79	78	80	83	78	86	67	70	70	73	77	87
Sending - receiving parcels	89	88	88	90	88	92	87	84	86	89	91	88
Newspapers & periodicals	87	88	88	89	88	89	93	88	87	87	91	87
Registered items	83	77	78	84	79	73	89	85	85	85	89	73
Client information	78	79	79	83	83	77	71	73	73	78	80	70
Physical state post office	76	73	74	77	77	75	49	51	52	52	59	72
Service in post office	71	72	72	76	74	79	69	70	67	73	74	73
Postal Point						86						87
Customer service						71						53
E-Shop						93						93

\* Results obtained through a new measuring method

General satisfaction about La Poste rises as 82%<sup>47</sup> of the customers said they were satisfied in 2008 as compared to 78%<sup>48</sup> in 2003.

46. X-%: WAS VERY SATISFIED, SATISFIED OR RATHER SATISFIED, ON A SCALE OF SEVEN

47. GENERAL SATISFACTION 2008 IS THE AVERAGE OF GENERAL SATISFACTION PRIVATE PERSONS 2008 AND GENERAL SATISFACTION COMPANIES IN 2008

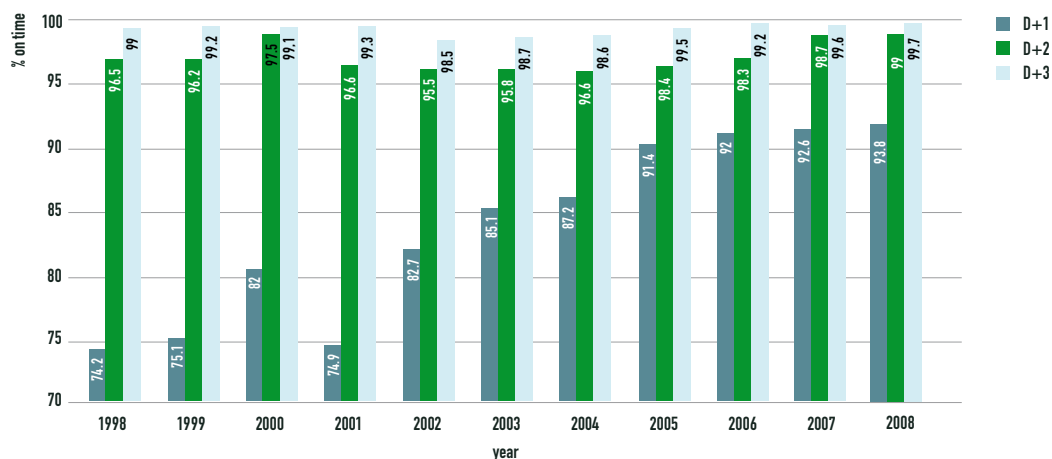
48. GENERAL SATISFACTION 2003 IS THE AVERAGE OF GENERAL SATISFACTION PRIVATE PERSONS 2003 AND GENERAL SATISFACTION COMPANIES IN 2003

### Quality check

The results regarding priority items in 2008 show that 93.8% of domestic priority items reached its destination at Day + 1 and 99% at Day + 2.

As regards the non-priority items for that same period, 97.8% of domestic non-priority items were delivered at Day + 2 and 99.3% at Day + 3. During these twelve months more than 58,567 priority and 10,621 non-priority test letters were sent.

#### Results of the transit time monitoring for priority items since the BIPT inspections of 1998



The average quality reached as defined in Article 9, 2°, a), of the fourth management contract between the State and La Poste is the index that calculates the percentage of single piece mail delivered on time. Quality is measured using an index based on a small users basket of postal services that are part of the universal service. In accordance with Article 16, 2°, of the fourth management contract this small users basket is composed as follows, with an indication of the share of each postal service in the basket:

- domestic priority single piece mail (40%);
- domestic non-priority single piece mail (27%);
- domestic registered single piece mail (10%);
- domestic single piece packages (7%);
- incoming priority cross-border single piece mail (16%).

In the table below the results of the transit times regarding small user services are given.

General quality regarding the observance of the transit time		
Category + Time	Ponderation	Result
Prior D + 1	40	93.8
Non Prior D + 2	27	97.8
Registered items D + 1	10	95.8
Postal parcels D + 2	7	99.4
Incoming international letter post D + 1	16	93.4
<b>TOTAL QUALITY INDEX</b>	<b>100</b>	<b>95.4</b>

The overall result of 95.4% is the average quality reached in 2008.

## Economic context of the sector

The increased competition following the gradual liberalisation of the market by the European Commission should improve the postal services in terms of quality, cost and options for the users, without detracting from the universal service.

In Belgium the postal sector comprises approximately 600 companies, amounting to about 41,000 jobs.

### LA POSTE

La Poste SA, the incumbent postal operator, has been designated to provide the universal service by virtue of the management contract.

La Poste employs about 36,000 staff and is one of the main employers of the country.

In 2008 La Poste achieved a turnover of € 2,262.4 million with an after-tax income of € 313.9 million.

In 2008 La Poste continued to modernise its retail network. A 500th Postal Point was created. Today, La Poste's distribution network numbers 850 post offices, apart from the Postal Points.

### THE OTHER PLAYERS ON THE POSTAL MARKET

In the postal parcel sector we find companies such as ABX and Kiala.

- On 21 June 2008 ABX Logistics announced its merger with the Danish DSV group, which constitutes an enterprise value of 600 million euro. The company made its intention public to keep its headquarters in Brussels.
- Kiala transports more than 40,000 parcels a day.

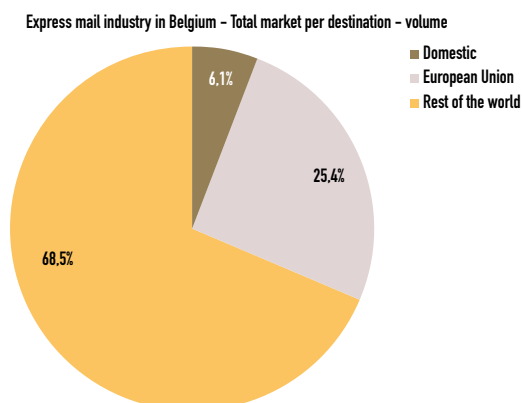
As for the delivery of addressed newspapers, companies such as Belgische Distributiedienst and Deltamedia (subsidiary of La Poste) are active.

The principal operators in the field of express services include DHL, UPS, TNT and FedEx.

- TNT moved its main European hub to the Liège airport. (22,000 tons of freight and 500 flights a week). TNT is the number 2 in Europe.
- In April 2008 DHL Express transferred its main airport for European air traffic from Brussels to its ultramodern facilities in Leipzig/Halle. In June 2008 DHL started to use its new terminal in Opglabbeek.
- FedEx centralised its activities in La Hulpe.

In Belgium the market for express mail is blooming.

The total number of items having risen from 106 million in 2004 to 118.8 million in 2008, an important increase of cross-border items can be observed.



# Economic regulation

## TARIFFS

BIPT gave its a posteriori approval to La Poste's 2007 tariff increases for the services in the small users basket and for the preferential and conventional services reserved for La Poste, in accordance with Article 33 of the Royal Decree implementing Title IV of the Act of 21 March 1991 on the reform of certain economic public companies.

The small users basket is a basket of postal services mainly used by residential customers, self-employed and small companies and the annual price increases of which are restricted via a specific formula. Indeed, if a number of conditions set by La Poste are fulfilled it is possible to enjoy a cheaper preferential tariff. Direct customers such as banks, department stores and mail-order firms that frequently deliver large volumes for distribution through the public network, may enjoy the conventional tariffs.

Furthermore, BIPT made an analysis of the new tariff proposal from the designated universal service provider, La Poste, for the year 2009 for the full rates of the small users basket and the preferential and conventional services that are reserved for La Poste.

In addition, BIPT made a first analysis of La Poste's proposal regarding full convergence in 2009. Late 2008 La Poste sent a new proposal to BIPT regarding the convergence of direct customers and intermediaries within the framework of its new tariff plan for 2009. The tariff deals between La Poste and its clients have been arranged based on two types of agreements, namely on the one hand a "direct customer" convention and on the other hand a "routers" convention, concluded with intermediaries who collect mail from different companies and deliver this mail pre-sorted to La Poste for distribution through the postal network. In 2009 La Poste wants to introduce an alternative tariff and contract system that deviates from the current one. BIPT asked additional questions about the new system, especially about the avoided cost as well as the non-discrimination and transparency of the system proposed.

## DECLARATIONS AND INDIVIDUAL LICENCES

In accordance with secondary legislation (see Moniteur belge published on 17 January 2006) BIPT continued to treat the declarations and individual licences submitted by the companies active in the postal sector. By the end of December 2008 measures had been taken for 10 individual licences and 208 declarations had been treated.

Also the procedures to declare in default the companies not complying with the law were pursued. On the BIPT website ([www.bipt.be](http://www.bipt.be) > Postal sector > Regulation) you will find all declarations and individual licences.

# Consumer protection

## THE UNIVERSAL SERVICE

Based on the management contract BIPT verified whether La Poste fulfils its obligations. BIPT completed the calculation of the 2007 universal service costs, which showed no unreasonable burden.

## CONTRIBUTIONS FOR THE OFFICE OF THE OMBUDSMAN FOR THE POSTAL SECTOR

BIPT made sure that the Office of the Ombudsman for the Postal Sector has sufficient means to carry out its tasks.

Within the framework of the extension of the powers of the Office of the Ombudsman for the Postal Sector BIPT pursued the procedures and actions necessary to calculate the amount of the contributions for 2008

from the companies that are active in the Belgian postal market. This was the first year in which the financing of the Office of the Ombudsman was fully based on both elements of the formula, namely the operating costs on the one hand, and the complaints against the operator concerned, on the other. In this case too, procedures were started to declare in default non-conforming companies.

## Technological monitoring, involvement in national and international institutions

### THE CONSULTATIVE COMMITTEE ON POSTAL SERVICES

The Committee is still awaiting a royal decree organising its composition and operation.

Yet, as stipulated in Article 45ter, § 8, of the Act of 21 March 1991 on the reform of certain economic public companies the Ombudsman and Ombudswoman for the Postal Sector submitted their draft budget to the Consultative Committee on Postal Services for advice. The latter supports the 2007 and 2007/2008 budgets submitted to it with some reservations.

The Consultative Committee was informed about the method to determine the contributions from the postal operators in the charges of the Office of the Ombudsman. Those contributions are determined on the basis of the operating costs of the Office of the Ombudsman and on the complaints against the operators that are treated.

### THE POSTAL DIRECTIVE COMMITTEE AND OTHER EC ACTIVITIES

BIPT took part in the Postal Directive Committee which discussed, among other things: the implementation of the new Postal Directive, the preparation and evaluation of the 24th UPU Congress, the state of affairs regarding the European studies and the fourth implementation report.

BIPT formulated a detailed answer to the extensive questionnaire of the consultant, Ecorys, which was commissioned by the European Commission to perform a study on the "Main developments in the postal sector 2006-2008" ([http://ec.europa.eu/internal\\_market/post/studies\\_en.htm](http://ec.europa.eu/internal_market/post/studies_en.htm)).

The Institute continuously followed the developments in the implementation of the Postal Directive. In that context the Institute participated in:

- the High Level Conference (24 June 2008) organised by the European Commission;
- the workshops of 11 September, 13 October and 15 October 2008 organised by the EC and focusing on the mechanisms to safeguard the universal service, the financing of the universal postal service which may have to be planned, essentially destined for new entrants on the postal market (possible market thresholds, access) and possible licensing systems, and stimulation of competition;
- the Postal Directive Committee (7 April 2008 and 24 October 2008).

### EUROPEAN COMMITTEE FOR POSTAL REGULATION (CERP)

Moreover, BIPT will make sure that CERP will be able to continue playing its role as it is laid down in the Third Postal Directive.

Belgium continued to chair the European Committee for Postal Regulation through Mr Dutordoit, administrator, until his third mandate ended in May 2008.

The CERP members thanked him profusely for his chairmanship that lasted for more than 9 years and the dynamism he instilled in CERP.

CERP held two plenary meetings, in Riga in May 2008 and in Athens in October 2008 respectively.

During these two plenaries CERP organised forums of which the themes were:

- “Provision of cross-border mail services in a liberalized European market and consequences in respect to UPU issues”;
- “Change of address in a competitive environment”.

Furthermore, CERP was reformed in the second half of 2008: the number of working groups was reduced from three to two and the project teams were given a more important task. BIPT was asked to head two of these project teams, namely the “Market Data/Supervision” and the “Sustainable Development” teams. BIPT is also a member of the CERP “Steering Group”.

The working groups worked intensely

#### *“Policy Issues” Working Group*

Apart from the aspects concerning the Postal Directive the Institute closely followed the work relating to the regulators’ task on the postal market considering the European Union’s request to strengthen their powers and independence. It should be pointed out that the Belgian Government also strives for a strong regulator who is respected by the sector.

This working group also convened to arrange the coordination between the CERP members during the UPU Congress in Geneva from 23 July to 12 August 2008.

#### *“Economic issues” Working Group*

This group focuses on two major topics: the universal services and their financing on the one hand and analytical accounting and price regulation on the other.

In October 2008 CERP approved this working group’s third report entitled: “Guidelines for Calculating the Net Cost of the Universal Service Obligations”.

#### *“Supervision/Market Data” Working Group*

This working group, which is now headed by BIPT, was transformed into a project team at the end of 2008. On 20 November 2008 this group had a first meeting in Brussels with 25 participants, and several presentations were given by various experts in the field of measuring quality of mail delivery based on standardised norms and methods. Furthermore, the future working plan of the group was decided during this meeting.

In addition, this working group follows up the standardisation activities of the European Committee for Standardisation (CEN/TC 331 “Postal Services”). CEN/TC 331 “Postal Services” harmonises the quality standards at European level. This standardisation is an indispensable tool to guarantee interoperability between the various national networks and an efficient universal service in the European Union.

BIPT mainly monitors the adaptations to the existing European standards.

Furthermore, this working group collaborated on the collection of European postal statistics through the national regulators and in cooperation with the DG<sup>49</sup> Internal Market and the DG Eurostat. The latest Eurostat publication (“Data in Focus” 25/2008 entitled “Postal Services in Europe 2006”) can be consulted at the following website: [http://ec.europa.eu/internal\\_market/post/facts\\_en.htm](http://ec.europa.eu/internal_market/post/facts_en.htm).

## UNIVERSAL POSTAL UNION

The 24th UPU Congress was held in Geneva under the chairmanship of Kenya.

The Congress was attended by nine Committees.

BIPT’s active participation mainly concerned the activities of Committee 3 (General matters), Committee 4 (Convention / Regulatory issues), Committee 5 (Convention / Economic issues), Committee 7 (Markets and products). It was also the vice-chairman of Committee 9 (charged with drawing up the Acts).

**The major challenges and results of the Congress included:**

- the change of the term “postal administration” into “Member country” and “designated operator”. Indeed the 2004 UPU Congress in Bucharest had requested the CA (Council of Administration) to carry out a study regarding this matter. Based on that study the definitions of “Member country” and “designated operator” were approved by the Congress and integrated into the Acts of the UPU;
- the definition of the notion of “reservation” in the Acts: BIPT submitted a proposal for the definition of “reservation”, which was approved by the CA and adopted by the Congress;
- the status of extraterritorial offices of exchange and international mail processing centres;
- a new system of terminal dues was introduced;
- the reform of the UPU.

The UPU World Postal Strategy 2008-2012, coordinated by BIPT, was approved unanimously by the international community.

The plan describes the strategic objectives for the 2009-2012 period, namely:

1. improving interoperability, quality and efficiency in the postal network;
2. stimulating the universal service;
3. promoting sustainable development and postal economy;
4. developing the postal markets.

These objectives were further elaborated in programmes, of which clear and measurable results are expected in the next four years.

Belgium was elected as a member of the Council of Administration by an overwhelming majority and as a member of the Postal Operations Council.

BIPT took part in the UPU’s activities during the CA session in November 2008.

During that session it was given the task of chairing the “UPU Reform” project team in order to complete a project for the Doha Congress (Qatar) in 2012.

As soon as the Congress was ended, BIPT started the procedure to approve the Acts of the Geneva Congress.





## Staff

If 2007 was the year of drastic change with the integration of the Office of the Ombudsman for the Postal Sector, the staff extension and the start-up of the new administrative and financial statuses, as for personnel management 2008 constituted the period of evaluation of these changes, searching for anomalies and preparing possible adjustments. The policy mainly focused on the staff's careers and social deliberations in general.

### HUMAN RESOURCES

BIPT – the regulator – employs about 230 staff (statutory and contractual) and still has the ambition to offer these staff members a fascinating, varied career which also offers prospects. In 2008 further attention was given to promotion exams, e.g. of technical head of department, while further steps were also taken to introduce the possibility of recruiting staff directly in level B.

BIPT also noticed that a number of recruitment exams organised specifically for BIPT resulted in few passes. The cause is being found out and may be linked to the limited number of jobs that on average become vacant within the validity of the exam. Although this finding largely applies to the period before the economic crisis, it is still useful to try to solve this problem. The selection procedures are relatively tough and time-consuming, so that they should give numerous, yet qualitatively good results.

Apart from the normal recurrent staff aspects, social deliberations in 2008 mainly focused on updating the social advantages. An agreement is almost reached here and in the spring of 2009 this project will be finalised.

### CHANGES TO THE STATUSES

As for the adjustments the Royal Decree of 9 December 2008 already rectified a number of anomalies in the financial status.

A new file covering adjustments to both statuses, including the introduction of a number of innovations, was opened. Exploratory discussions with the trade unions will be started.

### INTEGRATION OF THE OFFICE OF THE OMBUDSMAN FOR THE POSTAL SECTOR

Though the integration of the Office of the Ombudsman for the Postal Sector is a fact since 1 January 2007 the Royal Decree laying down the terms for the transfer of its staff members to the Institute could not be finished yet. This file was reinitiated.

## OFFICES OF THE OMBUDSMAN FOR TELECOMMUNICATIONS AND FOR THE POSTAL SECTOR

In accordance with Articles 43bis and 43ter of the Act of 21 March 1991 an agreement was concluded with both Offices, which included the practical and organisational rules of the operation of the Offices within the Institute and of the exercise of the tasks and powers conferred on them by the law.

