



Stedenlink - Annual Report 2008

Stichting Stedenlink is a network of twelve cities and two provinces working together to promote the optimum use of ICT in the community. It is hereby essential that Open Access optical fiber networks are rolled out and that the social and economic interests of local (and regional) government institutions are served.

The Netherlands is an innovative country, developing into a knowledge economy. The Stedenlink partners contribute to this by cooperating in local initiatives. Stichting Stedenlink was founded in 2001.

Stedenlink focuses on the following key issues:

1. Stedenlink's first objective was to get the importance of investing in broadband onto the agenda. Attention then shifted to creating a general awareness that ADSL and cable are not sufficient to support broadband in practice: optical fiber networks are needed. An optical fiber infrastructure, interlocally linked through open digital exchanges (market places), had to be set up. Nowadays the importance of this is gaining more and more recognition.
2. These days Stedenlink focuses on the need for open networks, freely accessible services must be available everywhere; an electronic highway open to all.
3. Where possible, broadband services must be developed and upscaled in strategic alliances.

The following twelve cities and two provinces are members of Stichting Stedenlink:



Amersfoort, Amsterdam, Arnhem, The Hague, Deventer, Eindhoven, Enschede, Helmond, Leeuwarden, Rotterdam, Tilburg and Zoetermeer. Two provinces became candidate members of Stedenlink in late 2008: Gelderland and Overijssel.

Organisation

In 2008 Stichting Stedenlink's board was composed of representatives from the participating City Councils.

In June 2008 Hans Janssen (Tilburg) resigned as chairman of Stedenlink. Eric Helder (Enschede) has been appointed as new chairman and he is succeeded as vice chairman by Kees Bethlehem (Helmond).

The General Board met twice in 2008, the Executive Board six times. Stedenlink also has a core group composed of official

representatives of the participating municipalities. The work carried out by and for Stedenlink is performed as much as possible by members of this core group. A leading group has emerged from this core group that looks after the day-to-day affairs. The leading group consists of representatives from Enschede, Helmond, Leeuwarden, Deventer and Tilburg. These cities have tasks in fields such as knowledge sharing, foreign contacts, and the gathering and publishing of news. Deventer plays a coordinating role hereby and is responsible for Stedenlink's publicity and administration.



City Council/Province:	Elected member (Vice mayor)
Amersfoort City Council	Arriën Kruyt
Amsterdam City Council	Maarten van Poelgeest
Arnhem City Council	Willem Hoeffnagel
The Hague City Council	Frits Huffnagel
Deventer City Council	Gosse Hiemstra (EB, secretary/treasurer)
Eindhoven City Council	Erik van Merrienboer
Enschede City Council	Eric Helder (EB, chairman since June 2008)
Helmond City Council	Kees Bethlehem (EB, vice chairman since October 2008)
Leeuwarden City Council	Marga Waanders (EB)
Rotterdam City Council	Marc Harbers
Tilburg City Council	Joost Möller (since June 2008) Hans Janssen (chairman until June 2008)
Zoetermeer City Council	Bé Emmens
Gelderland Province	Marijke van Haaren (since January 2009)
Overijssel Province	Carry Abbenhues (since January 2009)

The public interest of optical networks deserves better

Eric Helder, chairman of Stedenlink since June 2008, wrote the article 'Het algemeen nut van glasvezel verdient beter' (the general usefulness of fiber optic deserves better). This article was published in the Netherlands Staatscourant on 22 January 2008 and can be found at www.stedenlink.nl. The article concludes that the social and economic usefulness of fiber optic networks is immense but that telecom communication legislation fails to treat fiber optic networks as a utility. The regulatory process does not provide for the adequate regulation of matters such as open networks and a transparent cost structure. Moreover, different parties, including Reggefiber and KPN, are setting up their own infrastructure. This creates a patchwork of FttH connections throughout the country owned by different companies. FttH stands for Fiber to the Home, this is fiber optic rolled out to the home. During the next few years more and more fiber optic will be rolled out, alongside (and replacing) the existing coaxial cable installations belonging to cable companies and KPN's copper network. The demand for fast communication will become so high that only the fiber optic network will be able to satisfy it. This will result in an undesirable monopoly position unless additional rules of play are developed on time.



To tackle this problem rules of play between the government and the market must be drawn up that guarantee that fiber optic networks will be treated as a utility. Legal conditions must be worked out governing the deployment of telecommunication networks.

