A NEW NETWORK OF KNOWLEDGE

for researchers, academics and students



ANNUAL REPORT 2007

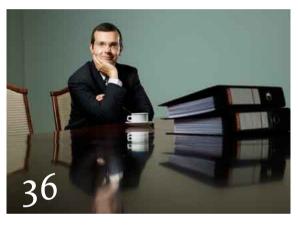












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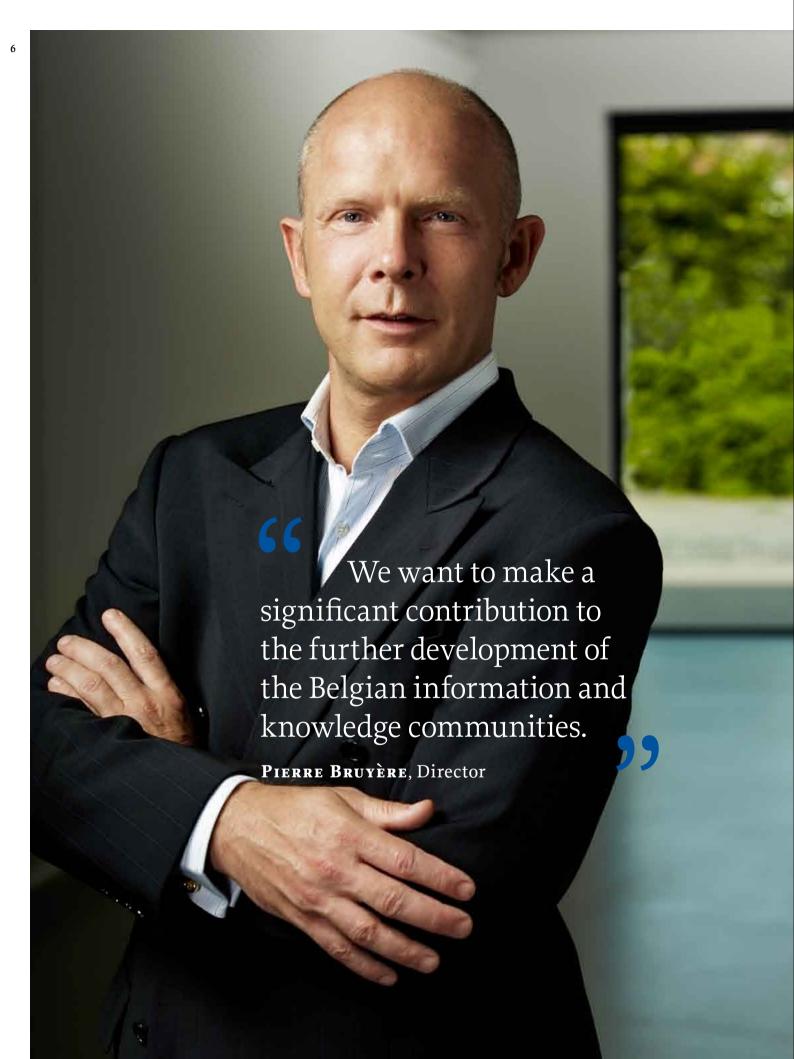
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Managing director, IBBT

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Head of Networks unit, BELNET



AN ENLIGHTENING YEAR

In 2007, BELNET implemented what it had researched, planned and negotiated over the previous two years. The high point of the year came in December, when the new BELNET network was officially launched. This new network is not only a step forward for BELNET and for the Belgian research and educational communities, it has also put our country on the worldwide knowledge and information communities' map.

For several different reasons, the new BELNET network is a milestone. The implementation was a huge project, in which all BELNET's staff and our partners were intensively involved. We began the preparatory research in 2005, and in 2008 our clients migrated to the new network. In the intervening period, BELNET invested a great deal of resources to create this new infrastructure.

The new BELNET network provides a virtually definitive answer to the continued demand for more network capacity. Henceforth, researchers, academics and students can work and communicate using enormous bandwidth. Perhaps the best way to explain the new situation is to compare it to a railway network. Whereas BELNET's previous network only rented one railway line on which you as user could take an intercity train, we now have our own rail network with 42 lines over which you can travel using a high speed train. Via our own optical network equipment and lightpaths in a fibre optic cable, our clients can obtain up to 42 times the basic capacity of 10 gigabits per second [Gbps]. By activating a lightpath, we create a private railway between two locations, in Belgium, but also internationally. For research, educational and governmental projects which require huge calculating and storage power, such

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From now on, researchers, academics and students can work with virtually unlimited bandwidth.

private railways are sometimes a necessity, and their capacity can range from 10 to 420 Gbps. Ten Gbps is 2,500 times faster than 4 megabits per second [Mbps], the connection speed used by most broadband clients in Belgium, and 500 times the capacity of the fastest broadband Internet service that you can subscribe to as a consumer. Furthermore, there are no limits to the monthly data volumes that BELNET users can upload and download.

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We now offer <u>super-fast</u> connection with the major international research networks.

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As it seems that the demand from researchers and academics for more bandwidth appears to be definitively solved, we can concentrate on advice, service and quality assurance over the next few years. In this way, we can stimulate education and research in Belgium even further. In 2007, three new staff joined the Customer Service department.

The Customer Service department will help our users to make optimum use of the new BELNET network. The network offers a whole range of new advantages. It includes the use of lightpaths for large, secure and direct data streams between two computers.

Using lightpaths, researchers can experiment without any delay with supercomputer applications, multimedia, remote surgery and other applications which require a lot of bandwidth. But it's not just for such research applications that the BELNET network offers added value. Organisationally, it is also an important step forward for the research and educational worlds. Partner colleges and universities can now centralise some of their services more easily such as computer facilities.

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The Belgian information and knowledge communities have developed yet further. They have become richer, more colourful and more competitive.

"

In the past, BELNET rented its infrastructure network, but since 2007 we have become an operator. Thanks to excellent collaboration with the Flemish Community, the Walloon Region and a few private companies, we were able to install a fibre optic infrastructure quickly and cost-effectively. An earlier study that we carried out steered us in this direction for several reasons. With our own infrastructure, we can work on a 15-year cycle and are no longer dependent on short-term rental contracts of 3 to 4 years. This means we can adapt better to the needs of our connected organisations and deliver services that commercial telecom operators do not offer, but which are very important for the educational and research worlds.

The international importance of this new research network cannot be overstated. Academics and researchers will be able to collaborate better with foreign colleagues. They get a super-fast connection to the important European Géant2 network and to other research networks around the world. This connection makes cross-border collaboration between scientists possible. On this level, we are undoubtedly at the beginning of a new era in the history of science. Finally, other sectors will also reap the benefits of these developments over time. The BELNET network is an important step forward for the Belgian educational and research world.

It is also with some satisfaction that we celebrate our fifteenth anniversary in 2008. There is another reason that makes 2008 a special year: in May, BELNET hosted the TERENA Networking Conference. TERENA is the European organisation of research and educational networks and the conference placed our country on an international stage.

The success of the conference and of all the other activities was the result of teamwork. BELNET's employees form a cohesive team which will continue to follow that path enthusiastically. I thank them personally for their cooperation and dedication. They have given the best of themselves and this had led to excellent results.

Pierre Bruyère Director

OUR MISSION

On the one hand, BELNET stimulates scientific development through innovative high-quality network infrastructures and associated services, to the benefit of Belgian higher education and research. On the other hand, BELNET accelerates the growth of the knowledge and information community thanks to the expertise it has built up, its unique position in the market and its economies of scale.

OUR

STRATEGIC OBJECTIVES

I.

BELNET intends to meet the needs of educational and research institutions and their end-users as far as network infrastructure and services are concerned in an optimum manner.

2.