The draft decision on making human and material resources available to the Office of the Ombudsman for the Postal Sector, as well as the update of the corresponding decision for the Office of the Ombudsman for Telecommunications were re-submitted.

### ICT AT BIPT

In 2008, the Institute continued its annual investments in the field of IT, security maintenance contracts, and the partial renewal of its computer fleet and software licences. On the other hand many cross-department projects were launched and continued with a view to making the Institute more effective and accessible and bringing it closer to the public.

The move of the Institute in February 2008 required the IT staff to make great efforts, in order to make sure the entire enterprise went smoothly and was carried out quickly. The entire migration (network, websites, applications, mail system, servers, local computers) took place within a span of four days. Sensitive applications, such as the mail system, were interrupted for only a few hours.

### CONTENT MANAGEMENT AND ELECTRONIC DOCUMENT MANAGEMENT

In 2007, an enormous internal project for content management was mounted. This project comprised the following aspects:

- management of non-structured multilingual content (French, Dutch, English, German) in different formats;
- introduction of personalised interfaces for the officials and the services;
- integration with other office software (such as Microsoft Office and Microsoft Outlook);
- introduction of document scanning and OCR<sup>50</sup> ;
- compatibility with systems of document versions, life cycles and workflows;
- research via structure plans, indices and key words, plain text, one or more multilingual thesauruses;
- integration of the Institute's Translation Department;
- transfer of existing documents (office documents, electronic messages, paper documents, digitised documents).

In 2008 the first phase took place, i.e. the installation of the new material and of the basic software, as well as the technical training of the IT Department.

## Finances

In 2008 BIPT's revenues and expenditures showed no structural differences compared to the previous years. The revenues comprise fees for frequency licences, numbering plans, licences and declarations of telecommunications networks and services, as well as declarations of operation regarding other services, including in the postal sector.

BIPT is obliged by law to transfer the balance between its revenues and expenditures to the Treasury, taking into account an annual cash reserve to be established during the budgetary conciliation.

Personnel and operating costs of the Offices of the Ombudsman for Telecommunications and for the Postal Sector are borne by the respective sectors. In a sense BIPT acts as prefinancer.

### ACHIEVEMENTS OF THE OFFICE OF THE OMBUDSMAN FOR THE POSTAL SECTOR - 2008

REVENUES	euros	EXPENSES	euros
Reimbursement	694	Staff	1,264,457
Services performed for third parties (sector's participation)	1,187,263	Operation	252,504
		Investment expenses	9,991
		Coordination organisations	0
<b>TOTAL</b>	<b>1,187,957</b>	<b>TOTAL</b>	<b>1,526,952</b>

### ACHIEVEMENTS OF THE OFFICE OF THE OMBUDSMAN FOR TELECOMMUNICATIONS - 2008

REVENUES	euros	EXPENSES	euros
Reimbursement	128,434	Staff	1,592,055
Services performed for third parties (sector's participation)	1,590,235	Operation	409,434
		Investment expenses	37,912
		Coordination organisations	0
<b>TOTAL</b>	<b>1,718,669</b>	<b>TOTAL</b>	<b>2,039,401</b>

### ACHIEVEMENTS OF BIPT - 2008

REVENUES	euros	EXPENSES	euros
Reimbursement	88,721	Staff	17,689,765
Licence and monitoring fees for private radio communications	16,059,517	Operation	6,304,289
Public licence fees	21,263,824	Investment expenses	1,501,155
Post	16,828	Coordination organisations	1,535,905
Depreciations	0	Treasury	7,500,000
Miscellaneous	209,131	CF/RT <sup>51</sup>	
			4,775,230
<b>TOTAL</b>	<b>37,638,021</b>	<b>TOTAL</b>	<b>39,306,344</b>

51. THESE ARE THE SALARIES FULLY ASSUMED BY BIPT OF THE STAFF THAT IS ASSIGNED TO THE RADIO AND TELEVISION LICENCE FEE DEPARTMENT.

The following remarks can be made about the numbers in the various budgets:

- the 2008 achievements of BIPT-regulator seem to show a negative balance. This is caused by the 7.5 million euro payment into the Treasury. This amount covers unused credits from the 2007 budget, which BIPT is legally forced to pay into the Treasury;
- the budget of both Offices of the Ombudsman is funded by a contribution from the operators in the sectors concerned to BIPT-regulator, which itself acts as a prefinancer. In principle this contribution equals the amount estimated (for 2008) minus the balance of the previous year (of 2007). In this case too the distorted picture may be created that the operation shows a negative balance, while it is per definition covered by funding from the sector.

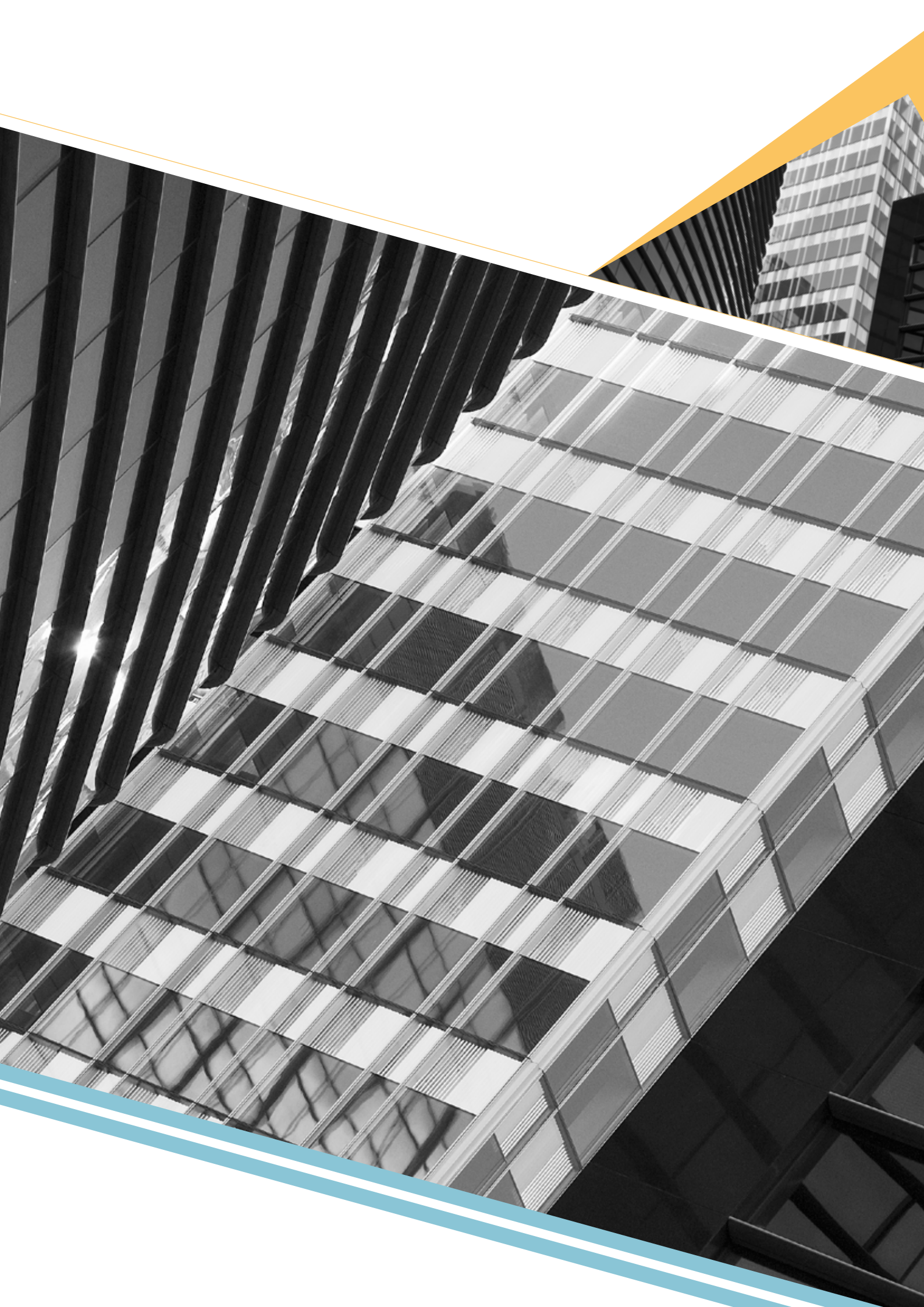
## ACCOUNTING

In 2008 the Accounting Department started a pilot project for the electronic processing of incoming invoices. Together with the IT Department the needs were analysed and the computer interface was set up. Specifically, all incoming invoices will be scanned, after which they will automatically be allocated to the right department and the right budget item, before having them approved electronically by the authorised persons.

The necessary steps were also taken to switch to the electronic payment system of the Financiële Post, called Pay@Finpost. This payment system, specially developed for the Federal Public Services, should make it possible to send payment orders in an electronic, safe and quicker way to the Financiële Post.

In total 77,650 accounting transactions were carried out in 2008. They represent all transactions entered in BIPT's accounting journal entries. Overall 36,146 invoices were sent to licence holders. For the purchase of material and for services provided or work performed 3,672 invoices were received. The number of financial transactions that were processed, including payments made and revenues received, amounted to 37,832.





## LIST OF THE ABBREVIATIONS USED

**ADSL:** Asymmetric Digital Subscriber Line

**ATM:** Asynchronous Transfer Mode

**BRIO:** Belgacom Reference Interconnect Offer

**BROBA:** Belgacom Reference Offer Bitstream Access

**BROTSoLL:** Belgacom Reference Offer for Terminating Segments of Leased Lines

**BRUO:** Belgacom Reference Unbundling Offer

**CA:** Council of Administration

**CAS:** Cost Allocation System

**CB:** Citizens' Band

**CEPT:** Conférence Européenne des administrations des Postes et Télécommunications

**CERP:** Comité européen de réglementation postale

**COCOM:** Communications Committee

**COMIXTELEC:** Commission mixte des télécommunications of gemengde commissie voor televerbindingen

**CPS:** Carrier Pre-Selection

**CRC:** Conference of Regulators of the electronic communications sector

**CSA:** Conseil supérieur de l'audiovisuel

**CSC:** Carrier Select Code

**CT:** Cordless Telephone

**DCS:** Digital Communication System

**DG:** Directorate-General

**DNS:** Domain Name System

**DSLAM:** Digital Subscriber Line Access Multiplexer

**DVB-T:** Digital Video Broadcasting - Terrestrial

**ECC:** Electronic Communications Committee

**ECTA:** European Competitive Telecommunications Association

**EMC:** electromagnetic compatibility

**ENISA:** European Network and Information Security Agency

**ERG:** European Regulators Group

**ERO:** European Radiocommunications Office

**ESA:** European Space Agency

**ETSI:** European Telecommunications Standard Institute

**Full VP:** Full Virtual Path

**GOC:** General Operator's Certificate

**GSM:** Global System for Mobile communications

**HAREC:** Harmonised Amateur Radio Examination Certificate

**HCM:** Harmonised Calculation Method

**IARN:** International Audiotex Regulators Network

**IMS:** IP Multimedia Subsystem

**IP:** Internet Protocol

**IRG:** Independent Regulators Group

**ITU:** International Telecommunication Union

**LEGBAC:** Limited Exploratory Group on Broadcasting to Aeronautic Compatibility

**LPD:** Low-Power Device

**MSS:** Mobile Satellite Services

**MTR:** Mobile Termination Rate

**NCS:** National Spectrum Monitoring Department

**NGN/NGA:** Next Generation Network/Next Generation Access

**NRA:** National Regulatory Authority

**NTP:** Network Termination Point

**OCR:** Optical Character Recognition

**OLO:** Other Licensed Operator

**PMR:** Professional Mobile Radio

**ROC:** Restricted Operator's Certificate

**RSC:** Radio Spectrum Committee

**RSPG:** Radio Spectrum Policy Group

**R&TTTE:** Radio and Telecommunications Terminal Equipment

**SDH:** Synchronous Digital Hierarchy

**SDSL:** Symmetric DSL

**SLIM:** Simpler Legislation for the Single Market

**SMP:** Significant Market Power

**SMS:** Short Message Service

**SRC:** Short Range Certificate

**TCAM:** Telecommunications Conformity Assessment and Market Surveillance

**T-DAB:** Terrestrial Digital Audio Broadcasting

**TG4:** Task Group 4

**UMTS:** Universal Mobile Telecommunications System

**UPU:** Universal Postal Union of Wereldpostvereniging

**VDSL:** Very High Rate DSL

**VHF:** very high frequencies

**VoIP:** Voice over IP

**VPN:** Virtual Private Network

**VRM:** Vlaamse Regulator voor de Media (Flemish Media Regulator)

**WAPECS:** Wireless Access Policy for Electronic Communications Services

**WBA:** Wholesale Broadband Access

**Wimax:** Worldwide interoperability for Microwave Access

**WLR:** Wholesale Line Rental

**WRC:** World Radio Conference

**WTO:** World Trade Organisation

**xDSL:** Digital Subscriber Line

## Useful addresses

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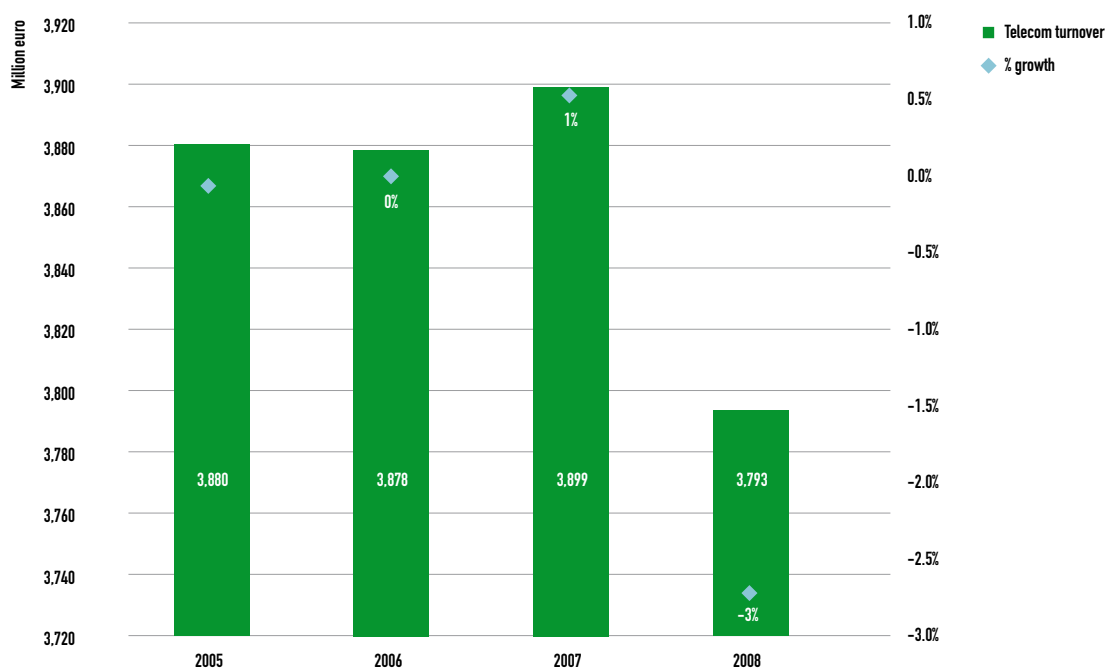
# §7 ECONOMIC SITUATION OF THE TELECOMS SECTOR 2008

## Market context fixed sector

Belgacom and five other major telecoms operators (BT Limited, Colt Telecom, Telenet, KPN Belgium, Verizon Belgium Luxembourg NV) recorded a 3.8 billion euro telecom turnover in 2008. The financial crisis observed in the second half of 2008 had a limited impact on revenue from telecom activities. Turnover dropped by 3%.

Telecoms turnover of the main fixed operators: 2005 – 2008

Source: operators Belgacom, BT Limited, Colt Telecom, KPN Belgium, Telenet, Verizon Belgium Luxembourg (BIPT)



Growth in broadband and multiple play services stimulated the investments made by the incumbent who adapted his network to support VDSL<sup>52</sup>. In 2008 Belgacom's investments increased to 16% of telecom turnover. In the years 2005-2007 this percentage varied between 13 and 14%.

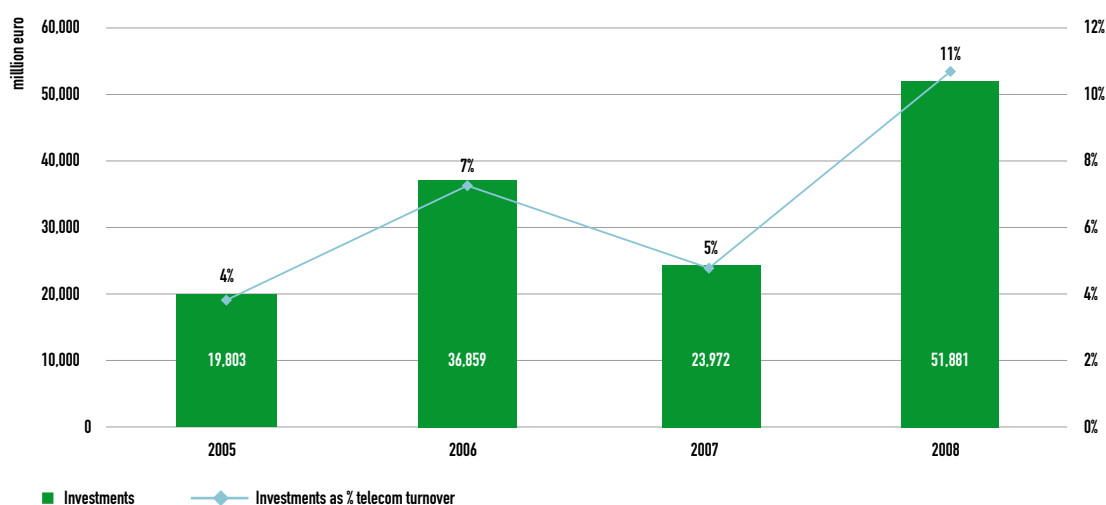
At Telenet too, the network upgrade which was meant to be able to offer higher speeds, resulted in a sturdy increase of investments: from 28 to 36% of telecom turnover.