Furthermore the economic and social interests of local (and regional) government institutions must be more explicitly guaranteed; for this purpose Stedenlink is willing to act as an interlocutor for the market and the national government.

Stedenlink has taken the initiative in setting up a national, independent platform where the market, institutions and the government meet to discuss issues related to the coupling of optic networks. This produced Stichting BreedNed in 2007 (www.breedned.nl).

Stedenlink supports OPTA report

At the end of 2008 OPTA, the Independent Post and Telecommunications Authority (NRA), drew up a draft version of policy rules with regard to 'tariff regulation for unbundled fiber access'. Stedenlink believes the OPTA scheme is a necessary and welcome development. Not only does this have the advantages of ensuring long term investment in the Netherlands in fiber optic networks but the tariff proposals create a level playing field for

service providers. The prices charged to customers would then be such that a large scale launch of fiber optic connections will be possible. Service providers will also be able to distribute their services throughout a broad network; which will promote innovation and economic growth in the Netherlands as well as the transition of the Dutch economy to a knowledge economy. Naturally Stedenlink supported this OPTA proposal in the consultation round.

Knowledge sharing

A permanent item on the agenda of the meetings of Stedenlink is the exchange of experiences in cities/provinces and further afield. In this way members keep one another informed with regard to the latest developments and ideas. Parties work together to implement these as fully as possible within the participating cities and provinces. Meetings are also held to discuss specific matters. In 2008 extra meetings took place with regard to the physical roll out of fiber optic in the cities. On behalf of its members Stedenlink had research carried out into the organisation in municipalities of the introduction of FttH, fiber optic to the home. The results of this research have been discussed in depth. Various



meetings have also been held during which the Nijmegen and Deventer City Councils recounted their experiences with the large scale roll out of Fiber to the Home (FttH) and offered suggestions regarding the best way for the municipalities to prepare for these. There are also many bilateral contacts within Stedenlink. For

example the participating staff members and managers of Arnhem, Amersfoort and Leeuwarden visited Deventer during which developments in Deventer were explained for the inspiration of the local policy of the visiting councils. Representatives from Stedenlink have spoken at diverse meetings and congresses in the Netherlands and Europe. Stedenlink is widely recognized as *the* representative of the knowledge in the field of ICT and the urban community and as *the* representative of the interests of local government institutions in this domain.

Providing information

The website www.stedenlink.nl is an important medium for sharing knowledge. Major developments, current news, a list of relevant meetings and background information are updated here. A short film about Stedenlink can also be viewed on the website www.stedenlink.nl. During this film, which is both in Dutch and English, the managers of all the participating City Councils explain Stedenlink's mission. The managers also keep a weblog at the website. In 2008 a number of news letters were sent, both to internal and external partners of Stedenlink. These can be found on the website. The internal and external knowledge sharing is highly valued by participants.

Fact-finding trip to Brussels

Each year the members of the Stichting Stedenlink go on a fact-finding trip abroad. The purpose of this trip is to work together to gain more understanding of developments in the field of European legislation and funds and best practices in other countries. The network activities are also important for the profiling of Stedenlink and the tightening of cooperation in the field of project development and European lobbying. In October 2008 the trip took us to Brussels. The four-day fact-finding trip started with the strengthening of the mutual contacts and the exchange of experiences. Internal knowledge sharing is a major aspect of the fact-finding trip. The most recent developments were exchanged with regard to infrastructure, e-government and broadband services. These sessions form the basis for the new working programme in 2009. Many activities were organised in



Brussels, for example a visit to the European Parliament. A number of meetings are outlined below:

- The Stedenlink members were informed in detail about the EU lobby, the regulatory process and programmes. This is of great interest to Stedenlink because the race for Open Net Works is not yet over. Broadband is at the head of European policy (i2010). Moreover it is important to make it known in Europe that without the active contribution of local authorities the required launching of fiber optic in Europe cannot be successful. Dutch national legislation is stricter for public authorities than that of Brussels; this has a braking effect on our innovative force with regard to international developments. The EU

opinions were explained in detail and at the same time Stedenlink was able to express its own point of view.