BELNET intends to deliver innovative networks and applications which will adapt to future needs.

3.

BELNET intends to be a strong and visible organisation accessible to all educational and research institutions.

4.

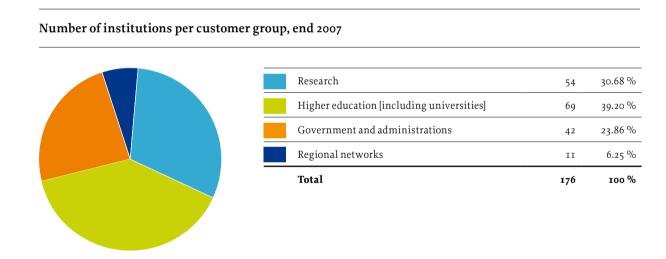
BELNET intends to deploy its means and staff in an efficient and effective way inside an optimised organisation. 66

More than <u>600,000 people</u> make <u>daily</u> use of our network.

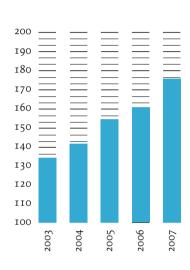
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CUSTOMERS AND USERS

By the end of 2007, 176 organisations were connected to the BELNET network, as opposed to 161 in 2006. Most of the 600,000 plus end-users in these organisations are researchers, academics or students. In 2007, quite a few new customers joined. Besides a number of hospitals, we also added colleges, large institutions or administrations such as the Gemeenschapsonderwijs, the cities of Leuven and Hasselt and the Belgian Post Office to our customer base.

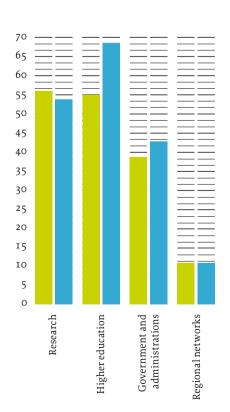


Growth in the number of customers and percentage growth over the previous year



2007	176	+9.32 %
2006	161	+3.87 %
2005	155	+9.15 %
2004	142	+5.19 %
2003	135	

Net growth in the number of new customers in 2007, per customer group



	2006	2007
Research	56	-2
Higher education [including universities]	55	+13
Government and administrations	39	+4
Regional networks	II	o
Total	161	+15



2.76 %

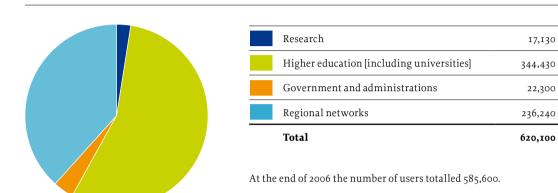
55.54 %

3.60 %

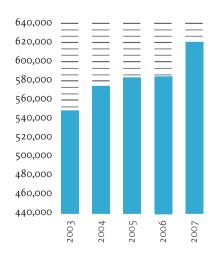
38.10 %

100 %

Number of end-users per customer group, end 2007



Growth in the number of end-users



2007	620,100
2006	585,600
2005	584,000
2004	575,000
2003	550,000



Partner colleges and universities can centralise some of their services such as the computing centres more easily.

ACTIVITIES

The most important event in 2007 was the launch of the new BELNET research network. BELNET devoted the greater part of its resources and staff to realise this project. In 2007, we also connected a lot of new colleges to the network. Furthermore, BELNET also took on different technological and customer-oriented initiatives.

2.I THE NEW BELNET NETWORK

Due to national and international developments in research and education, the previous generation of the BELNET network [which dated from 2002], could no longer cope with the needs of its users in an adequate manner. The new BELNET research network not only offers faster Internet access, it also offers direct connection with research networks around the world, such as the American Internet 2 and the European Géant2 networks. Using the new BELNET network, connected institutions can establish private network connections for specific applications. It is also possible to use advanced lightpath technology: with this technology, two computers or networks can easily communicate with one another securely and at high speed. Such connections can be set up on an ad hoc basis and this opens new horizons for scientific applications, even across borders.

The migration of existing users to the new network will take place in the first quarter of 2008. The new research network was created in partnership with the Walloon Region and the Flemish government. The partners' investment flowed back to the universities, colleges and research centres in the form of a 75% discount on their broadband charges. Moreover, from September 2007 until the end of the year, the institutions also received a free increase in their bandwidth. This led to an appreciable increase in the use of bandwidth in the last quarter of 2007. There is more about the new BELNET network later in this annual report.

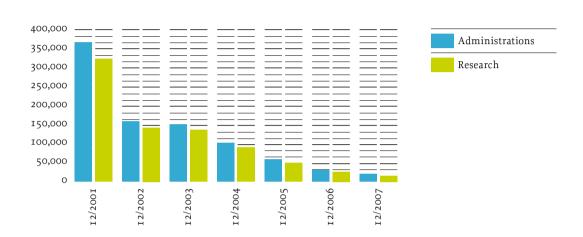
2.2 CONNECTING BELGIAN COLLEGES

Up until recently, many Belgian colleges used a simple ADSL connection or had to use a costly leased line to connect to the BELNET network. This situation has now changed. All Belgian colleges now have an economical yet super-fast connection to the BELNET network, and thus with other campuses, colleges, universities and international research networks such as the European Géant 2 and the American Internet 2 networks. This increase in connection speeds was absolutely essential in light of the academisation of college education within the framework of the European Bologna reforms. High connection speeds also formed part of the government's initiative concerning innovation, research and development, science and education. In 2007, the number of college connections to the BELNET research network showed strong growth. We witnessed an uptake of nearly 50%. Twelve Wallonian colleges and the University Faculty of Agronomic Sciences at Gembloux [FUSAGX] joined. In collaboration with the Wallonian and Flemish governments, BELNET ensured that approximately 40 Belgian colleges received a fibre optic connection with a bandwidth of I Gbps. From April 2008, nine colleges in Brussels will also have a high capacity connection. This means that the complete connection of all Belgian colleges will have been achieved. In the 2006-2007 period, BELNET invested € 2.3 million in this project.

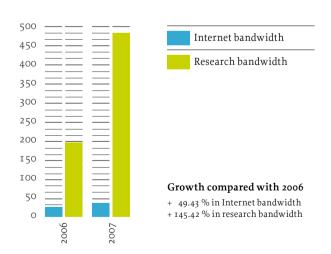
2.3 SCIENCEMAN

The 14 federal scientific institutions in the Brussels Region were formerly connected to the BELNET network through a line leased from a telecom operator. This meant that they couldn't enjoy all the advantages and services of the BELNET network and had to pay a relatively high price for rather low bandwidth. After a preparatory study, BELNET rolled out the ScienceMAN project in 2007 to equip the federal scientific institutions with a powerful connection, with a capacity of up to I Gbps. Thanks to this high speed access, the Royal Meteorological Institute, the Royal Library of Belgium, the Royal Museum for Central Africa, the State Archive, the Royal Observatory, the Royal Museums for Fine Arts and many other institutions can now carry out projects that previously weren't possible, such as digitising, IP telephony and videoconferencing. The further implementation of ScienceMAN will take place in 2008.