Other alternative operators are able to provide broadband access since unbundling was introduced in 2001. Since 2006, which was marked by a faster growth of the number of unbundled lines (from 9,230 at the end of

52. VERY HIGH DATA RATE DIGITAL SUBSCRIBER LINE, SUPERFAST BROADBAND CONNECTION OVER COMMON COPPER TWISTED PAIR CABLES

2005 to 53,720 at the end of 2006 and then to 69,318 late 2008), also an increase in investments made by the four major alternative operators (BT Limited, Colt Telecom, KPN Belgium, Verizon Belgium Luxembourg) is observed: from 19.8 million euro in 2005 to 36.8 million euro in 2006 and 51.9 million euro in 2008. Expressed as a percentage of telecom turnover the investments amounted to 11%.

Investment in telecoms by four alternative operators: 2005 – 2008  
Source: operators BT Limited, Colt Telecom, KPN Belgium, Verizon Belgium Luxembourg (BIPT)



For the future the fear is that the investments made by alternative operators in unbundling will become obsolete due to the use of Belgacom's Next Generation Network<sup>53</sup>. Such a scenario would mean that the alternative operators have to choose between replacing the product based on unbundling with a wholesale bitstream product<sup>54</sup> and investing in subloop unbundling<sup>55</sup> at street cabinet level. The latter option requires considerable investments.

In order to make sure the market is not disrupted by Belgacom introducing new technologies for local loop access, BIPT has taken a number of measures. Those measures, included in an addendum of 12 November 2008<sup>56</sup> to the decision on broadband access markets, are aimed among other things at creating transparency about future network developments and at preventing competition-distorting effects resulting from closing down local loop access points.

In Europe stimulating investment by promoting broadband received a lot of attention again in November 2008. It was particularly included in the European Economic Recovery plan presented by the European Commission as an answer to the economic crisis. Specifically the plan wants to develop a broadband strategy to promote the upgrading and extension of existing networks. This strategy is supported by public funding in order to develop broadband infrastructure in rural areas (100% broadband Internet coverage by 2010). Member States should also encourage competing investments in optical fibre networks and support the Commission's proposals to reserve spectrum for wireless broadband.

53. NEXT GENERATION NETWORK REFERS TO THE EVOLUTION OF THE CURRENT NETWORK INFRASTRUCTURE: CONVERGENCE TO A SINGLE DYNAMIC NETWORK (IP- OR ETHERNET-BASED) AND LIMITATION OF THE NUMBER OF NETWORK AGGREGATION POINTS WHERE ALL THE TRAFFIC IS AGGREGATED.

54. BITSTREAM ACCESS REFERS TO THE SITUATION WHERE THE INCUMBENT INSTALLS A HIGH-SPEED ACCESS LINK TO THE CLIENT'S PREMISES AND THEN MAKES THAT LINK AVAILABLE TO THIRD PARTIES, IN ORDER TO ENABLE THEM TO PROVIDE HIGH-SPEED SERVICES TO CLIENTS.

55. UNBUNDLING AT STREET CABINET LEVEL. TO THAT END THE ALTERNATIVE OPERATOR'S EQUIPMENT HAS TO BE PLACED IN THE STREET CABINET (SC) TO OFFER DATA SERVICES TO THE END-USER.

56. SEE BIPT-WEBSITE: [HTTP://WWW.BIPT.BE/SHOWDOC.ASPX?OBJECTID=2968&LANG=NL](http://www.bipt.be/ShowDoc.aspx?OBJECTID=2968&LANG=NL)

## Access to the fixed telephone network

The number of telephone channels in the traditional fixed telephone network (PSTN) has been dropping since 2001. By contrast, the number of cable accesses used for telephony steadily rose to 683,983 in 2008. Also the number of DSL accesses used for managed voice over broadband went up: at the end of 2008 they totalled 234,420.

Number of accesses to the fixed telephone network (channels)

Source: operators (BIPT)

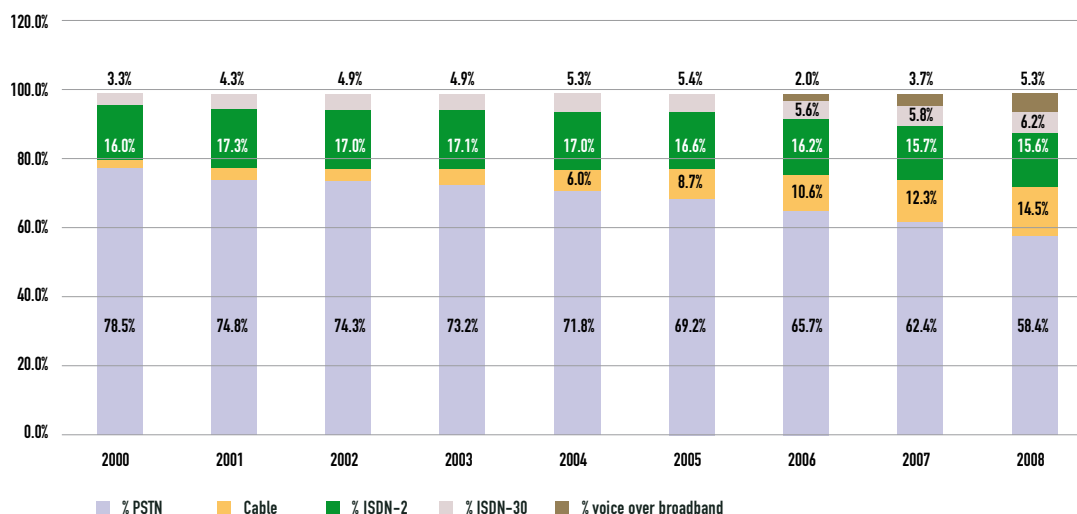
	PSTN	Cable <sup>57</sup>	ISDN-2	ISDN-30	Managed voice over broadband <sup>58</sup>	Unmanaged voice over broadband <sup>59</sup>	Total (x 100)
2000	3,931,177	111,134	802,566	164,880			50,098
2001	3,702,301	181,310	855,976	211,800			49,514
2002	3,666,240	187,399	838,128	239,790			49,316
2003	3,570,056	234,864	832,714	237,780			48,754
2004	3,446,765	285,923	814,618	253,740			48,010
2005	3,320,091	417,282	796,990	260,220			47,946
2006	3,168,694	509,500	780,146	269,460	92,776	1,331	48,219
2007	3,026,834	597,556	763,122	280,080	173,338	6,333	48,473
2008	2,746,137	683,983	735,624	290,880	239,470	8,990	47,051

At the end of 2008 the various means of access amounted to a total of 4,705,084 telephone channels. 58.4% of the total number of telephone channels were analogue PSTN telephone channels, 15.6% ISDN-2 channels and 6.2% ISDN-30 channels. An increasing share is taken by cable (from 12.3% in 2007 to 14.5% in 2008) and by managed voice over broadband by way of DSL access (from 3.7% to 5.3%).

Following the slight increases in 2006 and 2007 a slightly downward trend of the total number of telephone channels (- 3%) could be observed in 2008.

Number of accesses to the fixed telephone network (channels)

Source: operators (BIPT)



57. DATA FROM TECTED, NEWICO AND BRUTÉLÉ FOR 2008 COULD NOT BE UPDATED.

58. DSL ACCESS USED FOR MANAGED VOICE OVER BROADBAND. DSL ACCESS OF THIS TYPE IS OFFERED BY SCARLET (SINCE THE END OF 2004), TELE2 (NOVEMBER 2005) AND MOBISTAR (SEPTEMBER 2007). VoB OFFERED ON A CABLE NETWORK IS NOT INCLUDED AND IS CONSIDERED TO BELONG TO THE CATEGORY OF CABLE.

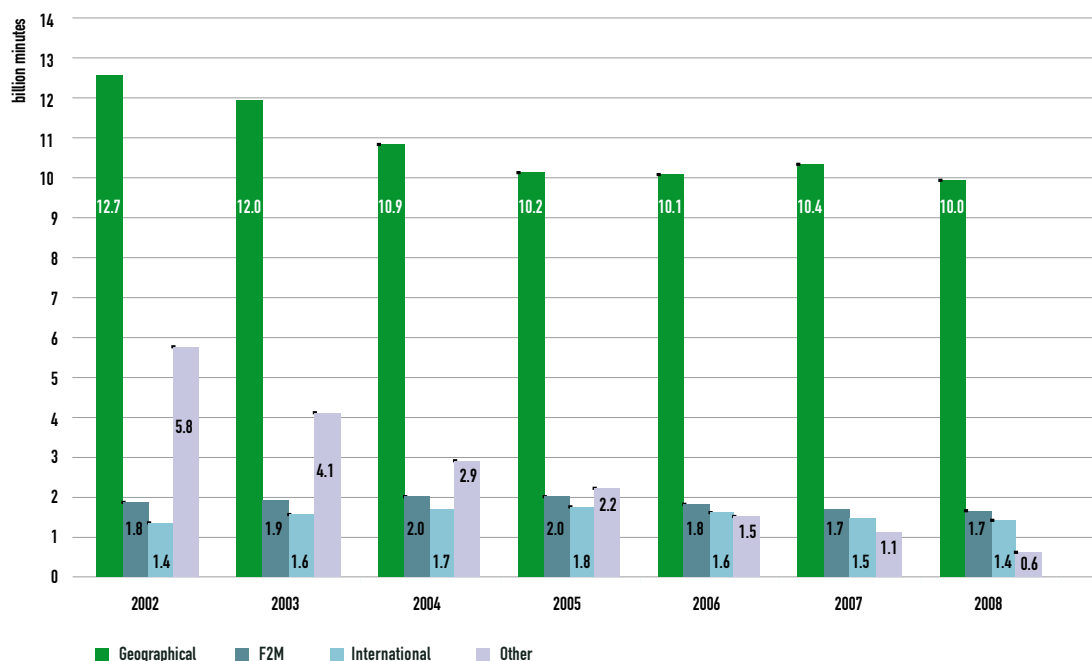
59. UNMANAGED VoB WITH GEOGRAPHICAL CALL NUMBERS.

# Fixed telephony

## VOLUME

The downward trend of the traffic volume through analogue accesses (PSTN and cable), ISDN accesses and DSL accesses used for managed voice over broadband continued. The national and international traffic volume declined and reached 13.7 billion minutes in 2008.

Volume of fixed voice telephony traffic (including managed VoB)  
Source: operators (BIPT)

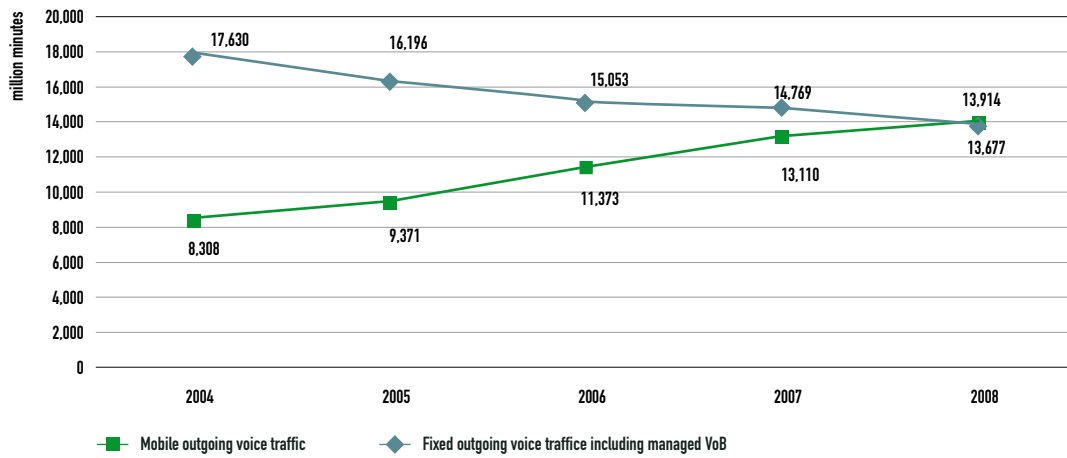


The effect of managed voice over broadband and of mobile telephony on the fixed voice telephone network grew stronger in the course of 2008. The rise of the number of DSL connections used for managed voice over broadband (excluding cable) resulted in the fact that in 2008 a little more than 543 million minutes passed through these accesses<sup>60</sup>. This corresponds with 4% of the total fixed voice volume as opposed to 2.9% in 2007.

Mobile telephony showed a 6% growth in 2008 and reached 13.9 billion outgoing minutes. Because of that growth mobile telephone traffic represented 50% of outgoing traffic in 2008 as opposed to 47% in 2007.

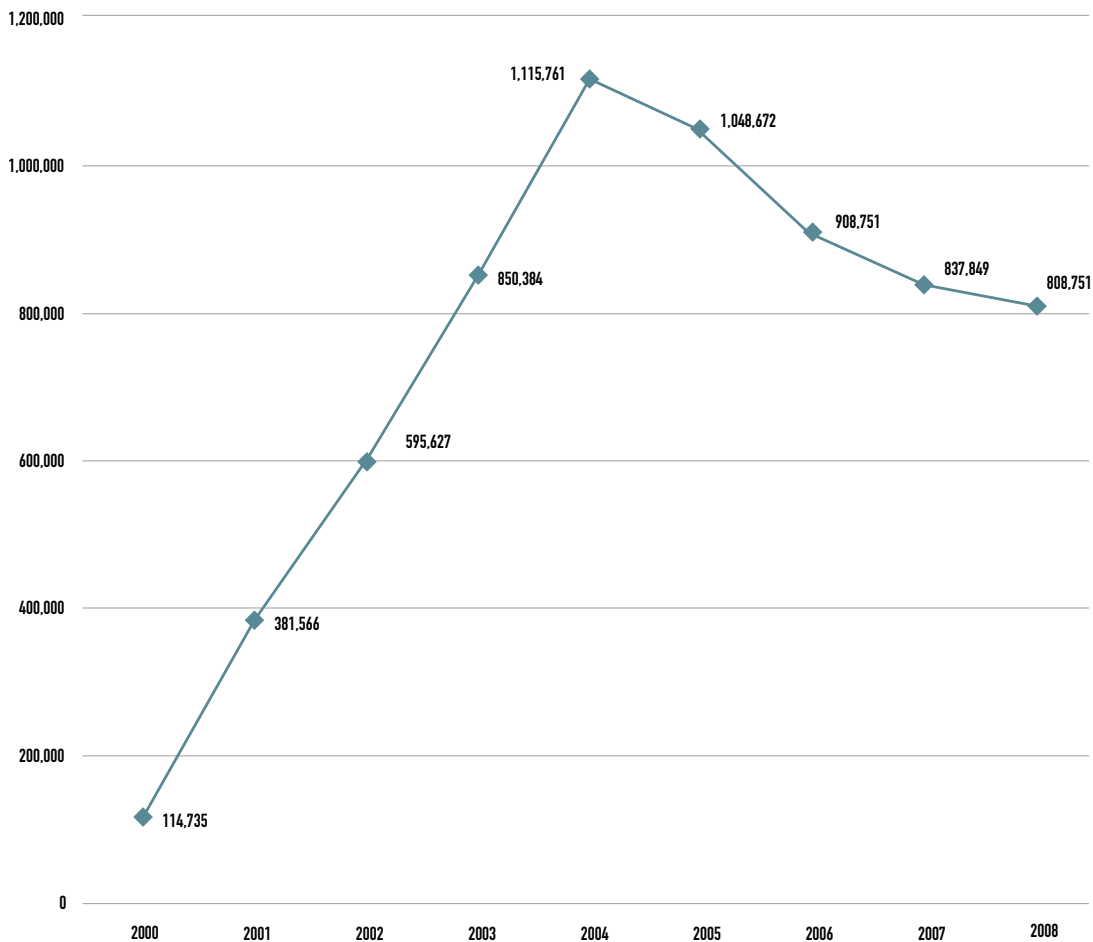
60. INCLUDING MANAGED VOICE OVER BROADBAND OF BELGACOM, SCARLET AND KPN BELGIUM. MOBISTAR WAS UNABLE TO REPORT ANY DATA

**Volume of fixed and mobile voice telephony traffic**  
 Source: operators (BIPT)

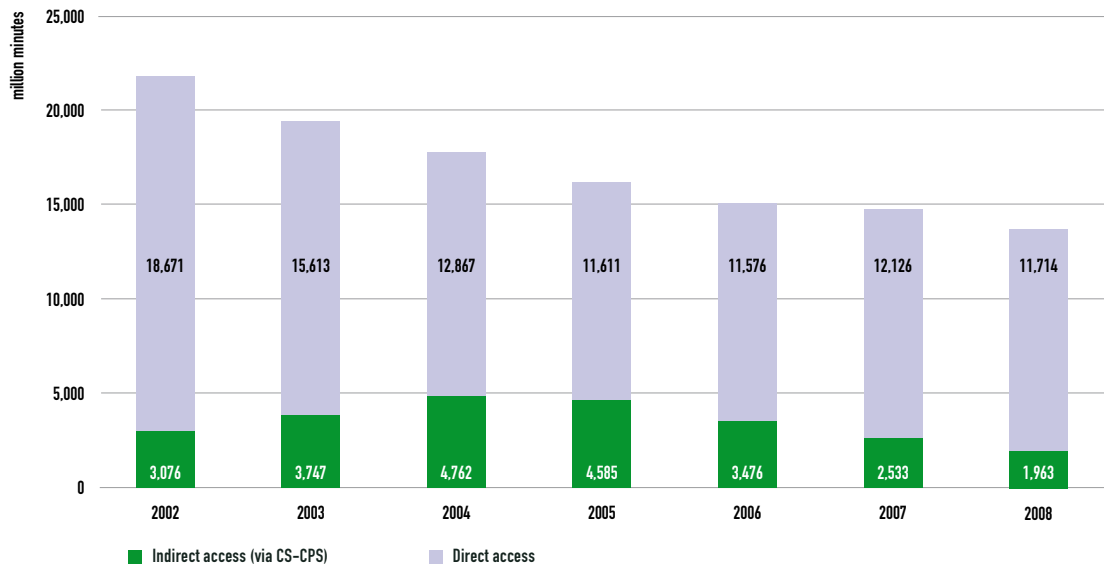


The alternative providers' CS/CPS traffic diminished because of the growing number of direct connections to the fixed telephone network among other factors. In the 2007-2008 period the CS/CPS traffic decreased from 2.53 to 1.96 billion minutes.