- Stedenlink paid a visit to the Brussels Regional Informatics Centre (BRIC). All the public informatics services in the Brussels region fall under the BRIC. The BRIC provides services to all government organisations in the region, these include infrastructure for schools and digital cartography.
- Stedenlink also visited the Federal Public Service for Information and Communication Technology (FEDICT); this is the responsibility of the Ministry of Business and Simplification. From an administrative point of view Belgium is a highly complex country with regions, provinces, municipalities and districts. The citizen expects fast and efficient public services without fully understanding the administrative aspects connected to these. For the citizen the government is a virtual government. One of FEDICT's successes is the electronic identity card (eID). The card is issued to all Belgians



aged 12 and above and is used for both private and public services. A Suske and Wiske album has also been published entitled 'The sinister site', to warn school aged children about the dangers of the irresponsible use of internet.

- Brussels' fiber optic network is called Irisnet. Some 600 locations in Brussels and the surrounding villages and towns are connected to Irisnet. Since 2005 a wireless Wifi network called Urbizone has been operational on the VUB-ULB campus (Free University of Brussels). This network will be extended to for example colleges and libraries. There are plans to integrate Irisnet and Urbizone further and create new services.
- Stedenlink also paid a visit to the IBBT. This is the Interdisciplinary Institute for Broadband Technology. The IBBT is an independent research institution that promotes innovation within the IT sector by order of the Flemish government. The IBBT team provides businesses and organisations with active support during research and development and for this purpose arranges for diverse companies, public authorities and non profit organisations to work together on research projects. Within one month of the fact-finding trip a conference on domotica developments took place in Deventer. A staff member of the IBBT/Free University of Brussels, travelled to Deventer to attend this

conference. The fact-finding trip enables international contacts to be made with a view to sharing knowledge with each other and thus combining forces.

Stedenlink crossing borders

Stedenlink's Open Net Works idea is regularly expressed at congresses and in similar networks, over the border as well as within the Netherlands. These European network activities are of major importance for the profiling of Stedenlink as well as for the exchange of knowledge and information and the strengthening of cooperation with regard to the European lobby. Leeuwarden did the honours for the 'European' portfolio. They did this, amongst other times, during the meetings of the Network of Major European Cities, Eurocities (as coordinator of the Broadband workgroup of the Knowledge Society Forum).

Stedenlink was also present at the annual congress of Digital Cities in Barcelona, where a representative from Leeuwarden was the chairman for the day for the section Social Inclusion and Community Services and where contacts were laid with the English sister network DC10Plus. Stedenlink also attended the congress of the Eurocities Knowledge Society Forum at Lyon, which focussed particularly on the approach to digital markets. Of particular interest was the visit of a Swedish group which, thanks to earlier European networking, for instance with our Swedish 'sister club' SSNF (Swedish City Net Association), had sought contact with Stedenlink. In September 2008 ICT staff from 14 local authorities in the Norrbotten region in North Sweden came to the Netherlands on a fact-finding trip to gain inspiration from Stedenlink. Leeuwarden, Deventer and Enschede prepared this visit. Two themes were central: broadband services and ICT cooperation. Activities included a compact programme in Deventer and Enschede. Another network with which Stedenlink cooperates closely is INEC, International Network of E-Communities, which has its principle place of business in the Netherlands.

The European Commission has had a database made of 'best practices' of projects carried out in each member state. This was launched in 2008: the Broadband Portal (www.broadband-europe.eu). Stedenlink represented in the Advisory Board of the Broadband portal by Leeuwarden.

2009 is the European Year of Creativity and Innovation. In the meantime Stedenlink's activities in 2008 can be seen as the initial preparations for this.



CITY COUNCIL UPDATES

Below is an update by each City Council regarding its broadband activities in 2008.

Amersfoort

Fiber optic connections for all Amersfoort's residents and businesses to really spark off service development. This is our ambition. Some years ago BreedNet Amersfoort was launched for our institutions and businesses. In 2008 the first steps were taken to connect the whole city to a fiber optic network. The City Council has approved this ambition and recognises the need for a city-wide fiber optic network. This is important to the inhabitants, to the numerous independent entrepreneurs without employees (so called ZZPers), to people desiring to stay longer living in their home, to teleworkers etc. About 10,000 households in the north of Amersfoort are already connected to a fiber optic network and many more will follow in 2009.

Residents' networks actively providing services

In 2008 the Stichting Bewonersnetwerken (residents' networks) Amersfoort started to provide a number of services. A health care project has been launched in our Vinex neighbourhood. The green light has been given for neighbourhood TV and video communication is being introduced at two primary schools. These pilot projects are being subsidised by the province of Utrecht. The City Council believes these initiatives from bottom up to be of crucial importance. It is the residents who ask for these services and it is among the residents that we find support.