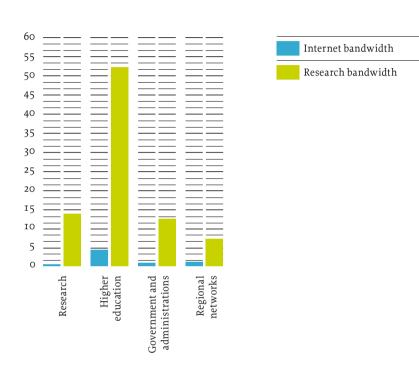
Evolution of the base price of a 100 Mbps connection in the period 2001-2007, in euro per year



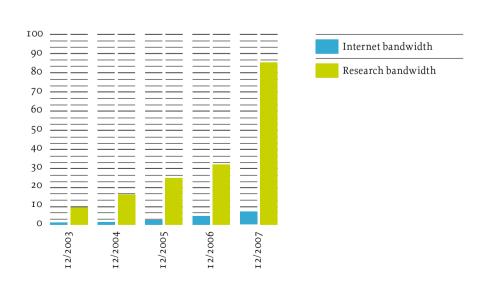
Split in types of bandwidth – average per customer, in Mbps



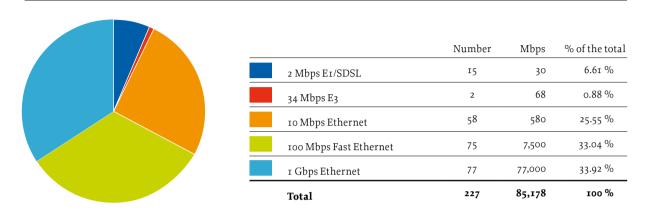
Split in bandwidth per customer group end of 2007, in Gbps



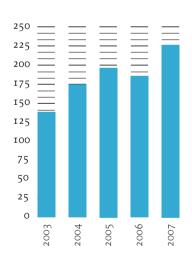
Growth of BELNET customers' total access capacity, in Gbps



Split of connections by access capacity



Percentage growth in the total number of connections over the previous year



2007	227	+22.04 %
2006	186	-5.10 %
2005	196	+12 %
2004	175	+6.06 %
2003	165	

2.4 QUALITY OF SERVICE TRIAL PROJECT

The BELNET network offers virtually unlimited bandwidth. But the connection at the customer's end can still cause some delays and data loss. For applications such as IP telephony and videoconferencing, this has unfortunate consequences. This is why BELNET examined the possibility of solving the problem through Quality of Service [QoS]. QoS reserves and guarantees bandwidth for certain sensitive or critical data streams so that they are not impeded by other data traffic. After a preparatory study in collaboration with the University of Leuven, a QoS project was initiated and successfully completed. In the course of 2008, BELNET will be able to offer the QoS option to its customers.

2.5 NETWORK LAUNCH EVENT

On Monday December 10th 2007, the official launch of the new BELNET network took place in the Résidence Palace in Brussels. Three renowned Internet specialists, Robert Cailliau, Bill St. Arnaud and Piet Demeester gave presentations. Robert Cailliau talked about his time at CERN and his contribution to the development of hypertext and the World Wide Web. Bill St. Arnaud, network director at Canarie, the Canadian equivalent of BELNET, stressed the significant contribution of optical network technology in the worldwide battle against global warming and, in general, to the development of a sustainable economy. Professor Piet Demeester [University of Gent], head of the Intec Broadband Communication Networks research group of the Interdisciplinary institute for Broadband Technology [IBBT], stressed the importance of BELNET to the Belgian research community.

We want to give our customers the maximum support so that they can get optimum use from our network.

"

2.6 BELNET NETWORKING CONFERENCE

The annual BELNET Networking Conference was held against the background of the new BELNET research network in 2007. After the general session in the morning, some 200 customers and users took part in one of three parallel sessions: Network, Services and Users, and Industry. For the first, several sponsors were also present. As always, the conference offered users the opportunity to exchange ideas and experiences. They could get to know BELNET staff and were brought up to speed about the latest developments in BELNET's network and services.

2.7 WORKSHOPS AND COURSES

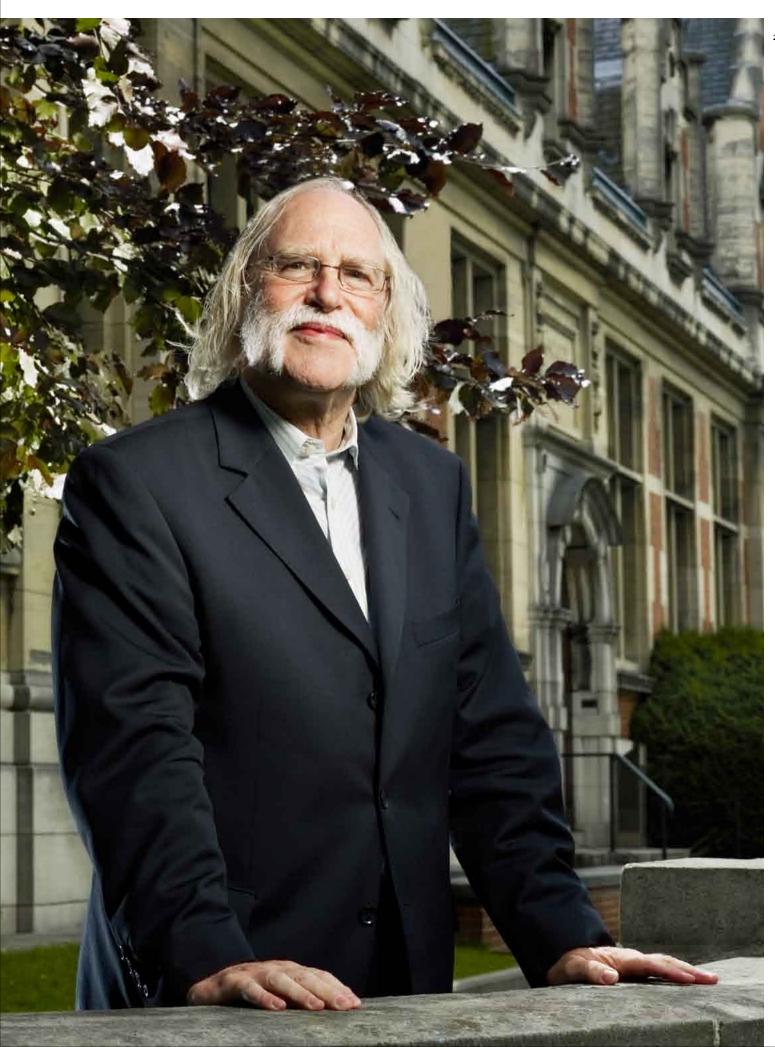
BELNET wants to provide its customers and end-users with excellent support so that they can make the very most of BELNET's services. There is also great demand for information about new technologies. Many customers and end-users also want to know more about the possibilities that our services offer. Through workshops and courses, BELNET aims to accommodate their demands. In March 2007, we organised a workshop for customers and end-users about Eduroam, a wireless network connection service at home and abroad. This was followed in May by a practical workshop about multicasting, in association with VUB [Free University of Brussels]. The BELNET BEgrid Seminar, whose major themes were security and data storage in a grid environment, was attended by 103 delegates in October. Over the course of the year we organised a grid course for 117 users in different locations. A further 22 participants attended the BEgrid for Computer Scientists course and another 20 took part in the BEgrid Cluster Installation course. You will find more about the Eduroam, Multicast and BEgrid services on pages 31 and 35.

2.8 FEDMAN

FedMAN stands for Federal Metropolitan
Area Network. This federal computer network was
built by BELNET on behalf of Fedict [the Federal
Public Service for Information and Communication
Technology] and links the federal administrations
in Brussels to one another and to the Internet.
FedMAN offers all connected organisations a
connection speed of 1 Gbps.

In 2006, FedMAN was completely overhauled. In 2007, a number of expansions and modifications were carried out. This gave the federal Finance and Justice services two physically separated data centres. Likewise, the federal government's current FedNAP portal is also split between two data centres. In the context of this Fedict project, a connection was laid between the two centres using three fibre optic circuits. In 2007, BELNET also began preparations for telephone traffic flow between the federal administration's Finance and Economy services over the FedMAN network. It is expected that this VoIP [Voice over IP] solution will be operational for both departments in 2008. The FedMAN network also provides access to TESTA [Trans-European Services for Telematics between Administrations], a private network which offers applications to connected member states. In mid-2007, the European Commission delivered the new version of the TESTA network, s-TESTA. Belgium was one of the first countries to migrate successfully to this new platform.