**Number of CS/CPS-lijnen**  
 Source: operators (BIPT)

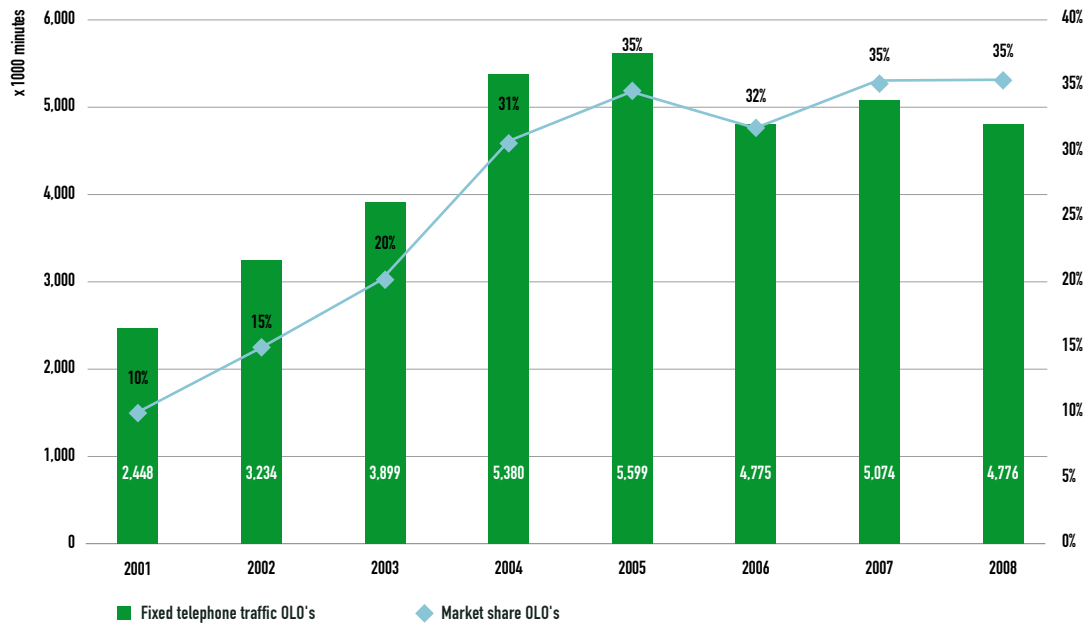


Fixed telephone service through direct access and CS/CPS (volume)  
 Source: operators (BIPT)



The offer of all-in tariffs linked to managed voice over broadband did not contribute to the increase of the alternative providers' traffic volume nor to a bigger share for them on the fixed telephony market in 2008.

OLO's fixed telephone traffic and share on the fixed telephony market  
 Source: operators (BIPT)



## PRICES

### EVOLUTION OF THE STANDARD TARIFFS FOR A PHONE CALL

If we take into consideration the evolution of standard tariffs for a phone call (10 minutes, peak hours) in our country between August 1997 (before the liberalisation) and 1 October 2008 (date of the last tariff increase), we see a drop of 72.6% for national calls and 71.9% for international calls to the USA.

In the course of 2008 the tariffs were adapted three times: on 1 January a price indexing was applied to the normal Belgacom Classic tariffs for national and international traffic. On 1 July 2008 and 1 October 2008 other price increases followed.

Evolution of the price for a zonal, national and international (to the USA) phone call from Belgium (10 minutes, weekday 11 a.m., in euro, including VAT)  
Source: Belgacom website (BIPT)

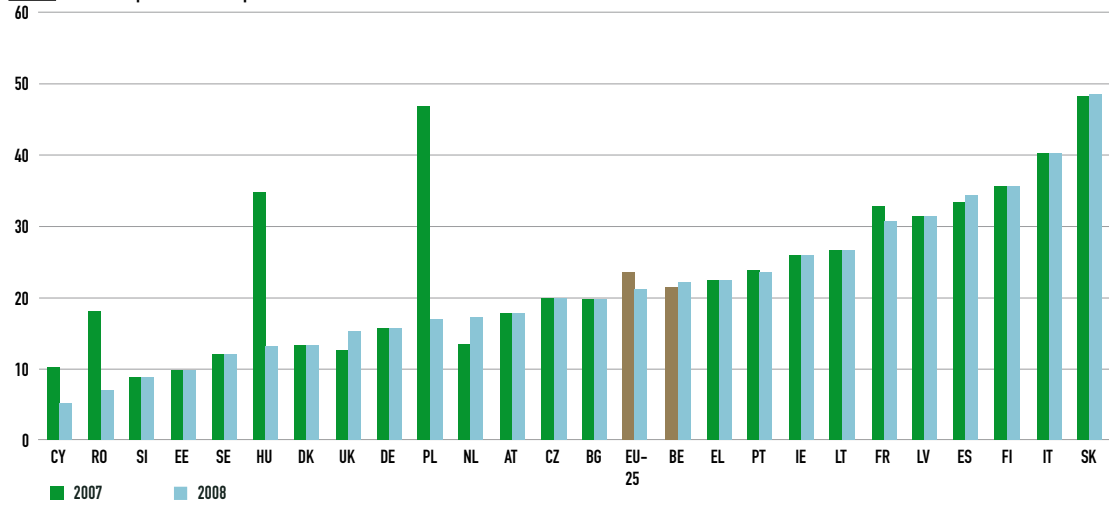
	Zonal	Change in %	National	Change in %	International	Change in %
1997	0.45		2.25		7.5	
1998	0.50	11.1%	1.74	-22.7%	6.0	-20%
1999	0.50	0%	1.74	0%	5.95	-0.8%
2000	0.50	0%	1.74	0%	5.95	0%
2001	0.54	8%	0.54	-69%	1.84	-69.1%
2002	0.54	0%	0.54	0%	1.83	-0.5%
2003	0.56	3.7%	0.56	3.7%	1.94	6%
2004	0.57	1.8%	0.57	1.8%	1.98	2.1%
2005	0.57	0%	0.57	0%	1.98	0%
2006	0.57	0%	0.57	0%	1.98	0%
2007	0.583	1.9%	0.583	1.9%	2.02	2.2%
1/07/08	0.601	3%	0.601	3%	2.06	1.8%
1/10/08	0.616	2.6%	0.616	2.6%	2.11	2.6%

### NATIONAL TELEPHONE TRAFFIC

If we compare prices for a national phone call in the European Member States based on the indicator of the 14th EC implementation report, we see that Belgium is ranked fifteenth.

Cyprus and Romania have the lowest rates, respectively about 69% and 77% cheaper than in Belgium. In the country where the rates are highest, Slovakia, prices are 2.2 times more expensive than in Belgium and 9.5 times higher than in Cyprus.

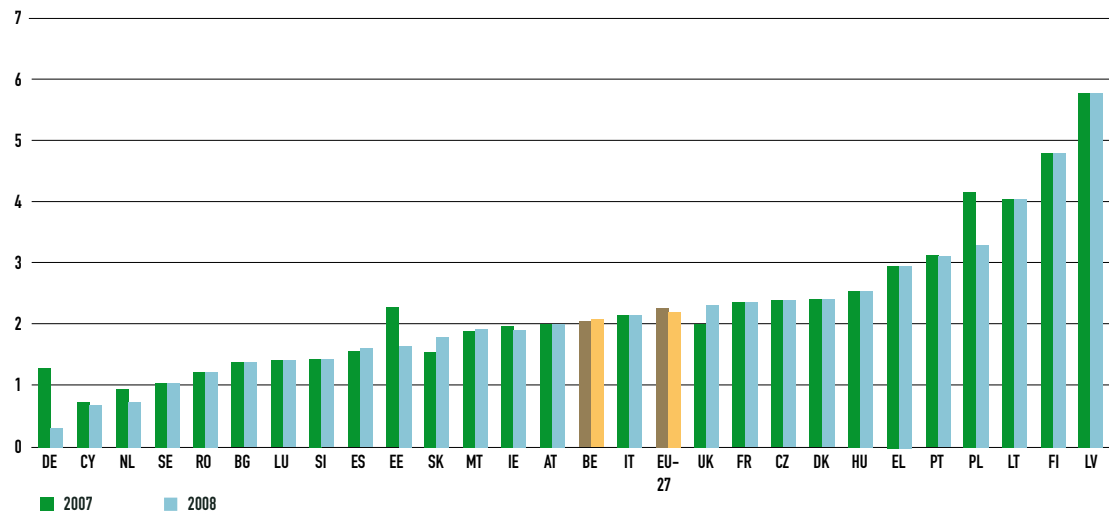
Evolution of the price for a national phone call in the EU countries (3 min/200 kms/weekday 11 a.m., in eurocent, including VAT)  
Source: 14th EC implementation report



## INTERNATIONAL TELEPHONE TRAFFIC

When comparing the prices in Belgium and the EU for an international phone call to the United States, we notice that between 2007 and 2008 there was a price increase in Belgium from 2.02 to 2.06 eurocent. The EU average decreased by approximately 3.5%.

Evolution of the price for an international phone call to the United States in the EU countries (10 min/weekday 11 a.m., in euro, including VAT)  
Source: 14th EC implementation report



# Retail broadband

## BROADBAND TECHNOLOGIES AND OFFERS

### ADSL – VDSL

ADSL allows Internet access over the existing copper network of the incumbent telecom operator Belgacom. ADSL and ADSL2+ are asynchronous technologies where the download speed is faster than the speed at which Internet users can send data.

ADSL providers attracted the attention in 2008 with a series of volume and speed enhancements. The download speed of Belgacom's ADSL Go was raised from 4 Mbit/s to 12 Mbit/s and the monthly limit from 12 GB to 25 GB. Telenet raised the speed of its competing subscription ExpressNet from 10 to 20 Mbit/s and the monthly limit from 12 to 30 GB.

In addition, ADSL subscriptions without a data limit made their entrance. In October 2008 KPN Belgium was the first major national provider to launch unlimited downloading for normal personal and private use under the trading name of Tele 2<sup>61</sup>. Scarlet too lifted the download limit of its ADSL 20 subscription, which was re-named into ADSL 20 No Limit. The subscription costing 24.95 euro a month replaces the 60 GB a month data limit with an unlimited offer according to a fair use policy<sup>62</sup>.

Since 2007 alternative operators have been connecting their customers to ADSL2+ by means of their unbundling networks. They mainly focused on big cities, but now their infrastructures are slowly extending to other areas. In 2008, Dommel announced an extension of its "Cityconnect" area to almost all Limburg cities<sup>63</sup>. Since 1 July 2008, ADSL2+ is also available by way of bitstream access. As a consequence, at the end of 2008 Scarlet had a 12 Mbit/s offer<sup>64</sup> with national coverage.

VDSL is comparable to ADSL but the length of the copper connection is reduced by a partial upgrade of the local loop<sup>65</sup> with optical fibre. In a VDSL environment optical fibre is rolled out between the MDF (main distribution frame) and the street cabinets (SCs). Only the part of the network between the street cabinets and the end-user still consists of copper wire. As a result a typical 1-10 Mbit/s download speed for ADSL can be raised to 10-50 Mbit/s in the case of VDSL, depending on the distance between the end-user and the street cabinet.

Belgacom started in 2004 to upgrade its broadband network to VDSL as part of the Broadway project. In November 2007 the VDSL2 roll-out was started. This evolution makes it possible to surf at a speed of 20 Mbit/s and to receive Belgacom TV on various television sets. Apart from that VDSL2 also makes it possible to install high-definition television.

Within a span of four years Belgacom has rolled out 12,780 kms of optical fibre to the street cabinets<sup>66</sup>. In one year's time VDSL coverage among the population went up from 59% to 66% at the end of 2008<sup>67</sup>. By mid-2011 coverage should be 80%.

The commercial sale of HDTV started at Belgacom on 14 April 2008.

61. TELE2 LAUNCHES UNLIMITED DOWNLOADING. DE TIJD 2 OCTOBER 2008.

62. SCARLET LIFTS DOWNLOAD LIMIT. ZDNET 22 NOVEMBER 2008.

63. FULL ADSL2+ COVERAGE IN LIMBURG. ZDNET 29 MAY 2008.

64. SCARLET LIFTS DOWNLOAD LIMIT. ZDNET 22 DECEMBER 2008.

65. PART OF THE NETWORK TO WHICH THE END-USER IS CONNECTED.

66. BELGACOM QUARTERLY REPORT Q3 2008.

67. BELGACOM ANNUAL REPORT 2008.

The triple play retail offers for residential customers available from Belgacom at the end of 2008 over ADSL2+ or VDSL2 are:

- Pack Internet including Internet Go + TV: initially 50 euro/month, including VAT, now 52.5 euro/month – Download speed: 12 Mbit/s, upload speed: 400 kbit/s. The bitrate is identical for ADSL2+ and VDSL2 but VDSL2 allows streaming of various SD/HDTV channels<sup>68</sup>. Where VDSL2 is available, HDTV is included.
- Pack Internet including Internet Go + TV + telephony (I-Talk): 60 euro/month<sup>69</sup>. In this case the fixed telephone line is provided over the Internet connection.

The alternative operators do not market any services based on VDSL2 yet. Since 10 January 2008 Belgacom was forced to open up its VDSL2 network to alternative operators. However, the Brussels Court of Appeal ruled in May 2009 that this obligation had not been sufficiently argued and annulled this obligation.

## CABLE MODEM

Broadband over cable modems is based on the existing cable television infrastructure after the network has been made bi-directional and the bandwidth has been enhanced by rolling out optical fibre closer to the customer (known as HFC, hybrid fibre coaxial, a network in which both optical fibre and coax are used).

In order to meet growing demand for more network capacity Telenet upgraded its network to Eurodocsis 3.0 starting from 2008. By using Eurodocsis 3.0 on the network in time Internet speeds of 200 Mbit/s downstream and 30 Mbit/s upstream will be possible.

Up to now there are no commercial offers yet based on the Eurodocsis 3.0 standard.

## FIXED WIRELESS ACCESS (FWA)

FWA technologies are based on “fixed” local radio links:

- Public Wireless LANs (PWLANS or Wi-Fi hotspots) are wireless local computer networks for data transmission over radio frequencies covering a distance of some 100 metres.
- The majority of Belgian hotspot sites is owned by Belgacom and Telenet (about 2,100 at the end of 2008).
- Citymesh focuses on building a network on the Belgian coast. The area currently covered by Citymesh’s wireless Internet includes the centre of Blankenberge, the harbour, the sea front and many surrounding camping sites. Citymesh’s wireless Internet is also available in Bredene, Wenduine, De Haan and the sea front of Knokke.
- The tariffs for using the hotspots vary according to the intensity of the use. For users who regularly or intensely use hotspots there are vouchers and subscriptions for a limited time (day, week, month or a year). After the period has been activated the hotspot can be used unlimitedly. Users who use hotspots only from time to time can buy minute bundles by means of a prepaid voucher. The bundle’s credit is usually valid for a limited time and within that period it can be used until it is spent.
- Belgacom ADSL subscribers can surf a few hours a month for free in any Belgacom hotspot using the login and the password they normally use. Telenet customers (ExpressNet, ExpressNet Plus, ExpressNet Turbo, Telenet Standard Pack, Telenet Top Pack) can take a hotspot subscription with which they can surf as long as they please. For ExpressNet, ExpressNet Plus and Telenet Standard Pack the monthly rate is 10 euro including VAT. For Turbo and Telenet Top Pack customers the hotspot subscription is free.

68. STREAMING = TECHNIQUE FOR DOWNLOADING MULTIMEDIA FILES ENABLING INTERNET USERS TO READ THE FILE IN REAL TIME WITHOUT HAVING TO WAIT UNTIL THE ENTIRE FILE HAS BEEN DOWNLOADED. THIS IS THE CASE WITH AUDIO OR VIDEO OVER THE INTERNET FOR INSTANCE.

69. THIS PACK IS NO LONGER AVAILABLE SINCE 1 APRIL 2009 BECAUSE I-TALK WAS DISCONTINUED.

**Tariffs for using a hotspot (June 2009)**  
**Source: website operators**

Operator	Name	Price (including VAT)
Belgacom	1 hour	€ 10
Belgacom	2 hours	€ 5
Belgacom	24 hours	€ 20
Telenet	60 minutes	€ 9,99
Telenet	2 hours – 24 hours	€ 5 - € 20
Telenet	1 - 2 - 3 - 5 days	€ 20 - 35 - 45 - 60
Telenet	1 week	€ 70
Telenet	1 month – 6 months	€ 100 – 350
Citymesh	30 min – 2 hours – 5 hours – 10 hours	€ 4 – 7 – 12 – 20
Citymesh	1 day – 1 week – 1 month – 6 months	€ 15 – € 25 – € 35 – € 149

- WIMAX (Worldwide Interoperability for Microwave Access) is a range of technologies for data transmission over a radio link with a bandwidth of more than 50 Mbit/s covering a distance of 20 to 100 kilometres.
- The American company Clearwire is the only operator who has a licence for FWA in the frequency bands in which the roll-out of the WIMAX-technology or other equivalent technologies is possible. The service is available in Brussels, Ghent, Aalst and Louvain. More competition may be brought about if the royal decree organising the contracting-out of extra frequency blocks in the 3.4-3.6 GHz frequency band becomes effective.