Ambassadors in the city

In 2008 the Taskforce Fiber to the Home was established. These are our ambassadors in the city and the region who, just like the City Council, want to see the development of new innovative services. These are services with major social and economic value. All the interested institutions are represented, from the business community to the education sector, from culture to housing corporations.



Amsterdam

Support for Amsterdam's model from the European Commission

In the light of the nationalization of banks in late 2008 it will be hard to assess the degree of turmoil surrounding Amsterdam's role in broadband. Wherever entrepreneurs proved unwilling to equip the city with a future proof infrastructure the city simply founded its own company in collaboration with market players. In the face of fierce resistance in the Dutch domestic courts and in the corridors of Brussels the city defended itself against allegations of state support and hidden agendas. In late December 2007 in a surprising and transparent decision the European Commission explicitly announced that Amsterdam's approach complied fully with the Treaty of the European Union. This decision means that it is now unambiguously established in Europe that cities are at liberty to invest in broadband on a sound commercial basis in collaboration with market players. At the end of 2008 some 40,000 homes in Amsterdam were able to make use of fiber optic. Private competitors such as KPN and Reggefiber seem to be interested in rolling out an open fiber optic network in the capital.

Educational and cultural broadband: once 'for the happy few', now available to everyone

Alongside the Citynet broadband programme Amsterdam also supports actions focusing on culture and education. Many stages in the city now have a symmetric 1,000 Mb/s connection making a TV broadcast transmitter unnecessary during live performances. In the project 'Cultureplayer' the cultural world discovers the many ways in which recorded programmes can be used. One of the target groups is Amsterdam's school-age children. Until recently each school had an ADSL or cable connection that was shared by staff and children. In 2008 the Amsterdam Schoolnet, BOA was launched via a European tender. The objective is that every school will be equipped with a 1,000 Mb/s connection. Early in November it was announced that Amsterdam's education sector has entered into collaboration with the NASA to assess super high-resolution satellite recordings. Parallel to this the new bandwidth is being deployed to make use of the rich video archives of the Dutch broadcasting system, the city archives and the Amsterdam History Museum. In this way what was previously a largely unattainable 'luxurious excursion' has become a standard educational quality available upon request - for all students.

Arnhem

In 2008 there were many developments in Arnhem in the field of ICT policy and in particular in the field of broadband.

Fiber to the Home

The Arnhem City Council has concluded an intention agreement with the GNEM (Joint Network Exploitation Company Arnhem). The GNEM is part of Reggefiber. Today all 6,000 homes belonging to the Portaal housing corporation are connected to a fiber optic network. The number of inhabitants using this in practice is gradually increasing. In neighbourhood 'de Laar', numbering 12,000 residents, the GNEM carried out an intensive demand bundling trajectory. The GNEM put a lot of energy into informing residents about the offer. All residents were contacted by GNEM a number of times and the neighbourhood took part in festivities. Ultimately GNEM decided that the support was too thin for a lucrative investment. With hindsight the dilemma of social cohesion played a role in this neighbourhood. On the one hand investment in fiber optic is essential to increase social cohesion in the neighbourhood. On the other hand a minimum level of social cohesion is required to implement demand bundling effectively. In the end it must be accepted that there was not sufficient social cohesion in the neighbourhood. The word of mouth promotion never really took off. The project in the 'de Laar' district has been postponed.

Digital services market

Arnhem's digital services market is owned and exploited by NDIX (Dutch - German Internet eXchange). Arnhem is connected to the network of the NDIX and thereby also to nearly all the cities in the east of the country. In 2008 a sound exploitation was realised. The number of customers has stabilized. The market master has produced two annual reports. Now the market master function is non active in anticipation of the merge with Nijmegen's market master function.

SSGA

The Foundation for Fiber optic Network Collaboration Arnhem (SSGA) is growing gradually. It currently numbers 10 parties with approximately 60 connections. In 2008 Viataal joined. In 2008 all primary schools and community houses decided to connect to fiber optic, this connection is provided by SSGA. In total this is 60 new connections. The primary schools also decided to set up a shared service centre. Alongside this a city learning centre is to be established to develop educational applications.

The Hague

Investing in Excellent Service Provision *and* the opening up of health care and culture

The Hague is working hard to ensure Excellent Service Provision to residents, businesses and visitors. This requires a good infrastructure. For instance wireless internet is available in the atrium of the City Hall.

In 2008 Stichting Glaslokaal, which already boasted 250 connections including a number of schools, was given a boost of EUR 750,000 to realise 50 additional connections at health care and culture institutions.