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By developing advanced services, we want to make new scientific research possible.

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SERVICES

BELNET not only provides its users with connectivity, but also with a range of advanced services. The research and educational worlds require specific solutions and possibilities.

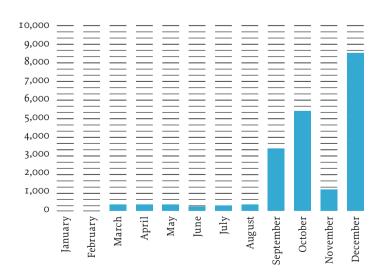
3.1 EDUROAM

Eduroam stands for educational roaming. It is an initiative of the TERENA [Trans-European Research and Education Networking Association] Mobility taskforce, of which BELNET is a member. The service is increasing the mobility of Belgian researchers, academics and students. Eduroam offers education and research users secure wireless access to the Internet from their own and other

institutions, at home as well as abroad. All they need for access is a single user name and password. In 2007, Eduroam was used 19,198 times. The service was operational in eight institutions during the 2007/8 academic year.

http://eduroam.belnet.be/

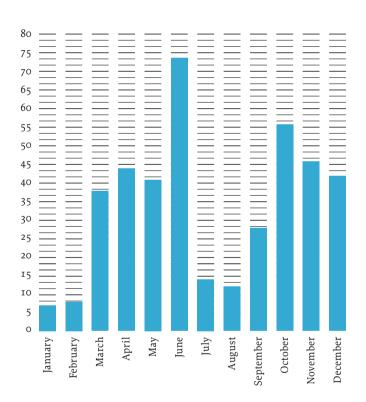
Eduroam - number of sessions or logins in 2007



3.2 VIDEOCONFERENCING

Videoconferencing with more than two parties requires a special infrastructure. For this application, BELNET offers two Multipoint Control Units [MCUs]. In 2007, 410 videoconferences were held using this service.

Videconferencing – number of sessions in 2007

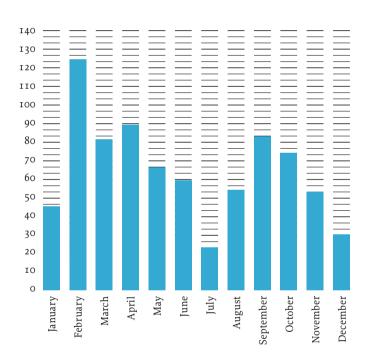


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3·3 SERVER CERTIFICATE SERVICE

BELNET's Server Certificate Service [SCS] makes secure connections between websites possible by supplying official digital SSL certificates [Secure Sockets Layer]. This service has been highly successful. In 2007, BELNET supplied 781 SSL certificates. This shows that educational research institutions find security important and that they want to offer secure services to their users.

Server Certificate Service – number of certificates issued in 2007



3.4 VIRTUAL LEASED LINES

Virtual Leased Lines [VLL] are an economical and simple alternative to expensive leased lines. These have proved very successful. In 2007,

a significant number of VLLs were installed. Within the context of associations between universities and colleges, such connections are also extremely relevant.

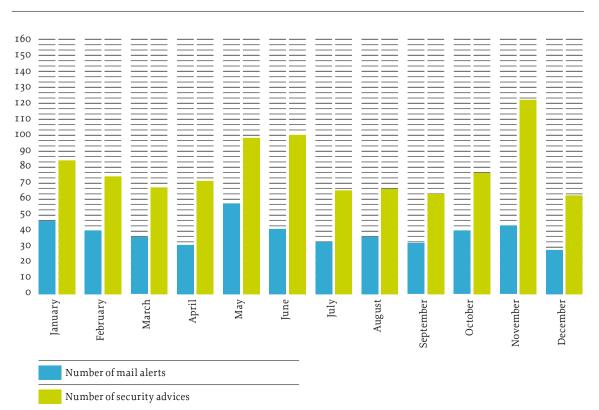
3.5 COMPUTER EMERGENCY RESPONSE TEAM

The BELNET Computer Emergency Response Team [CERT] is the centre for prevention and assistance with computer security incidents. CERT provides permanent surveillance, international information exchange and cooperation. It disseminates information about the latest security vulnerabilities via its website, publishes a newsletter and sends e-mails with

security alerts or advice. A security alert is a personal message: it concerns a specific problem of a specific customer. It can, for example, deal with an attempted computer break-in at a particular institution.

A security advice is a general message which is sent to all CERT contacts. In total 463 mail alerts and 948 security advices were sent in 2007.



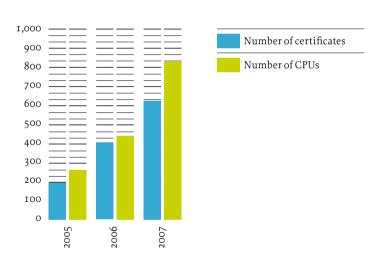


3.6 BEGRID

Gridcomputing is a technology used for processing extremely large amounts of data by connecting computers all over the world. This technology makes new scientific applications possible in areas such as high-energy physics, astrophysics, hydrology, medical imaging and mathematics. Thanks to the support of the Flemish government, since December 31st 2007, BEgrid now

comprises 830 processors as opposed to 430 the previous year. BELNET supplies certificates which provides access to the grid. In total, 624 BEgrid certificates were issued in 2007. These certificates also grant access to the European DataGrid test bed. More than half a million projects were executed on BEgrid, an equivalent of 158 years of CPU time. http://grid.belnet.be/

BEgrid - grid computing



3.7 OTHER SERVICES

Other BELNET services include IPv6, domain registration, IP addressing, multicast and access to an FTP server with software and documentation. Multicast is a technology for streaming high quality audio and video, and for live video applications. BELNET's FTP server has been a reference archive for years. Every day, more than 2 terabytes of data are downloaded.

The entire infrastructure has undergone a major upgrade and will be operational from the beginning of 2008. Naturally we also offer all the necessary support for each of our services. ftp.belnet.be



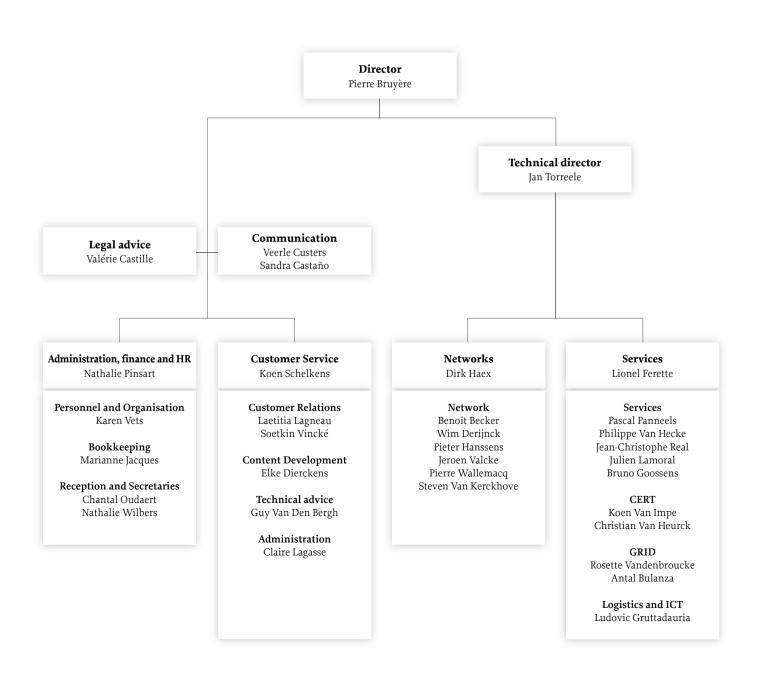
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In 2007, we placed strong organisational focus on developing a CRM system.