#### FIBRE TO THE HOME – FIBRE TO THE BUILDING

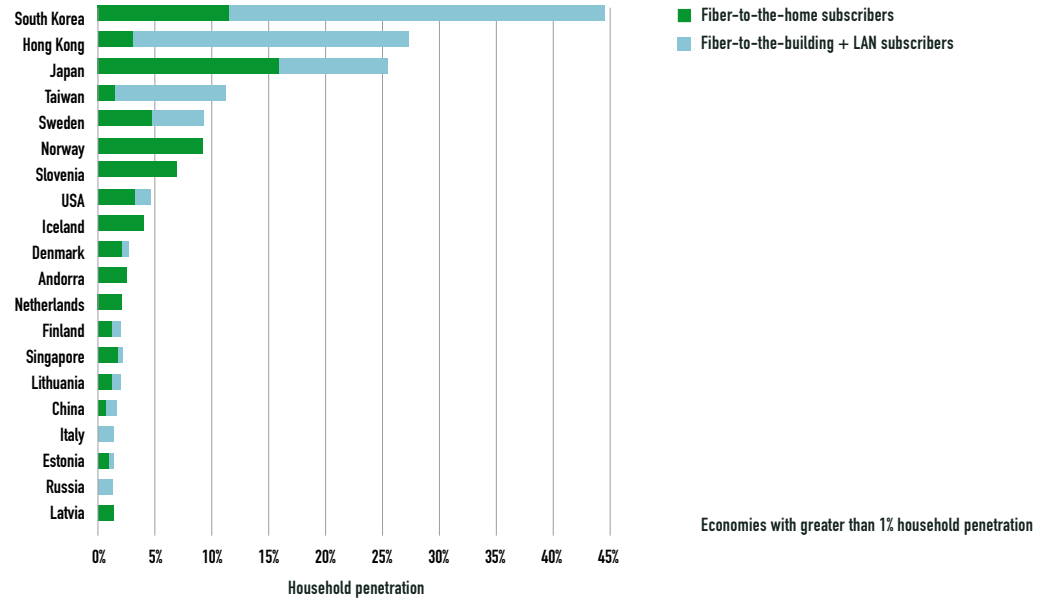
In case of FTTH each house is directly connected to the telecommunications infrastructure by means of an optical fibre. A typical bandwidth of 100 Mbit/s, independent of the length of the connection, can be achieved. The Fibre to the Building technology is used in buildings with various housing units. In that case the building is connected to the telecommunications infrastructure by means of an optical fibre; each house within the building is connected to the optical fibre by way of the existing copper network.

Belgacom started to test FTTH in Rochefort in 2008. However, rolling out optical fibre to the home on a large scale is still out of the question.

As a consequence, in the ranking of countries boasting the highest penetration of Fibre to the Home, as drawn up by the FTTH Council, Belgium is nowhere to be seen. The ranking is headed by the Asian countries. In Europe, the Scandinavian countries are at the top, but the Netherlands are not far behind.

**Penetration of FTTH and Fibre to the Building (at the end of 2008)**

Source: FTTH Council



**MOBILE TECHNOLOGIES**

Technically upgrading the mobile broadband networks from third-generation UMTS technology to 3.5 HSPA<sup>70</sup> enhances the available bandwidth.

At the end of 2008 Belgacom had a 3G network, which was upgraded to HSDPA with a population coverage of 89.9%<sup>71</sup>

For Mobistar the outdoor 3G/HSDPA coverage was up to 80% at the end of 2008<sup>72</sup>.

The mobile data services provided in Belgium can be divided into mobile data services through a USB modem/PCMCIA card and mobile data services through the mobile phone.

The following mobile data services through a USB modem/PCMCIA card are available in Belgium:

**Tariffs for mobile data via USB modem/PCMCIA card (June 2009)**

Source: website operators

Operator	Name tariff plan	Included	Price/month(including VAT)
Proximus	Mobile Internet 15 h	15 hours	€ 14.99
Proximus	Mobile Internet Evening & weekend	2 GB during off-peak	€ 24.99
Proximus	Mobile Internet Anytime Plus (2 GB)	2 GB	€ 34.99
Proximus	Mobile Internet Anytime (5 GB)	5 GB	€ 51.99
Mobistar	Internet Everywhere	1 GB	€ 5/month (+ € 1 per day of surfing)
Mobistar	Internet Everywhere Max	2 GB	€ 30/month
Mobistar	Internet Home & Away	1 GB	€ 30 (wireless Internet at home + wireless mobile Internet at € 1/day)

70. HSPA = HIGH SPEED PACKET ACCESS IS A TECHNOLOGY APPLIED WITHIN UMTS TO OBTAIN HIGHER BITRATES AND SHORTER RESPONSE TIMES. THERE IS AN HSPA VERSION FOR THE DOWNLINK (HSDPA) AND ONE FOR THE UPLINK (HSUPA).

71. SOURCE: BELGACOM ANNUAL REPORT 2008.

72. SOURCE: MOBISTAR ANNUAL REPORT 2008.

Since November 2008 mobile surfing with a data card or a USB stick is free during weekends for Belgacom customers with an ADSL Go or ADSL Plus subscription through the 3G network of Proximus. The Internet customers are allowed a data limit of 500 MB a month at a maximum download speed of 7.2 Mbit/s (2 Mbit/s upload)<sup>73</sup>.

The mobile data services using the mobile phone are shown in the table below.

**Tariffs for mobile data using the mobile phone (June 2009)**  
**Source: website operators**

Operator	Name tariff plan	Included (GB)	Price/month
Proximus	Mobile Internet Access Time Option		€ 4.1239/hour
Proximus	Mobile Internet Access Volume Option		€ 0.4132/100 kb
Proximus	Mobile Internet Anytime50 MB	0.05 GB	€ 15
Proximus	Mobile Internet 500 MB	0.5 GB	€ 19.99
Proximus	Mobile Internet 200 MB	0.2 GB	€ 24.99
Mobistar	Mobile mail & surf	0.2 GB	€ 18
Mobistar	Mobile mail & surf max	2 GB	€ 30

Mobile data services using the mobile phone are offered in Belgium primarily as an extension to the mobile voice contract. Later on also bundled pack offers combining voice and data communication by mobile phone appeared on the market.

Mobistar, for instance, offers the All-In subscription which combines mobile Internet with the call and SMS tariff plan. For 45 euro a month customers get a 200 MB data volume and 119 minutes (or 208 messages) to all networks. In addition per month 40 hours of calls to fixed lines are included.

Also the subscriptions My30, My45 and My60 for iPhone at Mobistar are a combination of mobile Internet with a quantity of call minutes and/or text messages. They offer respectively 200 megabyte, 500 megabyte and one gigabyte of data traffic a month with three, six or nine hours of calling time to all networks. Although the iPhone tariff formulas have been specially designed for iPhone users these subscriptions are also available for other smartphones/PDAs.

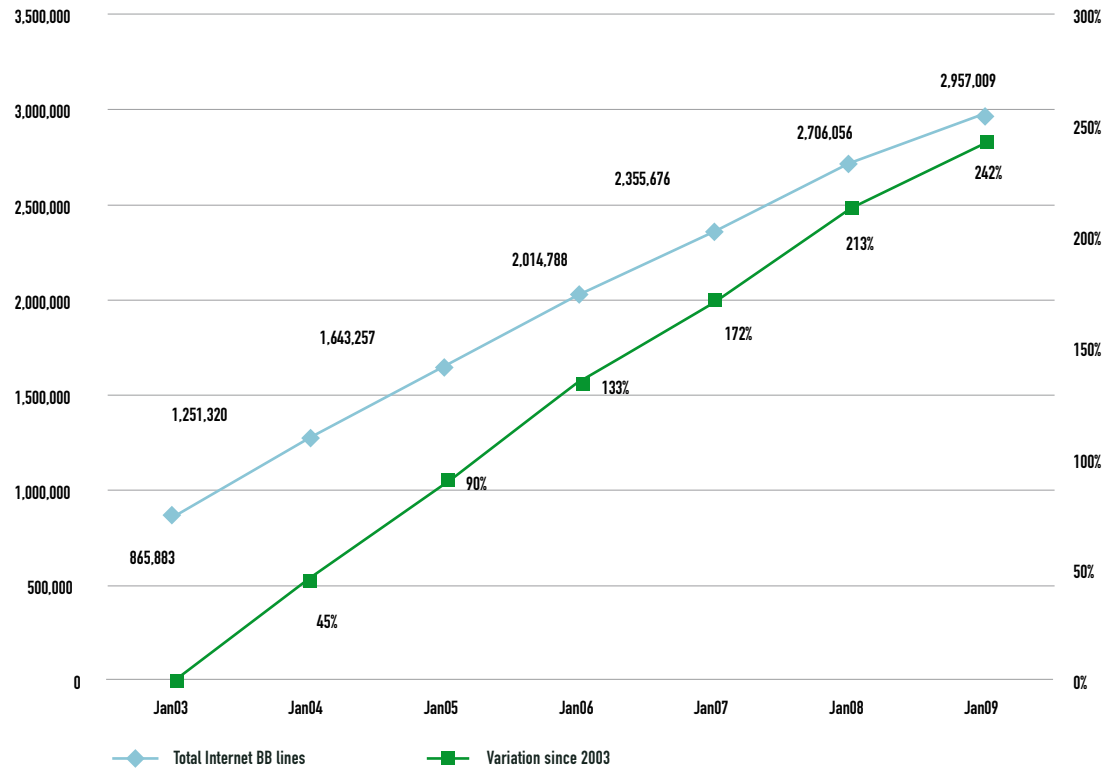
## SIZE OF THE BROADBAND INTERNET MARKET

In 2008 there was an increase of about 251,000 broadband internet lines (DSL + cable + FWA), i.e. a 9% rise. Both in relative and absolute terms the growth is lower than in previous years.

**Absolute and relative growth of broadband Internet**  
**Source: ISP's (BIPT)**

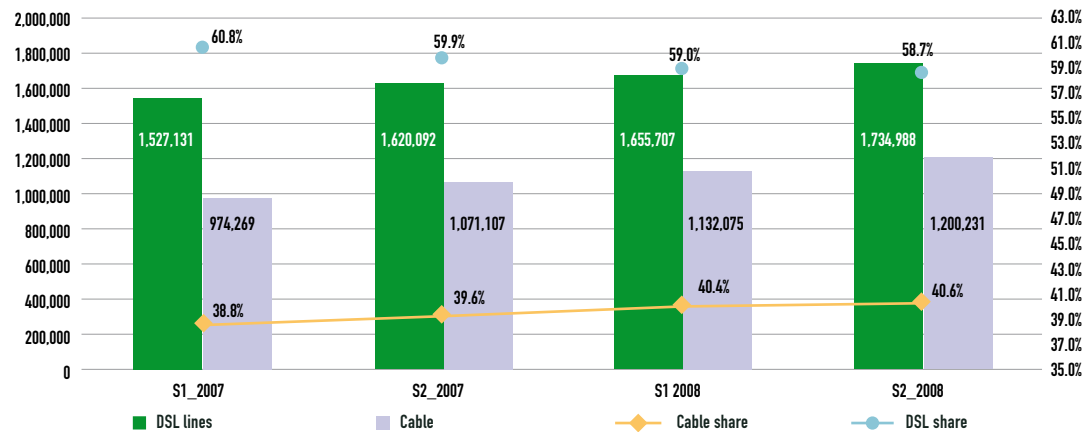
	2005-2006	2006-2007	2007-2008	2008-2009
Absolute growth	371,531	340,888	350,380	250,953
Relative growth	23%	17%	15%	9%

Upward trend of fixed broadband Internet since 2003 (DSL + cable + FWA)  
Source: ISP's (BIPT)



In the 2007 – 2008 period 46% of the new fixed broadband Internet lines was based on DSL technologies, 51% on cable and 2% on FWA. Competition between the various platforms is growing: cable is gaining ground on DSL. However, DSL is still the most common broadband technology in Belgium with 1.73 million lines at the end of 2008.

Competition between DSL and cable  
Source: ISP's (BIPT)



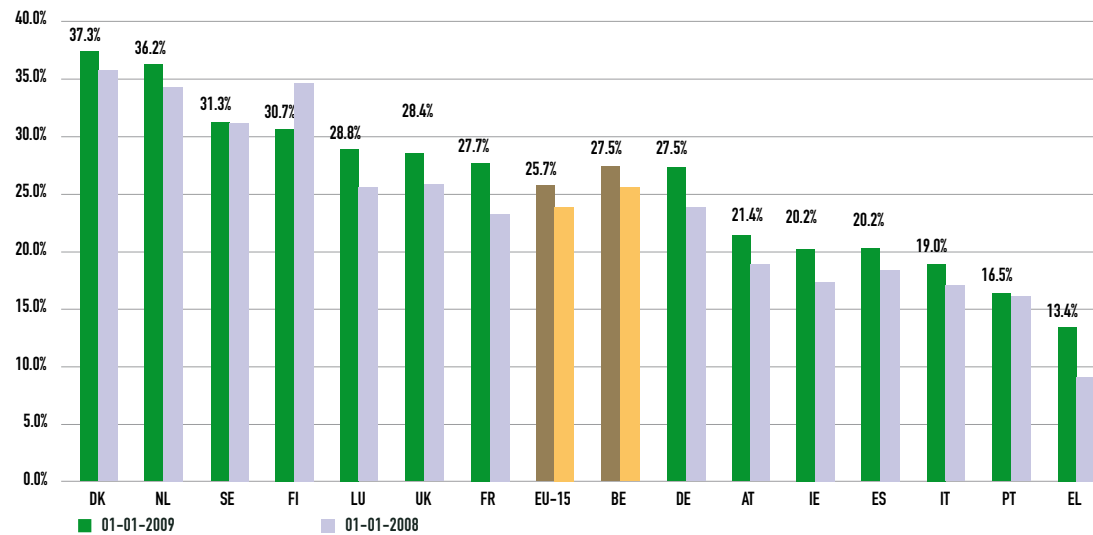
Mobile 3G broadband is slowly getting off the ground in Belgium. At the end of 2008 active mobile 3G broadband lines numbered 368,561. This includes 114,677 modems/cards giving mobile 3G broadband access by means of a laptop.

## BROADBAND PENETRATION

Fixed broadband penetration in Europe (EU-15) increased in 2008: the number jumped from 23.8 lines per 100 inhabitants to 25.7 lines per 100 inhabitants.

Belgium also registered an increase, at a rate comparable to that of the EU-15 average: from 25.6 lines per 100 inhabitants to 27.5 lines per 100 inhabitants.

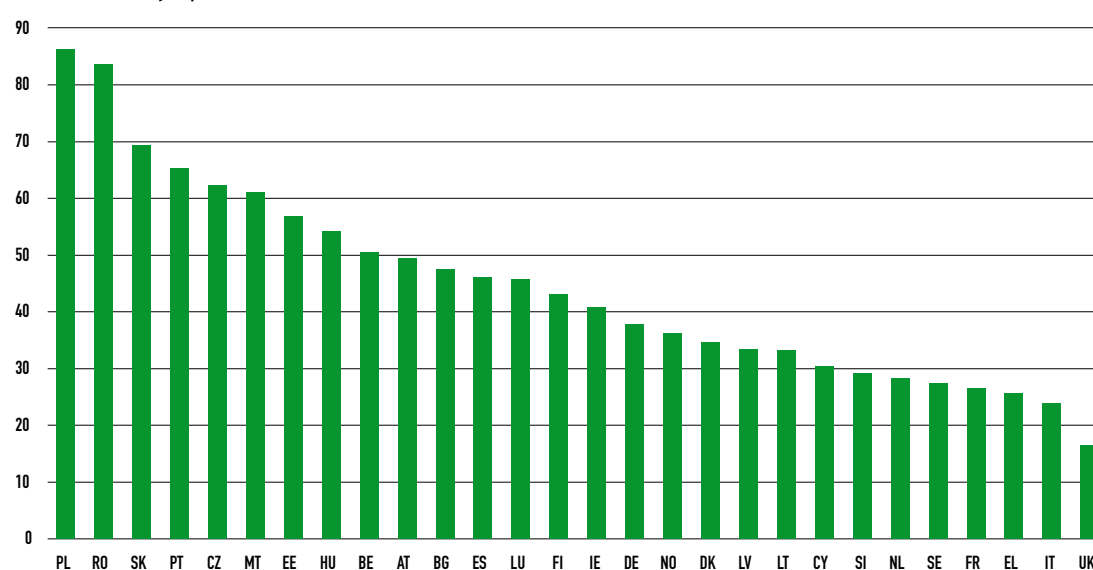
EU broadband penetration (Jan 08 and Jan 09)  
Source: 14th EC implementation report



## BROADBAND PRICES

Price information about fixed broadband collected by Bureau Van Dijk, as commissioned by the European Commission, shows that Belgium belongs to the countries where broadband prices are high<sup>74</sup>.

Monthly cost of broadband Internet with a download speed from 2 up to and including 8 Mbit/s (€/PPP)<sup>75</sup>  
Source: Bureau van Dijk (April 2008)



74. [http://ec.europa.eu/information\\_society/eeurope/i2010/docs/future\\_internet/broadband\\_prices\\_methodology.pdf](http://ec.europa.eu/information_society/eeurope/i2010/docs/future_internet/broadband_prices_methodology.pdf)

75. PURCHASING POWER PARITY IS THE EXCHANGE RATE WHERE PRICES OF A (MARKETABLE) BASKET OF GOODS ARE EQUAL IN TWO COUNTRIES.

These results should be treated with some differentiation. The fact that the selection of the baskets does not take account of the number of subscribers to these offers makes it difficult to translate the results into practice in the EU countries.

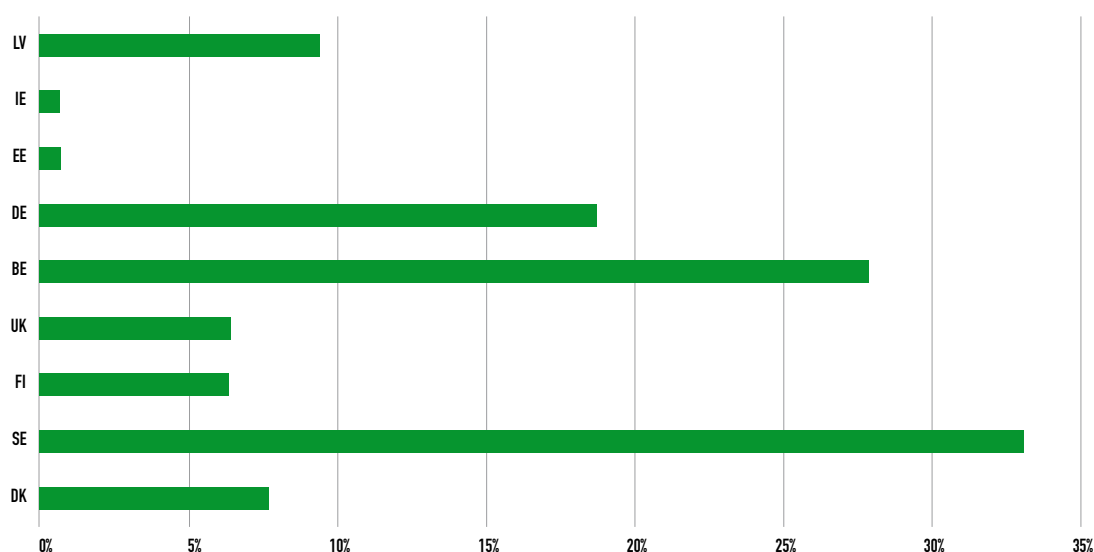
Specifically for Belgium the BIPT barometer study<sup>76</sup> for Q1 2008 shows for example that only 51.3% of Internet subscribers had an Internet connection with a speed between 2-8 Mbit/s.