In the *Forepark* business park (110 ha gross) in 2008 BBned realised a fiber optic network giving businesses the choice between 35 different service providers.

Strengthening infrastructure

In de 'Socio-economic Agenda The Hague 2020' the ambition of increasing the number of independent entrepreneurs without employees using fiber optic networks was expressed.



Strategic exploratory studies will therefore be conducted in 2009 into the launching of a new approach for fiber optic and the introduction of wireless internet to the city. The Hague aims to be an attractive city for both businesses and residents. It therefore goes without saying that the opening up and connecting of institutions in the 'International City of Peace & Law' will also be included in this study.

ICT as an economic magnet

The Hague is good at ICT congresses! In the autumn of 2008 for example Symantec held its global congress in the World Forum Convention Center. The 'ICT Gala' and 'Den Haag Telecom' were also once again a huge success this year. In late December the Chinese telecom company ZTE Corporation, the world's biggest manufacturer of mobile telephones and telecommunication networks, decided to establish its European head office and sales and distribution centre at The Hague.

To encourage (young) entrepreneurs the communities of innovative and creative designers are being enlarged. That these locations will be opened up with fiber optic goes without saying. The 'CaballeroFabriek' (www.cabfab.nl) in the Binckhorst are doing excellently. 'Binck36' (www.binck36.nl) in the Binckhorst and 'Labs55' (www.labs55.nl) in Laakhaven started their development in the summer of 2008.

Deventer

Deventer, the Netherland's first city to be fully connected to a fiber optic network!

With 50% Fiber to the Home (FttH) now, in 2009 Deventer will be the first fully optic fiber-wired city and the fastest city in the Netherlands! Of the 40,000 homes in late 2008 more than 20,000 were connected. The roll out of Fiber to the Home is proceeding smoothly and enthusiasm in Deventer remains high. In 2008 it was also decided to connect the villages Diepenveen and Bathmen, which belong to Deventer, to fiber optic.

School glass

School Glass is a Deventer county council and primary school project in which a fiber optic network ensures all schools of super fast broadband internet. Development of digital support in primary education is progressing successfully. School Glass has opened up numerous opportunities such as digiboards, classroom studio, video conferences, remote expert, joint ICT management and many more. This enriches education. The project is now being entirely borne by the primary education sector in Deventer with enthusiasm and zest. Progress can be followed at www.schoolglas.nl.

Local broadcasting

The City Council and Deventer's local broadcasting network have joined hands for optimum



use to be made of the fast fiber optic net.

This involves for instance theme channels, citizens' journalism and the extending of digital social participation. Hart for Deventer (Heart for Deventer) is a platform for and by Deventer's residents, on which local news is shared. The plans and developments can be followed at www.hartvoordeventer.nl.

Domotica

In collaboration with care providers and housing associations the possibilities of introducing city wide domotica are being looked into. Domotica stands for communication between all sorts of electric and electronic devices in the homes and immediate vicinity of residents. This is aimed at residents and service providers.

Eindhoven

Eindhoven leading in technology for everyone

In line with the objectives of Glasrijk Eindhoven, Eindhoven City Council is working to connect all residents and the business community to fiber optic before 2011. The first 25,000 homes (of more than 100,000) are connected, the user level is unprecedented from a national perspective and varies between 50% and 75%. In 2009 the next 25,000 - 30,000 homes will be connected. Fiber optic connections for the business community are also increasing exponentially. Five business parks were connected to fiber optic in late 2008. Multiple service providers offer their services via this network.

The Eindhoven Schoolnet

A three point project has been initiated in consultation *and* in collaboration with Primary Education, Secondary Education and the Library Service. The Eindhoven Schoolnet has, in addition to an open managed network, developed a large and growing spectrum of services with and for the education sector. The services focus on collaboration, doing business and education. There is close cooperation with Innovo Limburg. The Eindhoven Schoolnet will be phased into operation from mid May 2009.

Provincial cooperation

The five major cities in Brabant are currently developing a unique form of cooperation in the field of ICT. This cooperation focuses on both the innovation and the application of ICT with regard to e-government services as well as to the diverse shared social themes.



Research into the social and community effects of fiber optic

At the request of Eindhoven City Council research has been conducted by the TU/e (Technical University of Eindhoven) into the effects of fiber optic on the social enrichment and social cohesion of inhabitants. The research took place in neighbourhoods where residents have been using fiber optic for a number of years. This research has indisputably proved that diverse socio-community effects are very positively affected by open fiber optic constructions in combination with underlying communities.