"

ORGANISATION

BELNET works to satisfy the needs and wishes of its users and connected organisations. Our organisation's work is aimed at their needs. In 2007, we took on nine extra staff to strengthen our organisation.





CHAIRPERSON

 Dominique Fonteyn, director general Research & Applications, FPS Science Policy¹

VICE-CHAIRPERSON

PIERRE BRUYÈRE,
 director, BELNET²

VOTING MEMBERS

- ROBERT VAN DE WALLE, general advisor, FPS Science Policy³
- PAUL LAGASSE,
 professor at the University of Gent ⁴
- YVES DELVAUX, director of operations & technology, A.S.T.R.I.D.5

- JOHAN VAN HELLEPUTTE, vice-president, IMEC
- HENRI MALCORPS, director of the Royal Meteorological Institute
- MARC ACHEROY, professor at the Royal Military School



MEMBERS WITH AN ADVISORY ROLE

- MARIANNE JACQUES, accountant, BELNET
- PAUL ANNICAERT, general inspector, FPS Finance

SECRETARIES

NATHALIE PINSART,
 Administration, Finance & HR⁶

4.1 MANAGEMENT COMMITTEE

BELNET is managed by its director Pierre Bruyère and by a management committee. The management committee is, amongst other things, responsible for the approval of the management plan, expansion, the investment plan, accounts, rates, public tenders and appointments.

4.2 STAFF

In 2007 nine new staff were appointed. In two cases, these were to replace administrative personnel. Four new staff members bolstered the technical team and three joined the Customer Service department, to provide more advice to customers and end-users. There were also major changes in terms of manpower. With 62% of staff being under the age of 36, BELNET remains a young organisation. Most [approximately 77%] are employed at level A. Of all staff members, 36% are women and 64% men, 54% Dutch-speaking and 46% French-speaking. About 74% use public transport to get to work. Approximately 42% practice regular teleworking, 35% make occasional use of the facility. Contractually, 61% are employed by BELNET, 21% by FPS Science Policy and 19% through outsourcing.

4.3 CUSTOMER RELATIONS MANAGEMENT

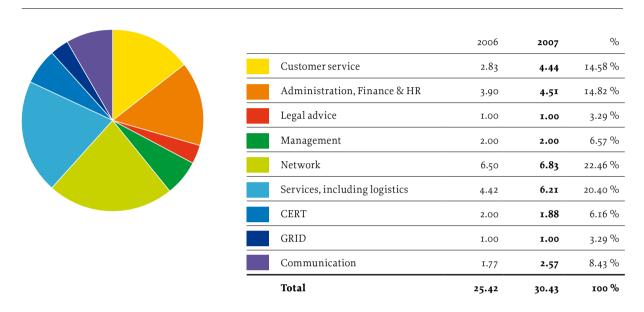
In 2007, the Customer Service department worked intensively on the implementation of a professional and all-encompassing Customer Relations Management platform. The equivalent of two full-time staff and one external consultant were involved in this over the course of one year. In 2008, the CRM system will ensure that customer administration and contact management run more efficiently. With this platform we will also follow up the needs of customers and the way in which they use our services.

4.4 PARTNERS

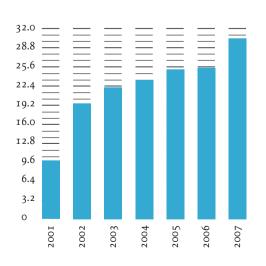
BELNET works in partnership with domestic and foreign organisations so that, together, they can shape the knowledge community:

- Belgian universities, colleges and research centres
- the Flemish government
- the Walloon Region
- the Géant2 international research network
- Fedict, the Federal Public Service for Information and Communication Technology
- TERENA, the Trans-European Research and Education Networking Association
- ISPA, the Internet Service Providers Association Belgium
- DNS BE, the central organisation for the registration of '.be' domain names
- Euro-IX, the European Internet Exchange Portal.

The average number of employees in different departments, in full-time equivalents

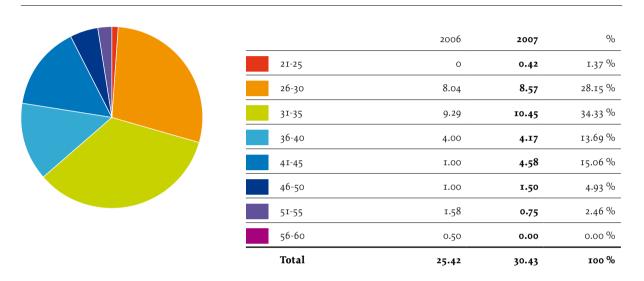


The evolution of staff since 2001, in full-time equivalents



2007	30.43
2006	25.42
2005	25.00
2004	24.33
2003	22.33
2002	19.33
2001	9.08

Number of staff by age, in full-time equivalents



The ratio of female to male staff at BELNET, in full-time equivalents

Total	9.1	19.3	22.3	24.3	25.0	25.4	30.43
Men	5.6	13.3	15.8	18.1	17.0	16.3	19.38
Women	3.5	6.1	6.6	6.3	8.0	9.2	11.05
	2001	2002	2003	2004	2005	2006	2007

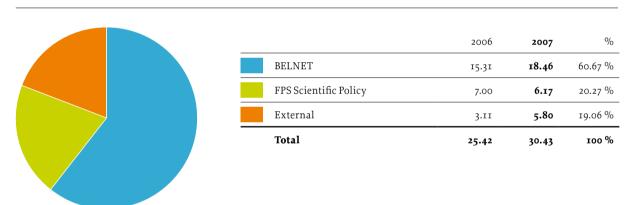
The ratio of administrative to technical staff, in full-time equivalents

nnical 15.25	16.92 55.60 %
ninistrative 10.17	13.51 44.40 %
2006	2007 %
	2007

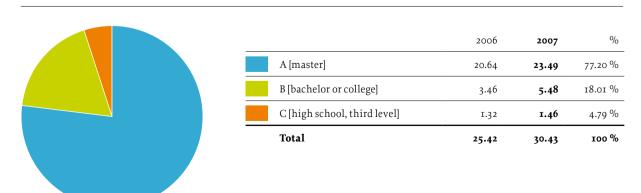
The ratio of Flemish to French speaking staff, in full-time equivalents

Total	25.42	30.43	100 %
French	13.61	14.09	46.30 %
Flemish	11.81	16.34	53.70 %
	2006	2007	%

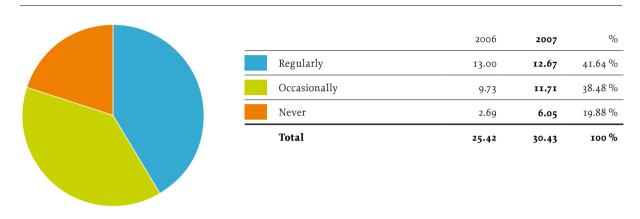
Staff, divided by contract, in full-time equivalents



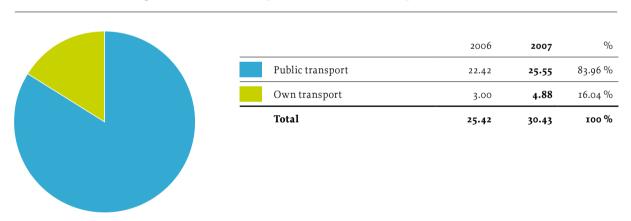
Staff, divided by level, in full-time equivalent



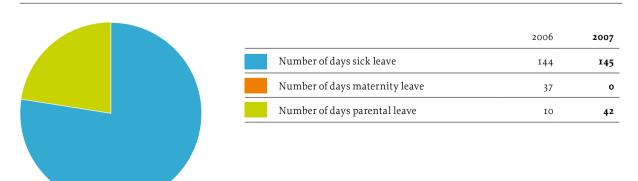
Staff, according to the frequency of their home working, in full-time equivalents



Staff, divided according to the mode of transport used, in full-time equivalents



Number of absentees





5.