The trend towards Internet connections with a speed over 8 Mbit/s continued after Q1 2008: from 37.4% in Q1 2008 to 47.5% in Q4 2008 of the total number of Internet offers sold.

European benchmarks show that along with Sweden, Belgium has the highest number of broadband users with a connection over 10 Mbit/s.

Percentage of broadband connections of 10 Mbit/s or faster (1 July 2008)

Source: Communications Committee working document 28 November 2008 – Broadband access in the EU – situation at the 1st of July 2008



Also the normalisation of the prices to reflect<sup>77</sup> a reasonably average download volume needs some differentiation. Indeed, the cost calculated theoretically by Bureau van Dijk does not allow for the customers' real usage. A calculation based on the real extra volume bought by customers results in a cost for the 2-8 Mbit/s basket in Belgium which is lower than the purely theoretical costs.

The fast growth of mobile broadband prompted the OECD in 2008 to perform a study into the tariffs for mobile broadband in the OECD countries<sup>78</sup>.

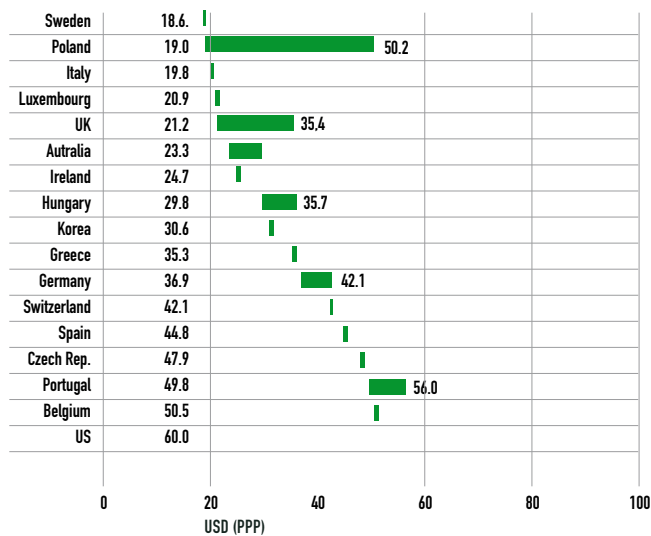
This price comparison makes clear that the price for mobile broadband with 5 GB of monthly traffic amounts to 50.5 USD in Belgium. The average is 37.5 USD and for about 20 USD mobile tariff plans are available in Sweden, Poland, Italy, Luxemburg and the UK.

76. [HTTP://WWW.BIPT.BE/SHOWCONTENT.ASPX?LEVELID=631&OBJECTID=3060&LANG=NL&FORLANG=EN](http://www.bipt.be/ShowContent.aspx?LevelID=631&ObjectID=3060&Lang=nl&ForLang=en)

77. FOR THE 2-8 Mbit/s BASKET: 10 GB A MONTH.

78. DSTI/ICCP/CISP(2008)6 MOBILE BROADBAND PRICING AND SERVICES, PARIS, 8-9 DECEMBER 2008.

Prices for plans with a 5GB data limit  
Source: OECD



For mobile broadband over mobile phones equipped with 3G technologies the price in Belgium is around 20 USD PPP for plans with a 0.2 GB data limit and around 25 USD PPP for plans with a 0.5 GB data limit.

Prices for plans with a 0.2 GB data limit and a 0.5 GB data limit  
Source: OECD



## INDEX FOR BROADBAND USE

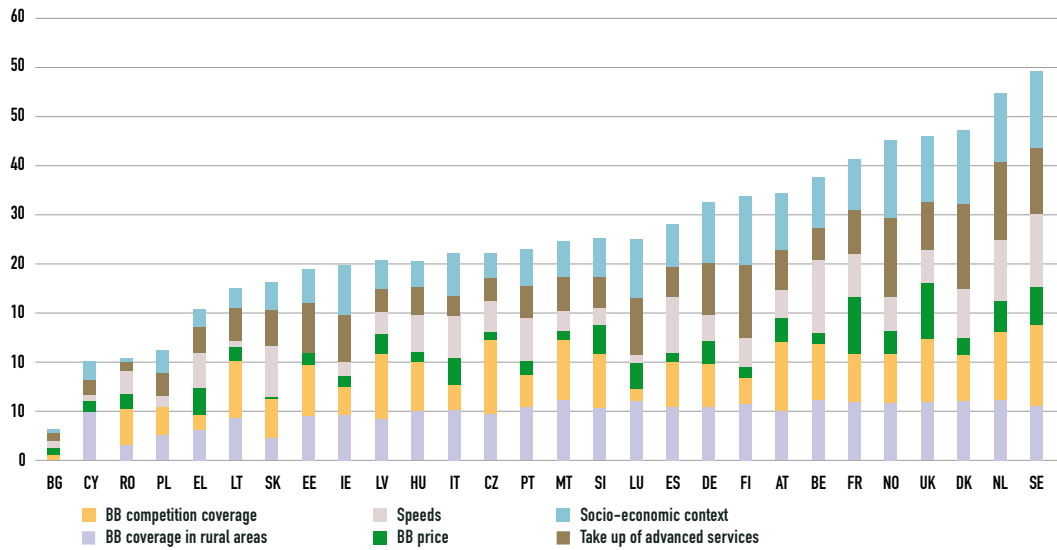
In September 2008 the European Commission published a new broadband performance index<sup>79</sup>. The index shows a list of EU countries based on their performance in the field of high-speed Internet. Six indicators are compared: coverage, competition, speed, quality of Internet access, take-up of advanced services by individuals and enterprises and the socio-economic context (including PC penetration). The outcome of each indicator is normalised to a single value ranging from 0 to 1. The closer the value is to 1, the better the Member State is performing in terms of the various elements of the index.

Belgium is ranked seventh. Our country is preceded by Sweden, the Netherlands, Denmark, the United Kingdom, Norway and France.

Especially for broadband coverage and speed Belgium gets a high score. In other areas the score is average. According to the European Commission especially lowering broadband prices and a more positive socio-economic context as a result of higher PC penetration could contribute to a further development of fast broadband in Belgium.

79. [http://ec.europa.eu/information\\_society/eeurope/i2010/bpi/index\\_en.htm](http://ec.europa.eu/information_society/eeurope/i2010/bpi/index_en.htm)

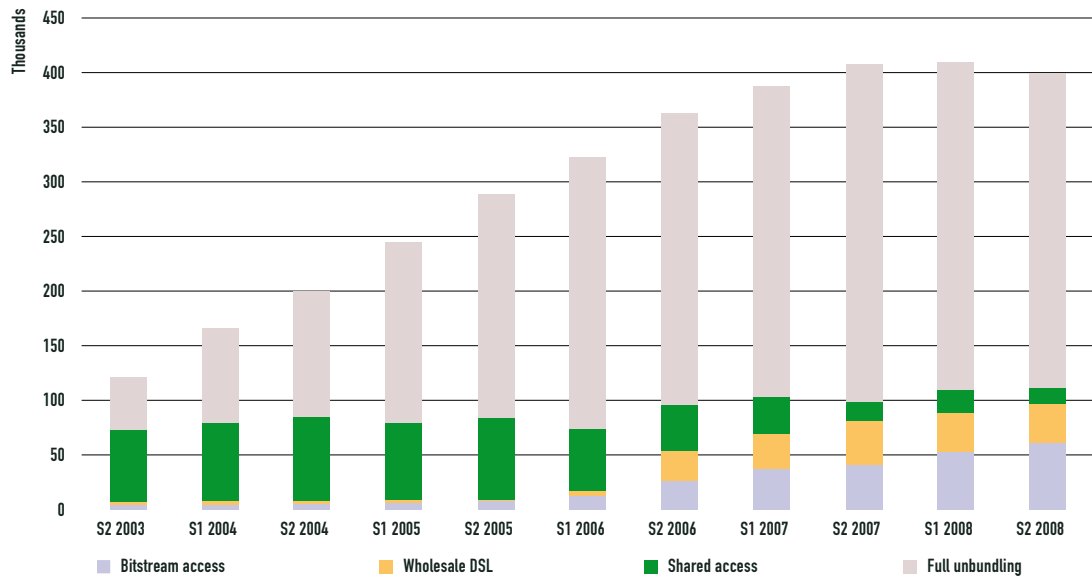
**Broadband performance index**  
Source: European Commission



## Wholesale broadband

In 2008 the number of wholesale broadband accesses sold by Belgacom dropped for the first time (from 408,197 at the end of 2007 to 399,283 at the end of 2008). Only the number of fully unbundled lines rose by 16% to 61,748 lines.

**Belgacom wholesale broadband lines**  
Source: Belgacom



	S2 2003	S1 2004	S2 2004	S1 2005	S2 2005	S1 2006	S2 2006	S1 2007	S2 2007	S1 2008	S2 2008
Full unbundling	3,915	4,750	5,383	6,439	7,376	12,393	26,575	36,948	41,445	53,222	61,748
Shared access	2,682	2,635	2,460	1,977	1,854	5,374	27,145	32,986	39,373	35,057	34,570
Bitstream access	48,688	86,539	114,587	165,285	205,093	248,920	267,328	284,359	308,995	299,154	287,515
Wholesale DSL	66,485	72,331	77,725	70,526	74,470	55,841	42,183	33,199	18,384	22,060	15,450

The decline of the wholesale broadband market mirrors the success of multiplay offers, which causes alternative DSL operators to lose market share.

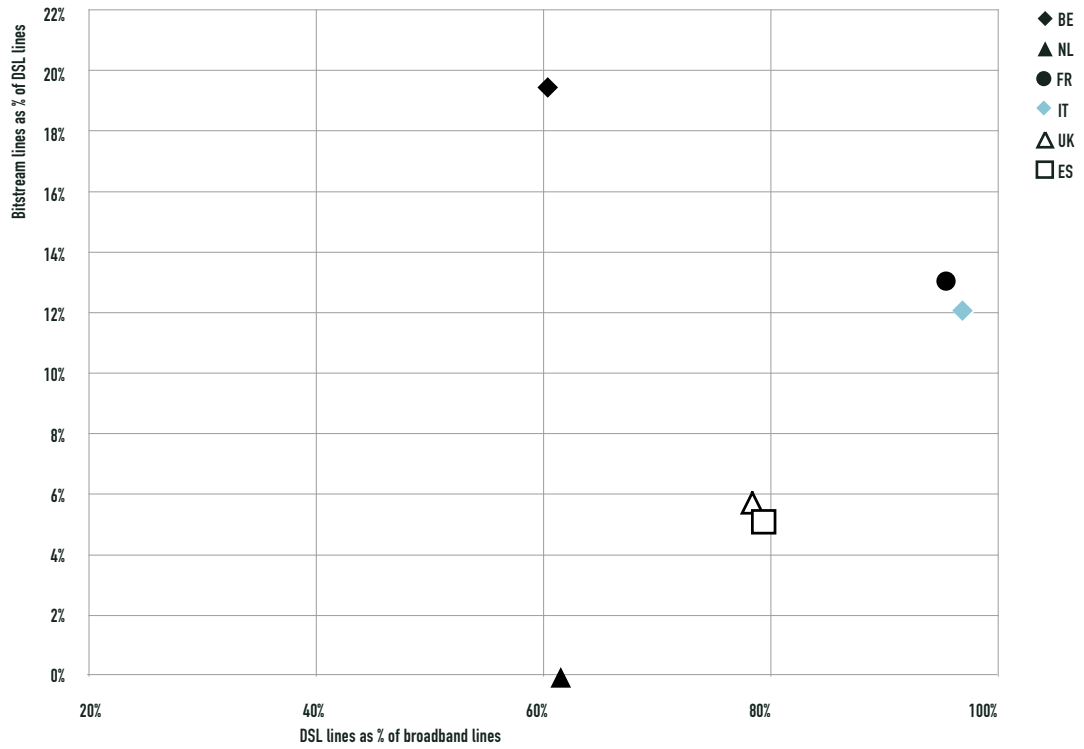
The main type of wholesale access used by alternative providers to offer DSL services is bitstream access; 59% of DSL lines was provided by alternative ISPs in 2008. Since 2007, bitstream lines are increasingly being replaced by fully unbundled lines.

Alternative operators' DSL lines per type of wholesale access (%)  
Source: alternative ISPs (BIPT)



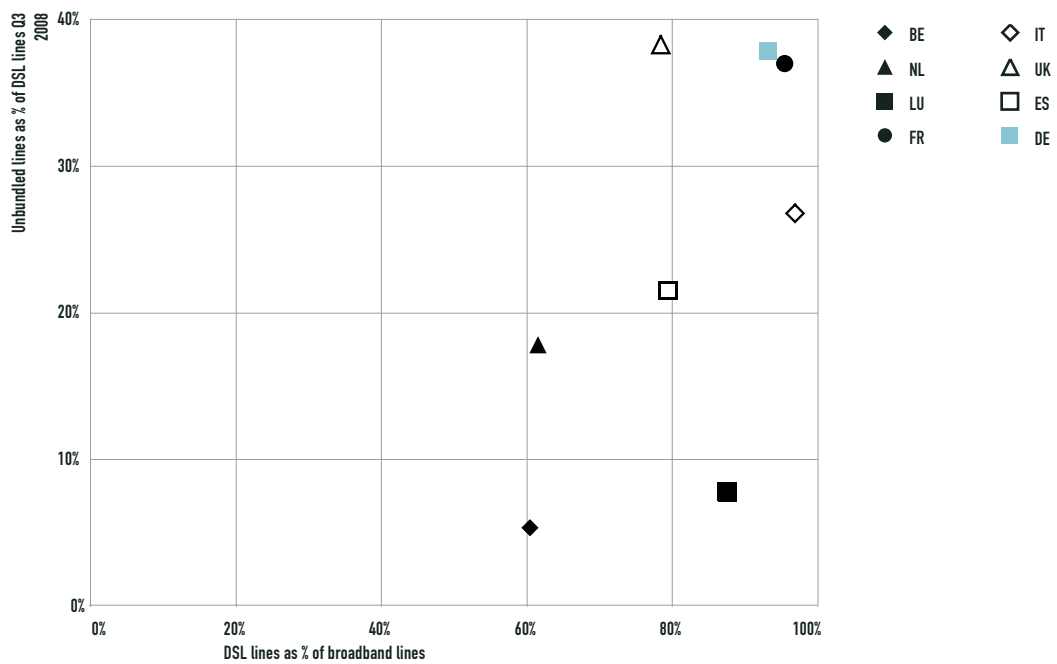
Compared to other European countries bitstream access is more important in Belgium.

Bitstream access in Europe (Q3 2008)  
Source: ECTA



In Belgium providers of DSL Internet based on unbundling represent a smaller part of the total number of DSL lines than in most European countries (5.4% in Q3 2008).

Unbundled lines in Europe (Q3 2008)  
Source: ECTA



## Bundles

The traditional boundaries between telephony (provided over the PSTN network or over the mobile network), broadband Internet access and TV are dwindling.

Providers respond to this by offering bundles of products or services. By means of these bundles they hope to increase their revenue and margins, to lower churn and to improve efficiency by a more extensive use of the same infrastructure by several services.

**TELENET** launched its first quadruple bundle in August 2006. In September 2008 the Telenet Packs were renamed into "Shakes". For all Shakes where telephony is included Freephone Europe was introduced. This tariff plan enables customers to call almost unlimitedly during weekends, on holidays and outside working hours on weekdays to all the countries of the European Union, plus to a number of countries at its fringes.

### Telenet-Shakes

Source: Telenet press release of 4 September 2008

Shakes Internet + Digital television and/or Telephony (in €/month)	BasicNet XL	ComfortNet XL	ExpressNet XL	TurboNet XL
Internet + Digital television (DTV)	30	40	50	68
Internet + Telephony	32	42	52	70
Internet + Telephony + DTV	40	50	58	75
Internet Speed Down (Mbps)	4	12	20	25
Internet Speed Up (Kbps)	256	400	513	1Mbps
Internet Volume (Gb)	5	30	30	100
Shakes Digital television and/or Telephony (in €/month)	SD Digibox	SD Digicorder	HD Digibox	HD Digicorder
Digital decoder rental + Tel	17	19	19	21

**BELGACOM** markets several bundled offers since April 2007. In 2008 and 2009 they were extended with the following products:

March 2008	Combining fixed and mobile telephony for the residential market: <b>Together</b>	Each month Belgacom customers get 600 free calling minutes during weekends and holidays to all fixed lines and mobile networks; Proximus customers get 600 minutes to Proximus numbers and to all fixed lines.
May 2008	Combining fixed and mobile telephony for the business market: <b>Business Voice Fusion</b>	Calling at a standard price from fixed to mobile, from mobile to fixed, from mobile to mobile using a fixed phone or a mobile phone.
February 2009	Combining fixed and mobile telephony with <b>Happy Time One</b>	€ 35/month for a classic telephone line (+ tariff Happy Time+) and a mobile subscription (with Happy Time Mobile). National calls to all fixed and mobile Belgian numbers, both with a mobile phone and a fixed phone, are free during the evening, the entire weekend and on holidays (limitation: maximum of 10,000 min to fixed numbers and 2,000 minutes to mobile numbers). The customer pays 9 euro a month less than the elements available separately.
April 2009	<b>All In One</b>	Bundling of fixed and mobile telephony, fixed Internet and digital television: subscription to the fixed classic line combined with Happy Time One (35 euro) and the Internet formula chosen (Internet Go = 41.75 euro). Customers save each month the subscription to Belgacom TV.