Other

In addition to the above developments Eindhoven is working on other initiatives, for instance:

- intelligent camera monitoring for businesses;
- further development and upscaling of regional market;
- wide ranging introduction of ICT care services;
- the smartest home in the Netherlands;
- cooperation programme for telediagnosis for oncology patients.

Enschede

The 'broadband coffee bean'

In Enschede and Twente broadband has become a commodity for service provision, just as the coffee bean is for coffee. This 'broadband coffee bean' is a product of the subtle melting pot of the Stichting Broadband Twente, NDIX, TrenT, Reggefiber, KPN, COGAS and many others who stood up for broadband services in this district. The broadband commodity boasts the lowest price in the east of the Netherlands! This has been true for many years now with people accepting this as 'normal'.

Partly as a result of this the ICT sector in the Enschede/Twente/Euregio has undergone



impressive growth: companies are taking advantage of the opportunities to increase their areas of distribution through for instance the NDIX/TrenT market. There are also companies that are already establishing branches elsewhere in the world for their software production, such as in Dalian/China.

A glance at some prominent broadband cases:

- Roessingh as the leading national 'rehabilitation institute';
- IZIT has made digital patient records technically possible in Twente;
- TeleTop is the electronic classroom for many schools;
- Telecats has successfully developed a dyslexia package for primary and secondary education, among other things;
- Dinkelborg in Denekamp makes use of care services (with domotica) provided in the Enschede district;
- pilot crisis management Grolsch Veste with wireless broadband;

- broadband is an ‘export product’ to Germany, with services providers through the NDIX;
- principle of software as a service (saas) in business centres (Arke, Oosterveld);
- developments in the new Nationale Muziekkwartier (music and theatre venue).

These are examples of services being provided mutually between companies/institutions: Business to Business (B2B). In Enschede (and Haaksbergen) huge efforts are being made by Reggefiber to introduce fiber optic to the city on a large scale and provide all households with access to fiber optic. This creates opportunities for suppliers to provide broadband services to the masses: Business to Consumer (B2C), with the potential for Consumer to Consumer (C2C).

Helmond

Fiber optic in the city

Once the business parks in Helmond were provided with access to fiber optic, in 2008 Fiber to the Home was also successfully provided to the first neighbourhood in Helmond. Preparations for extending this to two other neighbourhoods are stagnating as the standards required for participation have not yet been met. However market parties continue to strive towards access to fiber optic for Helmond as a whole. Alongside this, preparations were begun in 2008 for the realisation of a digital market within the framework of Brabantnet.

Developing services

As ICT increasingly becomes a part of everyday life the council also intends to make use of modern facilities in its communication with the citizens and businesses in Helmond.

Helmond City Council achieves this by providing electronic services through its website as well as by realising electronic participation and citizens’ commitment. Progress and developments in the field of electronic government is nationally monitored by the Overheid.nl-monitor. Helmond occupies first place in the category City Councils with 50.000-100.000 inhabitants in 2008.



Also in 2008 the vision and ambition of ‘Verbindend Brabant’ (Brabant Connecting) was formulated by the province and the five largest towns in Brabant as part of ‘Samen Investeren’ (investing together). The goal is to improve the accessibility of local

government with the application of ICT. In Helmond's case priorities here lie in the field of e-government and the continued development towards a virtual Brabantstad.

Leeuwarden

Leeuwarden highlights:

FR-IX facilitates froeks.tv

In 2008 froeks.tv was launched, similar to youtube and aimed at Friesland's youth. It is a resounding success, with more than 50,000 unique users. The project makes use of the facilities of Internet Valley at the FR-IX (Friese Internet eXchange), which provides, among other things, a highly advanced technical platform distributed among a number of high quality data centres in the North.

John the Baptist Church: FR-IX customer

Another of FR-IX's major customers this year is the Johannes de Doper Church. This was stripped and renovated in 2008 into a 'high tech' office complex for young businesses in the field of water technology. They collaborate with the Top Technical Institute Wetsus, located at the other side of the square. FR-IX supplies the 'State of the Art' connections for the virtual network with which the young businesses connect to the material world.

Gamevalley

Leeuwarden City Council, the province of Fryslân and the Noordelijke Hogeschool Leeuwarden have prepared 'Gamevalley', a knowledge centre that is being launched in Leeuwarden. Starters have all the facilities at their disposal, including a so called 'Motion Capture Studio', to enable them to develop their business, particularly in the field of Serious Gaming.