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Our revenues have increased thanks to the greater number of customers and their demand for extra bandwidth.

FINANCES

BELNET is a financially healthy organisation with an attractive pricing policy combined with a future-oriented investment strategy.

5.1 RESULTS

The increase in invoiced services is first and foremost the result of an increase of 16% in revenues from returning business [€ 1,811,000 in 2007 as opposed to € 1,562,000 in 2006]. Despite the drop in prices for the Internet bandwidth that BELNET handles, the revenue increased as a result of a larger number of customers and their growing demand for bandwidth. For 2007, revenue from the FedMAN2 project amounted to € 1,407,000, compared with € 1,338,000 in 2006. The original contract with Fedict for a total of € 8,000,000, stipulated that services be delivered over a four year period, from March 1st 2006 until February 28th 2010. During the 2007 financial year, two modifications were agreed in an appendix to the contract. On the one hand, the contract was extended by a year up to and including February 28th 2011. On the other, the appendix amended the total budget [€ 7,360,000], in relation to specific services and invoicing and payment conditions.

Personnel costs have risen slightly in comparison with the previous year due to an increase in the average number of staff in 2007. The increase in financial revenues compared with the previous financial year is largely explained by the higher level of investment during the 2007 financial year.

5.2 BALANCE

The notable investments during the 2007 financial year [€ 9,623,000], mainly concern network equipment [€ 5,949,000], servers [€ 454,000] and fibre optic connections [€ 2,778,000] which were required for the construction of the new BELNET network. Depreciation in the accounts for the 2007 financial year amounted to € 3,486,000 at an annual depreciation rate of 25% for the computer infrastructure, 20% for mobile material and 10% for the remaining capital goods. It should be noted that the different agreements for providing fibre optic connections run over the next 15 years and are fully amortised over 4 years.

The greatest amount receivable over the year was a payment of € 2,431,000 from the VAT authorities. This amount consisted mainly of VAT recovered from incoming invoices for investment received during the second half of the year.

The increase in assets carried forward is, above all, due to the maintenance costs [€ 1,498,000] of the new BELNET network, which were paid upfront in 2007 for the financial years 2008 up to and including 2011. As in the previous year, the balance consists

mainly of taking the second tranche [\in 3,987,000] of the annual grant into account for the 2007 financial year, which was received in January 2008. The section 'Net assets or own assets or net liabilities' amounted to \in 16,751,359 and consisted of the following elements:

Positive balance of the final accounts	€ 1,026,740
Reserve fund	€421,888
Transfer of our own assets at the beginning of the financial year	€ 15,302,730

Debts due in no more than one year increased significantly. They mainly involved invoices for investment in, and maintenance of, the new BELNET network which were received at the end of the financial year.

The drop in transitory liabilities and unallocated amounts is mainly the result of a transfer of profits of \in 1,407,000 from the FedMAN2 project [the transferred balance was \in 2,662,000 at the end of 2006 as opposed to \in 1,255,000 in 2007].

Balance sheet, in euros

Assets	2006 Financial year	2007 Financial year
Tangible fixed assets	1,937,091	8,074,900
External receivables due in no more than one year, not subject to accounting system	59,007	2,491,152
External receivables due in no more than one year, subject to accounting system	504,618	114,388
Share certificates and treasury certificates	12,693,000	10,443,000
Bank and giro accounts – cash in hand and stamps	87,425	314,807
Transitory assets and unallocated amounts	4,468,346	6,095,530
Total assets	19,749,487	27,533,777
Liabilities	2006 Financial year	2007 Financial year
Net assets or own assets or net liabilities	15,724,617	16,751,358
External debts due in no more than one year, not subject to accounting system	394,629	9,227,164
External debts due in no more than one year, subject to accounting system	652,952	172,754
Transitory liabilities and unallocated amounts	2,977,289	1,382,501
Total liabilities	19,749,487	27,533,777

5.3 BELNET BECOMES SUBJECT TO VAT

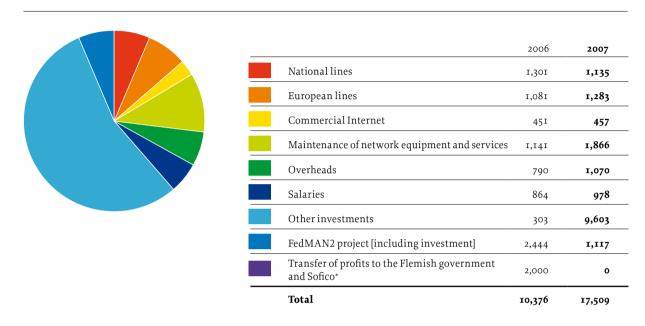
The programme law of December 27th 2006 amended Article 6 of the VAT rulebook. Accordingly, public institutions engaged in certain commercial activities, as outlined in Article 6, became liable for VAT. As BELNET is an independently managed state service, mainly active in telecommunications [an area expressly mentioned in Article 6], it therefore became liable to VAT under the rules of Article 6 on July 1st 2007.

On November 20th 2007, BELNET was identified as liable to VAT, effective retrospectively from July 1st 2007. As a result of this modification, BELNET's bookkeeping department spent a lot of time reorganising its supplier and customer invoices and its accounting procedures to meet the demands of the VAT authorities.

Profit and loss account, in euros

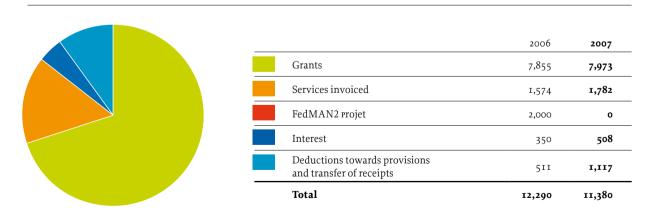
Expenditure	2006 Financial year	2007 Financial year
Other use of consumer goods and external services	5,866,727	5,963,924
Increased property and diverse taxes	0	10,301
Direct and indirect personnel salaries	1,011,892	1,151,214
Economic depreciation on accommodation expenses, intangible and tangible fixed assets	1,009,952	3,485,653
Transfer of income (expenditure) other than social security payments	2,060,106	68,915
Capital losses on existing assets and liabilities	228	0
General accounting result	1,490,647	1,026,740
Total expenditure		
•	11,439,552	11,706,747
Income	2006 Financial year	11,706,747 2007 Financial year
INCOME Services invoiced		
	2006 Financial year	2007 FINANCIAL YEAR
Services invoiced	2006 Financial year 2,899,730	2007 FINANCIAL YEAR 3,230,433
Services invoiced Interest and other financial income	2,899,730 350,453	3,230,433 507,534
Services invoiced Interest and other financial income Extraordinary income	2,899,730 350,453 II,422	3,230,433 507,534 -4,220

Excerpts from the budgetary account: expenditure in 2007, in thousands of euros

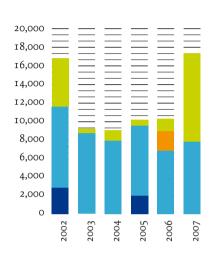


 $^{^{\}ast}$ in the context of the collaboration agreement for the connection of colleges in Flanders and Wallonia

Excerpts from the budgetary account: income in 2007, in thousands of euros

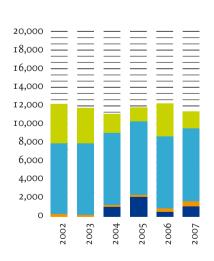


Summary of expenditure, in thousands of euros



Tot	tal	10,376	17,509
Inv	vestments	1,438	9,603
Tra	ansfer of profits	2,060	o
Red	curring expenses	6,879	7,906
Int	ernal transactions	0	0
		2006	2007

Summary of income, in thousands of euros



Total	12,290	11,380
Sales of services	3,574	1,782
Financial profits	350	508
Transfer of income	7,855	7,973
Internal transactions	511	1,117
	2006	2007







DIRK HAEX

Head of Networks unit, BELNET

Dirk Haex coordinates the network unit, which focuses on the design, implementation and further development of the services on the networks that BELNET runs.