Other operators too responded in 2008 to the trend of convergence. In September 2008 for example **NUMÉRICABLE** announced a new triple play offer: 39.90 euro for 83 TV channels of digital quality, a broadband connection with a download speed of 30 to 100 Mbit/s and 24/7 unlimited calls to fixed national numbers.

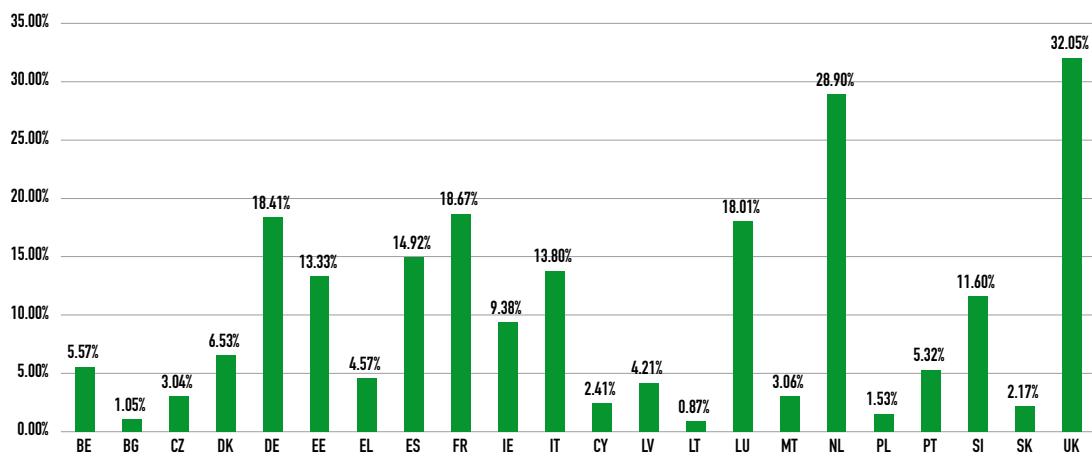
On 1 December 2008 **KPN BELGIUM** launched “Tele2 Trio”, combining mobile telephony, fixed telephony and Internet in a single pack. At € 49.90 a month customers can call 24/7 for free to all fixed lines in Belgium from their fixed line. In addition each month they have 85 mobile call minutes or 150 text messages to all Belgian networks. Also included in that price is a 4 MB Internet connection with unlimited download.

The Walloon cable companies, united under the trading name **Voo**, launched their first triple play offer with a single invoice in January 2009. “Duo malin”, the promotion price of which is 10 euro/month (29 euro/month after a year) includes apart from a broadband Internet subscription with a 1 Mbit/s download speed also the Eco telephone subscription. Calling costs are not included.

Belgian consumers show an increasing interest in bundles. In 2008, 9.4% of the Belgian population had a subscription to a bundled offer, an almost 63,5% increase compared to 2007. A bundled offer should be interpreted as various services offered at a single price and grouped together on a single invoice.

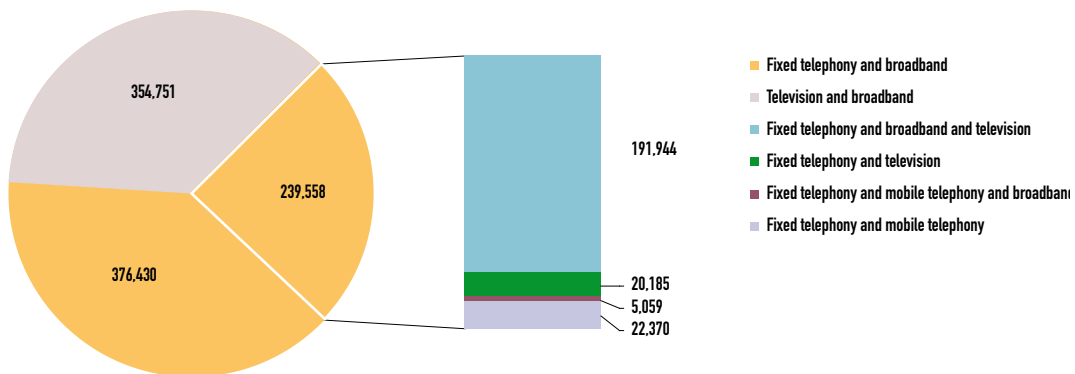
In other European countries the number of subscribers to a bundled offer at the end of 2007 varied between 0.87% (Lithuania) and 32.05% (the United Kingdom).

Subscribers to bundled services that are offered at a single price and grouped together on a single invoice, expressed in % of the population (2007)  
Source: 14th implementation report 2008



Double play is dominant in Belgium: 80% of the bundles is composed of two services. Fixed telephony and broadband is the combination most sold (376,430 units) followed by television and broadband (354,751 units) and the triple play offer telephony, broadband and television (191,944 units).

Number of subscribers to bundle services that are offered at a single price and grouped together on a single invoice (2008)  
Source: operators (BIPT)

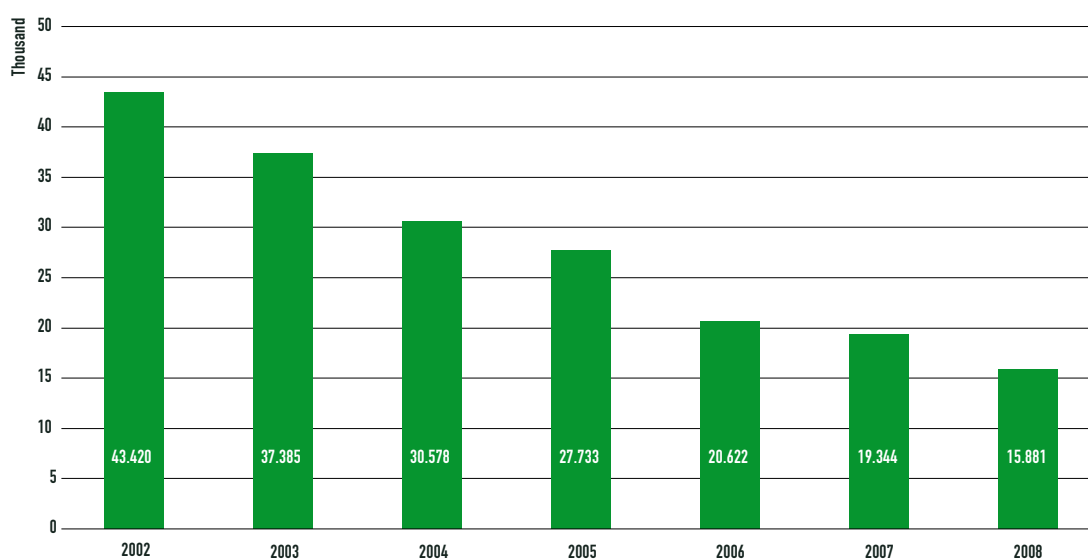


As to individual services it can be observed that a bundle including fixed telephony is bought by 5.7% of the Belgian population. 0.3% of customers add mobile telephony to their bundle. For broadband and television these percentages amount to 8.6% and 5.3% respectively.

## Leased lines

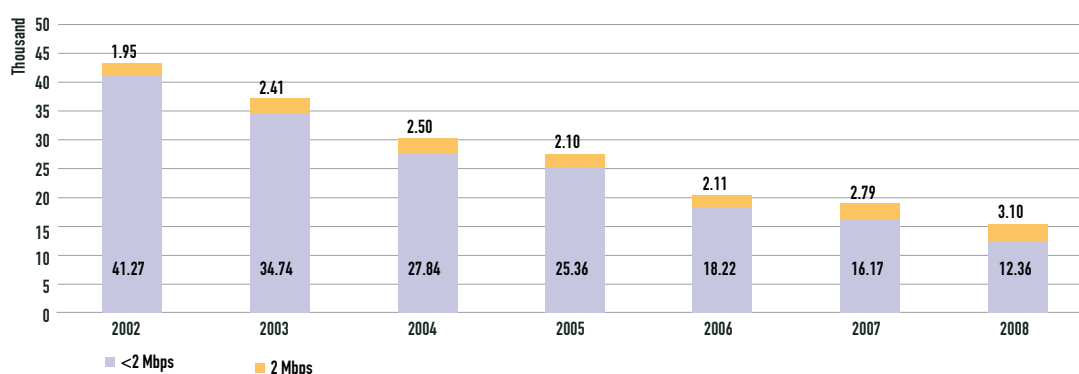
The use of traditional leased lines continues to decline: at the end of 2008 the number of leased lines had dropped by 17.9% as compared to the end of 2007 (15,881).

Evolution of the number of leased lines up to 2.5 Gbit/s (2002-2008)  
Source: operators (BIPT)



The retail market for low-speed leased lines ( $\leq 2$  Mbit/s) slumped in 2008 by 3,497 lines to 15,463.

Development of the number of low-speed leased lines (2002-2008)  
Source: operators (BIPT)



The retail market for leased lines with a speed  $\geq 2$  Mbit/s (to 2.5 Mbit/s) grew in 2008 by 34 lines. This growth represented a 85% rise in capacity to 52.8 Gbit/s at the end of 2008.

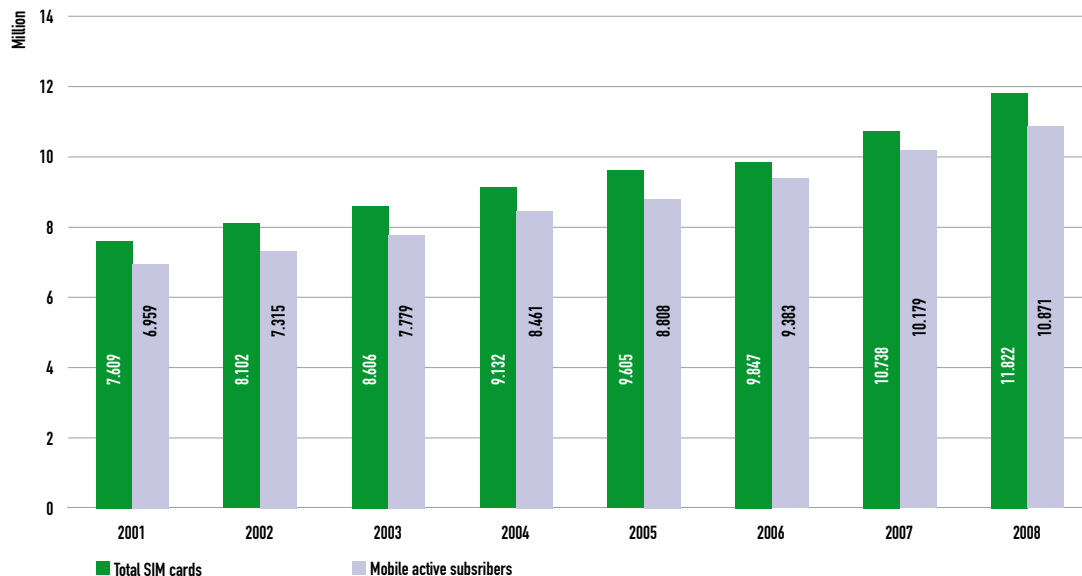
# Mobile telephony

## MOBILE SUBSCRIBERS

At the end of 2008 there were 11,822,190 SIM cards and 10,870,796 active mobile subscribers<sup>80</sup> in Belgium. This means a penetration of 110% and 101% respectively.

Evolution of the number of SIM cards and number of active mobile subscribers

Source: operators (BIPT)

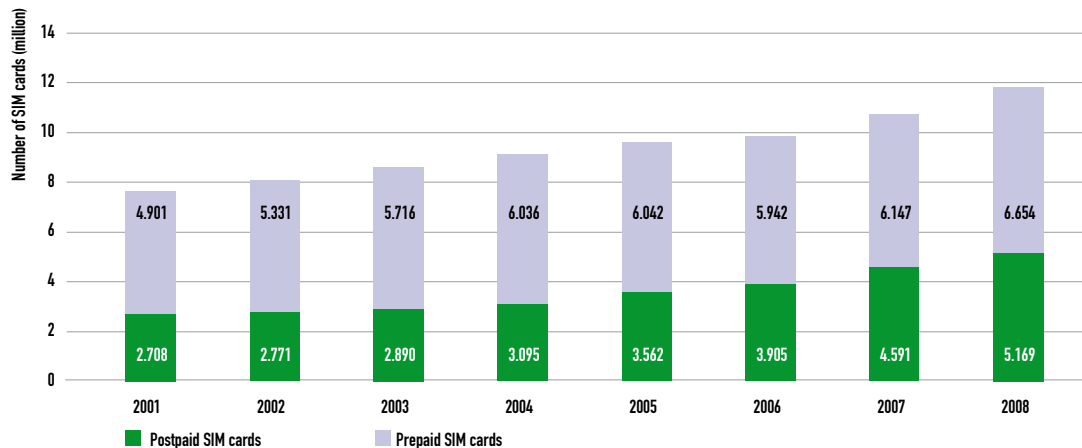


The number of subscribers is rising thanks to the fixed-mobile convergence strategy. On the residential market demand rose for offers that respond to this phenomenon: the Mobistar AtHome formula for instance succeeded in attracting 57,264 new customers in 2008<sup>81</sup>. On the professional market too, sales are increasingly linked to convergence offers. As such, at Mobistar two thirds of sales to small and medium-sized companies are realised through the One Office Voice Pack: the number of cards has risen from 45,297 at the end of 2007 to 143,748 at the end of 2008.

The share of prepaid customers in the total number of SIM cards amounted to 56% at the end of 2008.

Prepaid/postpaid share in the total number of SIM cards

Source: operators (BIPT)



80. ACTIVE MEANS THAT THE CUSTOMER HAS MADE/SENT OR RECEIVED CALLS OR SMS MESSAGES IN THE COURSE OF THE LAST THREE MONTHS.

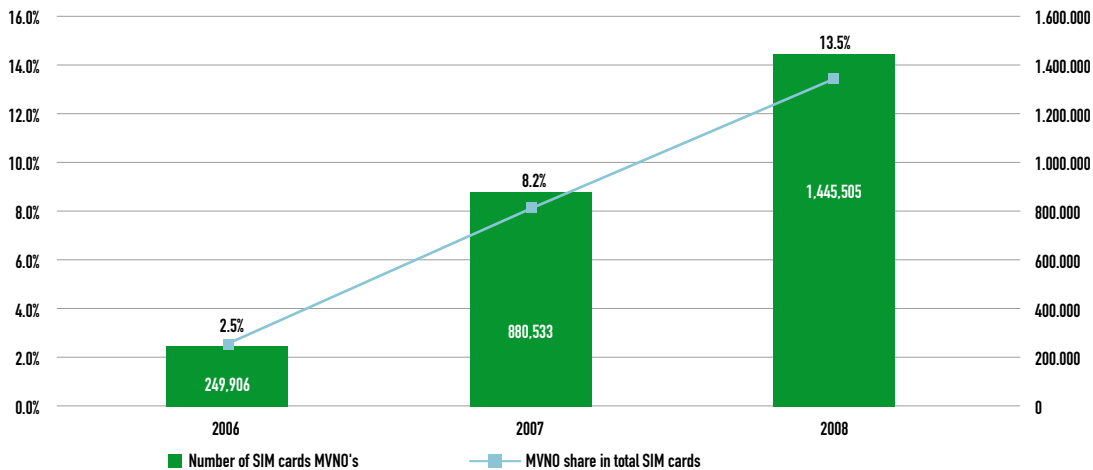
81. MOBISTAR AtHome MAKES IT POSSIBLE TO CALL IN THE "HOME ZONE" FROM A MOBILE PHONE TO FIXED NUMBERS IN BELGIUM AND ABROAD AT PRICES THAT ARE LOWER THAN THOSE APPLIED FOR CALLS BETWEEN FIXED LINES. LATE 2008 MOBISTAR AtHome HAD 124,582 SUBSCRIBERS. (SOURCE: MOBISTAR ANNUAL REPORT 2008)

Some households give up using a fixed phone and only possess a mobile phone anymore. Information about 2008 is not available yet, but according to the latest E-communications household survey<sup>82</sup>, at the end of 2007, 32% of Belgian households only had a mobile phone anymore. 52% had both a fixed and a mobile telephone connection.

The segment of Mobile Virtual Network Operators<sup>83</sup> (MVNOs) shows further growth. Late 2008 MVNOs accounted for 1,445,505 SIM cards on the GSM operators' networks, 1.6 times more than the 880,533 SIM cards at the end of 2007.

On the Belgian market they represent 13.5% of the SIM cards compared to 8.2% a year before.

MVNO share in the total number of SIM cards  
Source: mobile network operators (BIPT)



28 companies were active as an MVNO in 2008 based on a direct agreement with a Belgian mobile operator. Compared to 2007 there was one new MVNO: Transatel, which concluded already in November 2007 an MVNO agreement with Mobistar.

Other MVNOs concluded an agreement in 2008 but will not market their services until 2009. Among those we find the Finnish-British mobile telecom operator Blyk, who threw in its lot with Mobistar. Blyk focuses on young persons between 16 and 24 years and is financed by advertisers.

BASE signed an agreement with TomTom, the provider of navigational solutions, in order to offer the service TomTom High Definition (HD) Traffic in Belgium. This service, which provides Belgian customers with up-to-date traffic information, uses data collected anonymously from the BASE network.

In 2008 all MVNOs together generated a volume of 612.2 million outgoing minutes. This represents 4.4% of the total volume of outgoing voice traffic (13.9 million minutes).