New data centre

In Leeuwarden Friesland's first 'high power' data centre was opened in June. It is a valuable addition for the FR-IX and its customers, whose location is much improved by it. The data centre is remarkable for its 'sustainable' construction, due to the application of green energy and energy-saving cooling. The waste-heat can be used



by businesses in the direct surroundings. The link between ICT and sustainability will be promoted strongly during the next few years.

Fiber to the Home

Fiber glass access in Leeuwarden was surveyed and prepared in cooperation with market players.

District services

The district services through internet were extended and professionalised in 2008. As part of this move Kanaal Lokaal was launched in collaboration with the local broadcasting system and diverse cultural and social institutions such as museums, the archives and the library; a new medium that with the help of mutual fiber optic connections brings local news closer to the citizen. Leeuwarden also cooperates closely with the IZSF, the ICT joint venture in South-West Friesland and is a leader with regard to Shared Services for the six City Councils involved. Key to this is a common data storage system. This is first and foremost intended for data storage, backup and fallback but the cooperation also intends to continue its common policy development for data archiving and storage.

Regional collaboration

In late 2008 Leeuwarden City Council and the province of Fryslân announced their intentions to increase their joint activities in the field of demand bundling and service boosting.

Rotterdam

Fiber optic in Rotterdam

The experiences gained in the pilot neighbourhoods Nesselande and Lloydkwartier bode well for the further launching of the fiber optic network. Plans have been developed with housing corporations to extend the fiber optic network to 30,000 homes in Rotterdam North in 2009. Rotterdam has entered into serious negotiations with some market players. Parties in the development project 'Pact op Zuid' have now also shown their interest in the connection of existing homes to the fiber optic network in Rotterdam South. A great deal of effort has to be invested into the development and visibility of the different services provided through the fiber optic network. To this end the project team 'Glazen Maas' has designed initiatives to increase visibility, such as City Media Rotterdam, Rotterdam Wireless and IP-television in Nesselande. See: www.glasvezelrotterdam.nl

R-iX

The founding of the Rotterdam Internet eXchange (R-iX, November 2007) has been very warmly received by the Rotterdam and regional market. The short period of time since its establishment has been highly dynamic creating good future prospects. Approximately ten businesses and/or institutions are currently connected to the R-iX. The R-iX is in an advanced stage of contract negotiations for nearly as many again. This includes some larger international companies and care and educational institutions. Furthermore some 40 companies and institutions have shown their interest. See: www.r-ix.nl

Rotterdam Wireless

In collaboration with market players the pilot scheme Rotterdam Draadloos (wireless) was launched in October 2008. A WiFi network has been laid in the city centre covering about one square kilometre, which is open to businesses and institutions to test mobile applications. In addition to the permanent broadband infrastructure the project also makes



wireless access for mobile services possible. For example for public service providers but also for companies in the logistics sector. Mobile applications can offer major economic advantages and improve service provision. An evaluation will be made in 2009 largely with a view to assessing whether there is a market for a city-wide wireless network. See: www.rotterdamdraadloos.nl

City Media Rotterdam

An example of an innovation based on fiber optic infrastructure can be found in the form of the project City Media Rotterdam (CMR). In this project a new medium of communication in Rotterdam has been developed using display screen technology and narrowcasting. In November 2008 in the Neurs metro station in cooperation with the RET, fourteen display screens were introduced that display both editorial and commercial content to metro passengers. Expectations are high and the commercial market is watching developments closely in this unique Rotterdam project. See: www.citymediarotterdam.nl

IP-television

In September 2008 in cooperation with diverse market players the Nesselande neighbourhood started a pilot scheme with IP-television at a number of homes. Using a so called set-top box users are able to choose between programmes offered by digital television or analogue television and broadcasting packages are offered that are currently

only available via a disc antenna. The latter in particular offers an important perspective for the future in the older neighbourhoods with the problems they have associated with disc antennas. The Rotterdam housing corporations are keeping a keen eye on the results of this pilot scheme.

Data centres

After the opening of the R-iX it soon became clear that many Rotterdam parties are outsourcing their ICT and have a high demand for data capacity. This should preferably be available in the vicinity of Rotterdam and be affordable and green. Combining demand and listing the possible green locations in Rotterdam and its surrounding area serves the market well. The ambition is to construct a large independent green data centre for Rotterdam within three years. The Rotterdam fiber optic infrastructure is on the right track here, with the networks, the R-iX and Rotterdam Draadloos!