"We're mainly involved with optimum performance of the BELNET research network, the BNIX network (Belgian National Internet eXchange) and the FedMAN network. Amongst other things, in 2007, we built the new BELNET network: we have become responsible for our own transmission network. We also took charge of the connections between the FedMAN data centres which run the new portal site, www.belgium.be."

"Because highest quality standards are our prime consideration, the competence of our staff is crucial. BELNET has extremely capable and flexible people, who have a deep understanding of business: our staff are our greatest asset. I think that BELNET has a glittering future. Our very powerful and reliable research network offers a solid base for developing even more added-value service networks for our customers. There's a lot in the pipeline for 2008."



Dirk Haex ¹
Pierre Wallemacq ²
Benoît Becker ³
Jeroen Valcke ⁴
Wim Derijnck ⁵
Pieter Hanssens ⁶
Steven Van Kerckhove

THE BELNET RESEARCH NETWORK

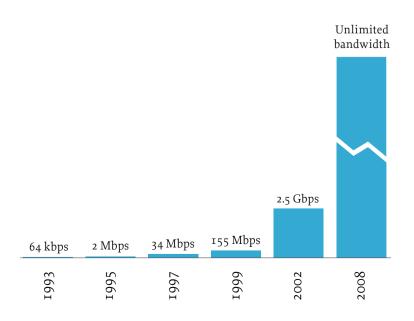
In 1993, Belgium was one of the few countries without its own research network. But fifteen years later our country is at the leading edge, up with the front runners. The new BELNET network, which was launched at the end of 2007, gives universities, colleges and research centres unforeseen opportunities. The high speed and secure connection of local networks belonging to Belgian teaching research institutions allow connection to other research networks all around the world.

6.1.1 UNLIMITED BANDWIDTH

With the new BELNET network, the Belgian educational and research world has access to an infrastructure which allows users to operate on an international level. It not only offers virtually unlimited bandwidth, but also all kinds of secure

connection, such as any-to-any connectivity over a virtual private network. The connection speed has risen to 10 Gbps or multiples of it, up to 42 times 10 Gbps.

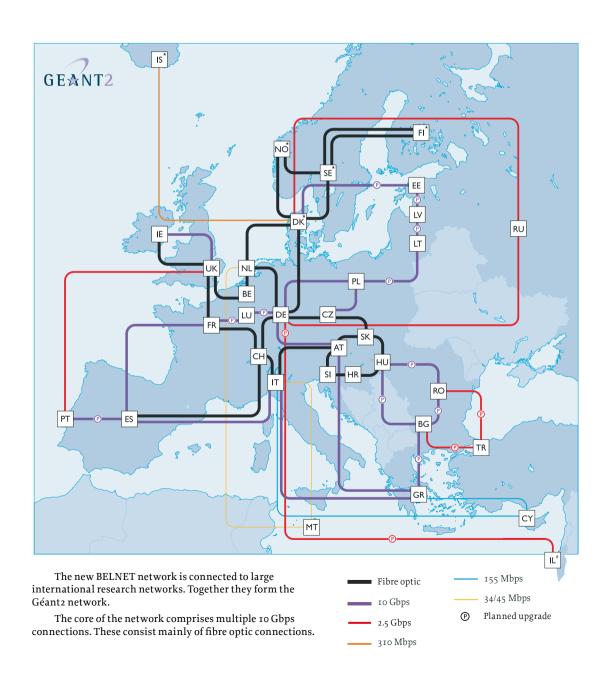
Growth of backbone bandwidth since 1993



6.1.2 WORLDWIDE CONNECTIVITY

Users of the new BELNET network can share information with colleagues on the European Géant2 research network at extremely high speed. Via Géant2, the Belgian academic and research community is in contact with 30 million users in

34 countries across Europe. Furthermore, through its partnerships, BELNET offers users in the higher education and research worlds access to other research networks, like the American Internet2. Belgium's place in worldwide research is thus secured.



6.1.3 NEW NETWORK SERVICES

The new BELNET network includes a number of new services, like optical private networks and lightpaths. Using these services, customers and endusers can establish secure, high-speed connections with computers at home and abroad in a relatively simple and economical way. From 2008, BELNET will also offer a Quality of Service option on the network, making it possible to reserve specific bandwidth for critical data streams.

6.1.4 NETWORK INFRASTRUCTURE UNDER OUR OWN CONTROL

For BELNET to be able to deliver these services, owning its own fibre optic infrastructure was indispensable. BELNET has obtained the indefeasible right of use to over 1,651 km of fibre optic cable for a period of 15 years. The largest part of this was obtained through a cooperative agreement with the Flemish Community and the Walloon Region. In addition, another 593 km of fibre optic cable was bought from commercial operators. Since the fibre optic falls under BELNET's own control, we can install our own optical equipment on the network, allowing us to activate shielded high-speed connections with capacities of up to 42 x 10 Gbps. Furthermore, we have equipped the network with state-of-the-art access routers with a capacity of 60 Gbps and with central routers which have

a capacity of 800 Gbps.



In 2008 we will provide a Quality of Service option so that bandwidth can be reserved for critical data streams.



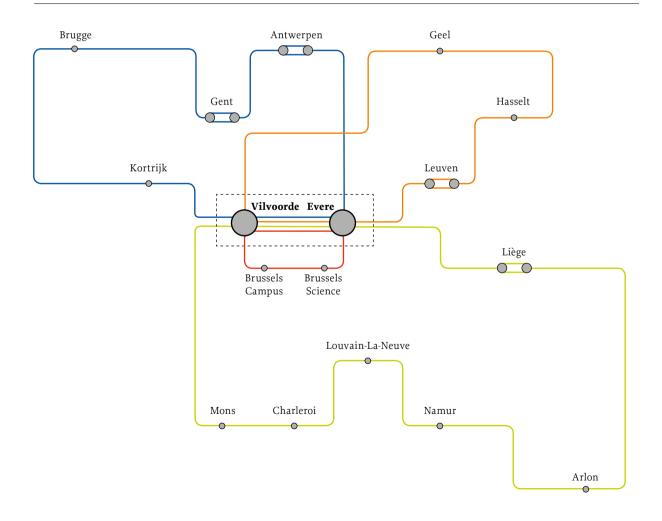
6.1.5 THE NEW BELNET NETWORK

The new BELNET network is over 1,650 km long. The number of network nodes has grown from 15 to 21. They are located in the universities and colleges and are linked to one another via a ring structure. The new network is hybrid: it combines a traditional IP network with an optical layer. The optical layer is made from fibres of transparent optical glass no thicker than a human hair. Thanks to these fibres, direct optical connections can be created between two points [lightpaths], for large

and secure data streams. Internet traffic uses the traditional IP network. The connection with the commercial Internet is via the worldwide Internet, through Internet nodes such as BNIX [Belgium], AMS-IX [the Netherlands], SFINX [France] and LINX [Great Britain].