82. [http://ec.europa.eu/public\\_opinion/archives/eb\\_special\\_en.htm](http://ec.europa.eu/public_opinion/archives/eb_special_en.htm) REF293

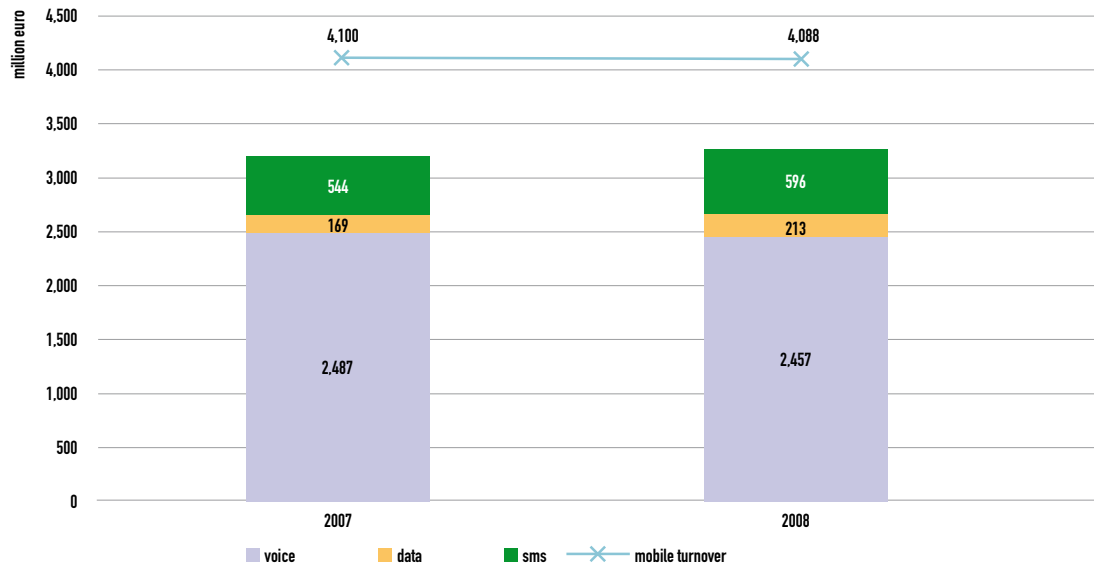
83. An MVNO (MOBILE VIRTUAL NETWORK OPERATOR) IS A COMPANY THAT DOES NOT HAVE A LICENCE BUT THAT SELLS MOBILE TELEPHONY UNDER ITS OWN BRAND THROUGH THE NETWORK OF ANOTHER GSM OPERATOR.

## MOBILE TURNOVER

The mobile retail market was estimated at 4.088 billion euro in 2008. Compared to 2007 turnover declined (4.1 billion euro).

Voice services<sup>84</sup> account for 60% of total mobile revenues, text messages represent 14% and other data services 5%. The share of total mobile retail revenues generated by both text messages and data services slightly increased in 2008 (by 1% approximately).

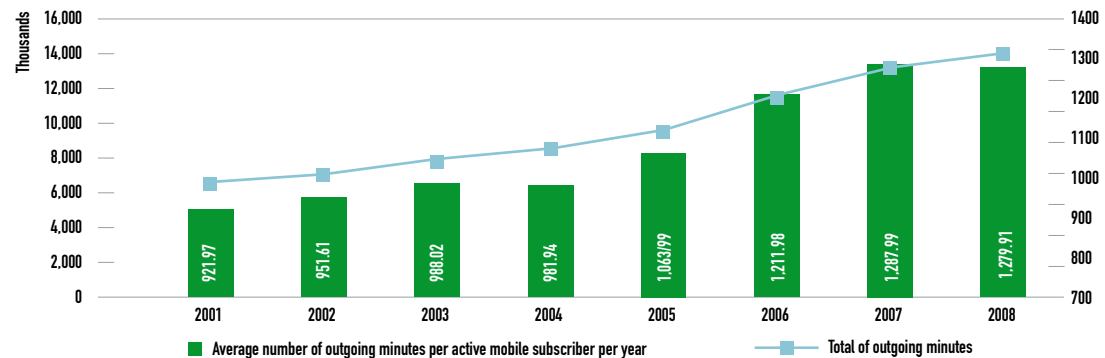
Mobile revenues  
Source: operators (BIPT)



## MOBILE TELEPHONY

Mobile outgoing voice traffic showed a 6% growth in 2008 and reached 13.9 billion minutes. This results from the higher number of active mobile subscribers. The annual average number of minutes per active mobile subscriber has gone down by 0.6%.

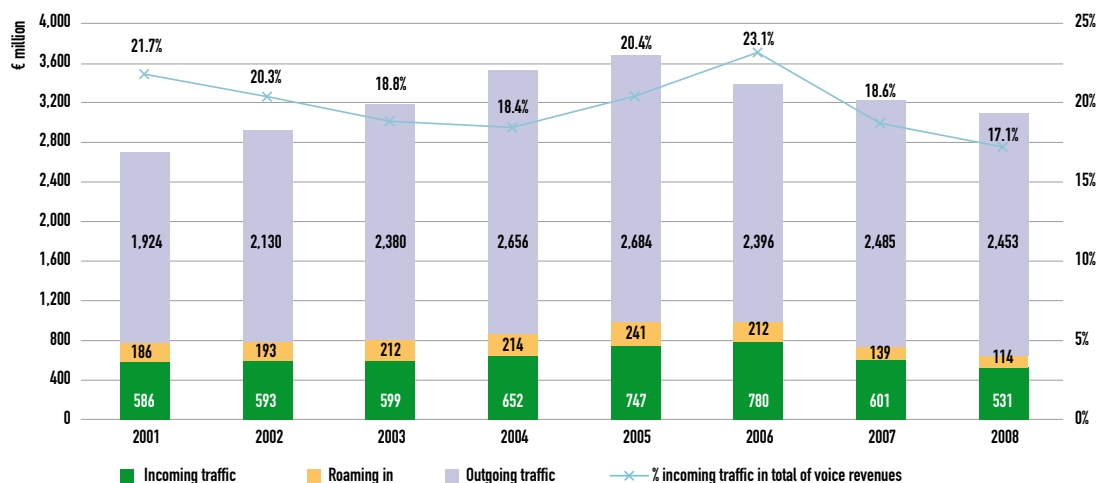
Mobile outgoing voice traffic (volume)  
Source: operators (BIPT)



Turnover of mobile voice traffic is falling because of the pressure on prices, the lowering of the mobile terminating rates and the regulation of roaming rates.

Evolution of turnover of mobile voice traffic (2001 - 2008)

Source: operators (BIPT)



Revenues from outgoing voice traffic (including roaming out<sup>85</sup>) decreased by 1.3% to 2.45 billion euro.

The roaming revenues generated by calls made by foreign mobile network subscribers visiting Belgium (roaming in) dropped by 34.8% to 114 million euro.

Revenues from incoming traffic<sup>86</sup> (531 million euro) represent an ever decreasing share of total mobile voice revenues (from 18.5% in 2007 to 17.1% in 2008).

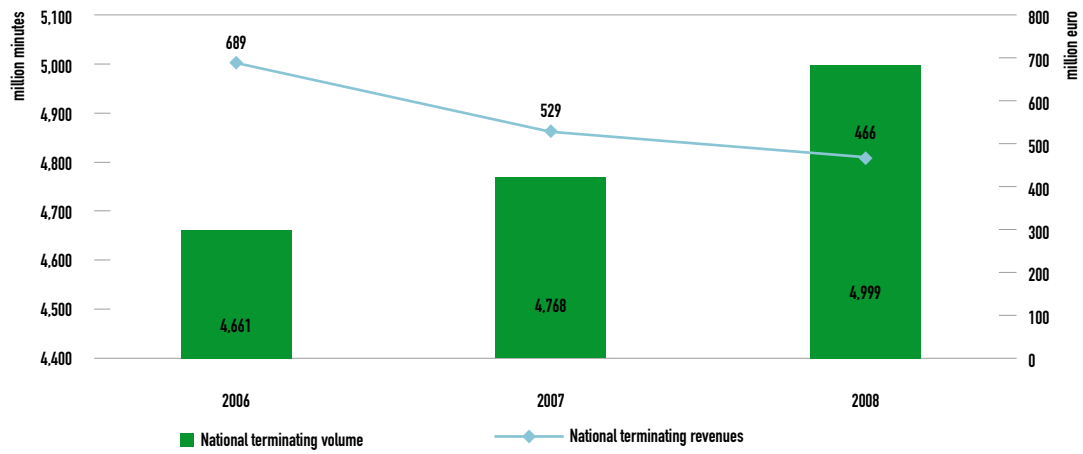
National terminating revenues dropped by 12% in 2008 as a result of the BIPT decisions. In December 2007 BIPT published the terminating rates for February and July 2008. Because the 2008 rates were suspended by the Brussels Court of Appeal in April 2008, BIPT published new tariffs on 29 April 2008. These go back to the decreases in the decision of 11 August 2006 regarding the analysis of the market for call termination on mobile networks. The decrease moved from February to May 2008.

Indexed MTR rates (eurocent/minute, excluding VAT)			
Source: BIPT			
	Before 1 May 2008	1 May 2008	1 July 2008
Belgacom Mobile	8.54	7.93	7.20
Mobistar	9.42	9.94	9.02
BASE	11.03	12.52	11.43

<sup>85</sup> CALLS MADE AND RECEIVED BY A SUBSCRIBER TO A BELGIAN MOBILE NETWORK, WHEN HE IS ABROAD.

<sup>86</sup> INCLUDING ROAMING IN: CALLS RECEIVED BY A FOREIGN MOBILE NETWORK SUBSCRIBER WHO IS VISITING BELGIUM.

Evolution of national terminating traffic  
Source: operators (BIPT)



## ROAMING

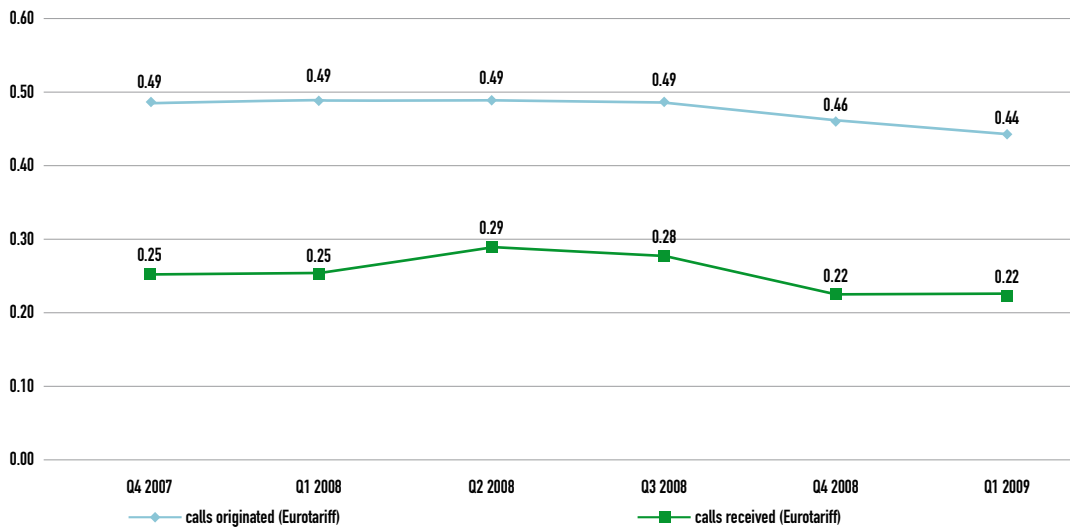
Since the introduction of the Eurotariff in September 2007<sup>87</sup> the cost of mobile calling when visiting another EU country is limited to 49 eurocent a minute. Receiving calls may only cost 24 cent a minute maximum (excluding VAT).

On 30 August 2008 the maximum rates were again lowered to 46 eurocent per minute for calls originated and 22 eurocent a minute for receiving calls.

In Belgium the implementation of these rates in 2008 led to new decreases of roaming rates for calls within the EU.

A Belgian traveller originating an intra-Community call while visiting another EU Member State paid 10% less at the end of 2008 than at the end of 2007. For receiving a mobile call in another EU Member State he paid 12% less over the same period.

Average price in euro per minute charged for a roaming call inside the EU (Eurotariff)  
Source: operators (BIPT)

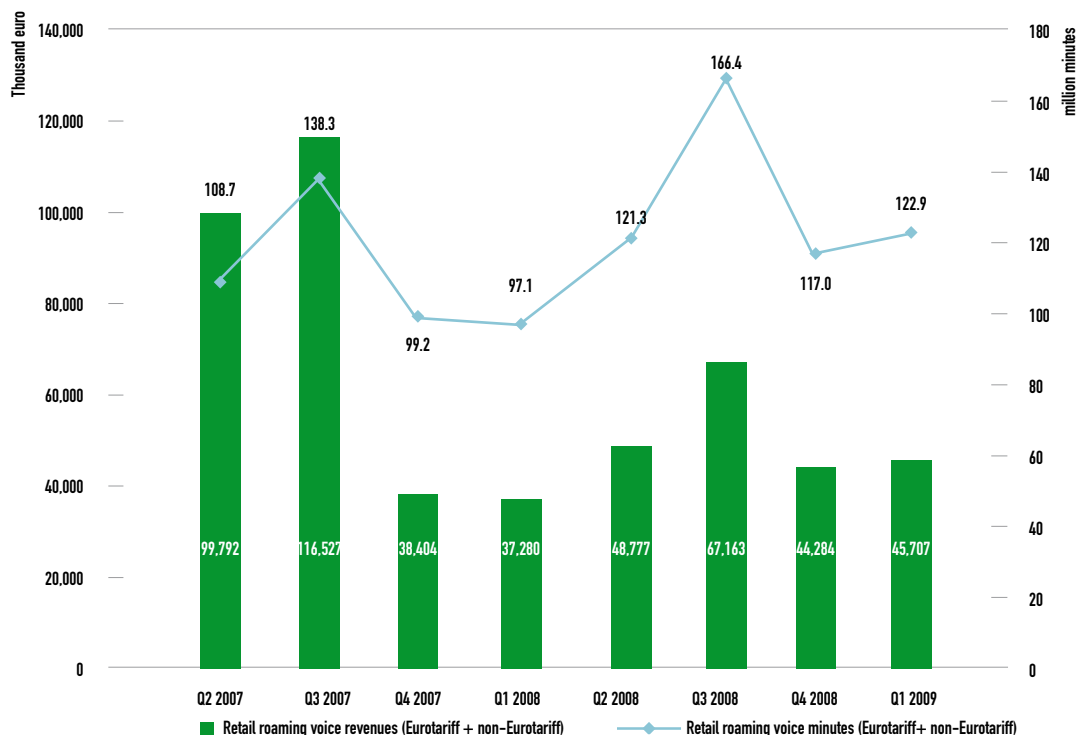


The lower roaming rates could not be compensated by the growth of the roaming traffic.

This is illustrated by a comparison of the retail roaming rates and minutes over the period from April to December in 2007 and in 2008: an 18% increase of roaming traffic results in 37% less roaming revenues.

Retail roaming EU/EAA (Eurotariff + non-Eurotariff): volume and revenues

Source: mobile network operators (BIPT)



On 8 June 2009 the EU Council of Ministers supported a further decrease of European maximum rates for calls to and from foreign countries. As a result call charges were again lowered on 1 July 2009.

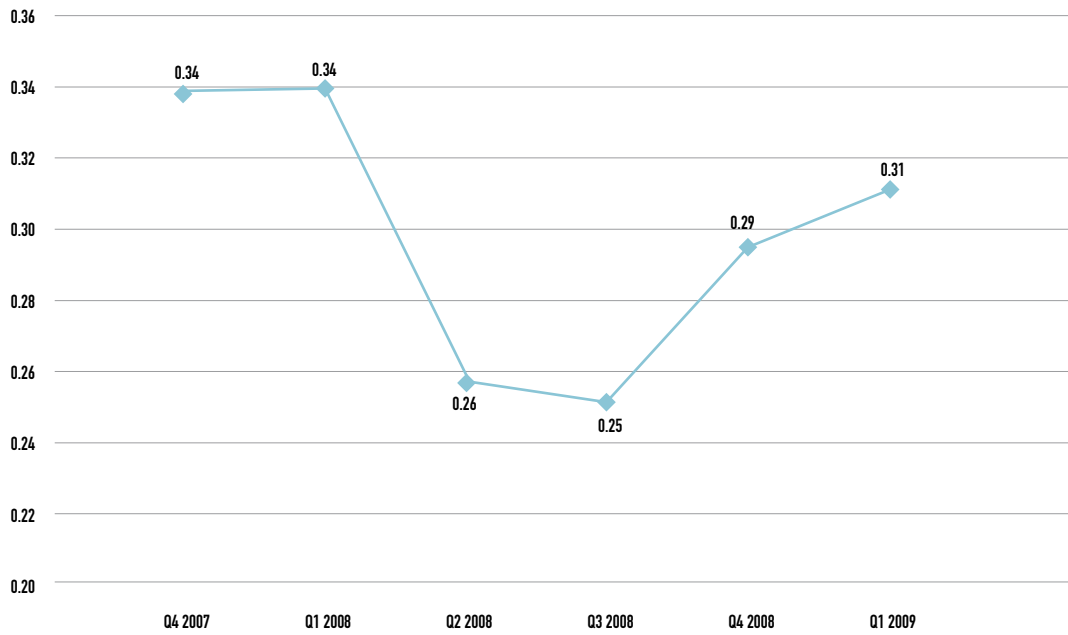
A telephone call from an EU Member State to Belgium should cost maximum 43 eurocent a minute (excluding VAT) from 1 July 2009. On 1 July 2010 the maximum rate will again be lowered to 39 cent per minute and on 1 July 2011 to 35 cent.

Being called while abroad will also be cheaper. The roaming rate for such an incoming call was lowered to 19 eurocent from 1 July 2009. On 1 July 2010 and 2011 further decreases will follow, respectively to 15 and 11 cent.

The second roaming regulation additionally introduces per second billing after the first 30 seconds when originating a roaming call and from the first second when receiving a roaming call.

SMS and data roaming rates were regulated for the first time from 1 July 2009. Sending a text message from abroad must not cost more than 0.11 euro (excluding VAT) from July 2009. In the first quarter of 2009 the average price for a Belgian subscriber still amounted to 0.311 euro.

Retail roaming SMS (euro per SMS)  
Source: mobile network operators (BIPT)



For data the EU doesn't impose a maximum retail price, but caps the wholesale price charged between operators when their customers are surfing on the other operator's network abroad. That price should be 1 euro maximum from 1 July 2009. In July 2010 it will be 80 cent, and in July 2011 50 cent.

## SMS

During 2008 the use of SMSs increased by 23% to 8.03 billion text messages. Active mobile subscribers sent 62 text messages a month on average in 2008 compared to 54 in 2007.

SMS messages per active mobile subscriber (per month)  
Source: mobile network operators (BIPT)