The national network is connected with Géant2 and, via that network, to other European,
North American and Asian research networks.

The new BELNET network



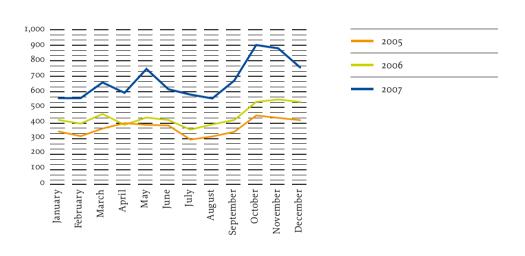
6.1.6 NEW DATA CENTRES

Together with the new BELNET network, two new Points of Presence [PoP] have come into operation in Vilvoorde and Evere. These nodes are housed in professional data centres which meet all the relevant technical standards. With these two new centres, the network's security and reliability are optimally guaranteed. BELNET's PoP location in Wetenschapsstraat was no longer able to adapt to meet future needs and will be dismantled.

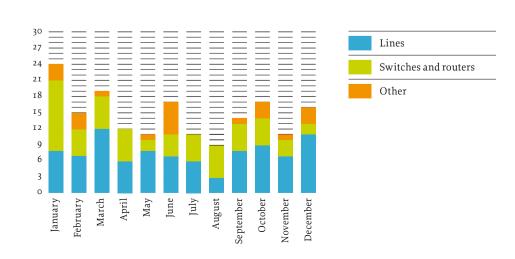
6.1.7 24/7 SERVICE DELIVERY

In order to be able to offer continuous service, BELNET has created a 24/7 Service Desk. This service for BELNET customers and the BNIX community acts when problems arise, collects feedback and sets up proactive diagnoses. The service is also responsible for the complete monitoring of the networks and network equipment.

Growth of external traffic in terabytes [TB] per month



Number of incidents by type, in 2007



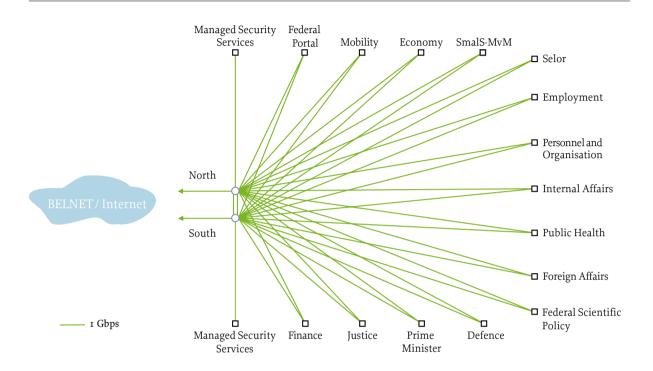
THE OTHER BELNET NETWORKS

BELNET is an Internet pioneer with extensive experience in building and managing networks. We not only set up the BELNET research network but, on behalf of the federal government service Fedict, we also built FedMAN, the computer network that connects federal administrations in Brussels with one another and with the Internet. We also control the BNIX [Belgian National Internet eXchange] network. BNIX offers Belgian Internet suppliers a central infrastructure for fast traffic between one another. By the end of 2007, 50 participants were connected to this network.

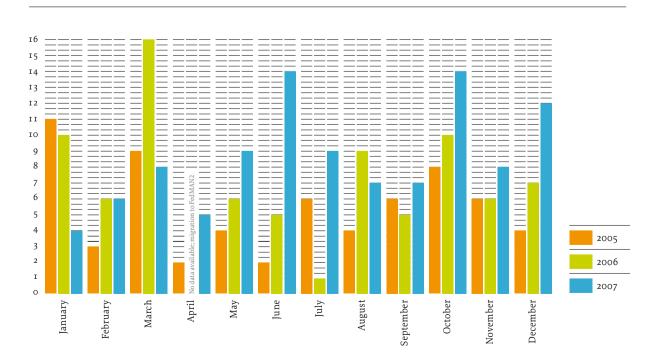
6.2.1 THE FEDMAN NETWORK

Access to all government applications like Tax-on-web and the Crossroads Bank is routed via the FedMAN network. Furthermore, FedMAN [Federal Metropolitan Area Network] allows government services to communicate with each other via FedNAPs [FedMAN Network Access Points]. Each FedNAP has redundant Gigabit Ethernet connections of 1 Gbps capacity to the network's central routers. These routers are connected to each other by two redundant fibre optic circuits, which increase the network's reliability. Via the BELNET network, the central routers offer access to the Internet.

FedMAN – network diagram



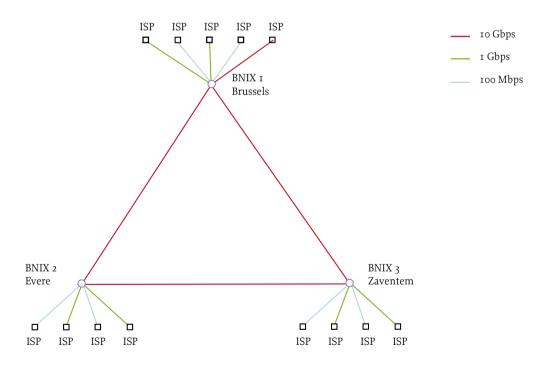
The FedMAN network – number of incidents



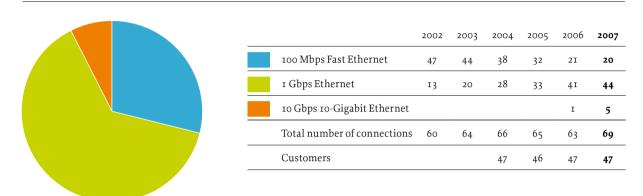
6.2.2 THE BNIX NETWORK

BNIX [Belgian National Internet eXchange] is built around three powerful switches which are located in the Brussels Region. These switches are linked to one another by three fibre optic connections with a capacity of 10 Gbps. Internet providers can connect directly to BNIX with speeds of up to 10 Gbps. Multicast protocols as well as IPv4 and IPv6 are supported.

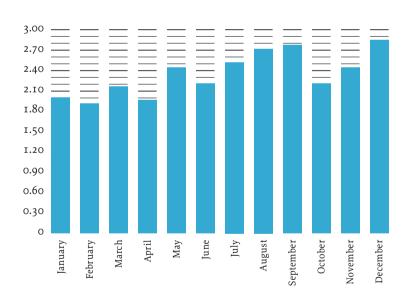
BNIX – network diagram



The BNIX network: number and types of connection



BNIX network volume in 2007, in petabytes [PB] per month



READY FOR THE FUTURE

In 2007, BELNET laid solid foundations for future developments in the areas of research and education with its new network. The BELNET network guarantees that Belgium can play a pioneering role in worldwide research and education. Its vast capacity makes new applications and experiments possible. It will also help scientists to deliver results over a shorter term.

With options such as lightpaths now available, the new technology anticipates the needs of tomorrow's academics and researchers. Over the next few years, BELNET will help them to make optimum use of these new possibilities. We are convinced that, in this way, we are heralding a new era and that with the new BELNET network, our country will play a leading role worldwide.

In 2008, BELNET will be celebrating its fifteenth anniversary with confidence and satisfaction. BELNET owes a great deal of thanks to all the people who have contributed to its success over the past fifteen years. By this, we are mainly thinking of all our connected organisations and users. We would also like to thank our partners from government, research, education and industry from the bottom of our hearts.

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We would like to thank the following people for their willing help and enthusiasm:

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- Dirk Haex and the staff of the BELNET Networks department
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If you would like to know more about the information in this annual report, please contact Sandra Castaño. You can contact her via communication@belnet.be or on 02 790 33 33.

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