Tilburg

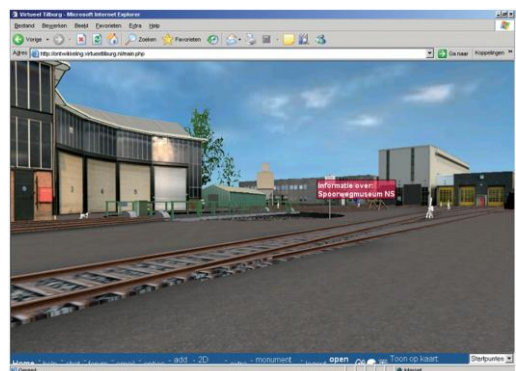
New ICT vision

In Tilburg a new ICT vision was adopted in 2008. The new vision's departure point is to make the City Council's internal ICT more serviceable for external policy objectives formulated by the council in policy programmes (economics, youth & education, care, culture, safety, etcetera). This implies less internal ICT and more ICT in and for the city. The reshaping of Tilburg.nl from council shop to city site is a good example of this, as is the business desk at this site.

This readjustment of focus is largely prompted by the changes in society, whereby ICT takes on an increasingly big role. However internal and external ICT are inseparably linked: to provide optimum service to the city the City Council needs to have its own information properly arranged.

Virtual Tilburg

With virtual Tilburg we are leading in the Netherlands. Together with Helmond and Apeldoorn the foundation has been laid to enable other cities to create virtual cities in the same way. The current virtual city now encompasses virtually the entire inner city and as well as being fun to visit is also a good source of information for Tilburg's inhabitants to keep abreast of developments in the city centre. Visit www.virtueeltilburg.nl



Fiber to the Home

In late 2008 it was announced that Midden-Brabant-Net was to start its first Fiber to the Home project in Tilburg. In addition to this Reggefiber also has serious plans to start laying FttH in Tilburg.

Zoetermeer

Zoetermeer, innovating towards a stronger knowledge economy!

With 13% of the available number of jobs Zoetermeer has the highest ICT employment percentage in the Netherlands. The establishment of the Academy of ICT & Media Zoetermeer; the construction of a mega fast digital infrastructure for businesses, schools and care institutions in Zoetermeer; more ICT use in the education sector and a strong network in the ICT sector are proof of an innovative policy framework. In cooperation with the Stichting Kenniseconomie (knowledge economy) and Innovatie Zoetermeer (Innovation Zoetermeer, Stichting KIZ) the council continues to support a favourable climate for knowledge intensive business. Below are some of the initiatives and projects that took place in this framework in 2008:

Extending higher ICT education

The strengthening of vocational education (MBO/HBO) , one of the spear heads of the Zoetermeer programme 'Kenniseconomie en Innovatie' (Knowledge Economy and Innovation), has resulted in, with effect from September 2008, the Academy of ICT & Media Zoetermeer offering, as the only institution in the Netherlands, the study programme 'Information Security Management'. Alongside the more technical and business subjects, students are also taught the role and risks of the human factor in the securing of business information.

ICT Sociëteit, TechCrossings & CreationInn.com

The Zoetermeer City Council organises periodic network meetings for the ICT branch. After the presentation given by a well-known speaker in the branch visitors have the opportunity to network during an informal networking reception. On 18 February, 24 April and 27 October 2008 an ICT-Sociëteit was organised with the themes 'e-working', 'software-as-a-service (SaaS)' en 'social networking'.

In 2008 Stichting KIZ and Crosspring also organised three 'Techcrossing' days. Providers of innovative technologies work during these sessions in ten teams of between three and five

members together with managers of (medium)large companies to come up with crossindustry applications for technological innovations.

Finally the launching of the online platform CreationInn.com is an innovative fact. This is an initial version of an online network to promote and facilitate virtual meetings, joint ventures and open innovation in the Zoetermeer district.

South Holland Festival of Knowledge 2008

In cooperation with the Knowledge Alliance, the Zoetermeer Chamber of Commerce and the Academy of ICT and Media Zoetermeer, the Festival of Knowledge 2008 was held on 5 November: an inspiring day when entrepreneurs, researchers and representatives from the education and care sectors met to become actively acquainted during seminars, debates and the 'Knowledge Market'.

See also www.zoetermeer.nl/ict en www.kizoetermeer.nl

UPDATES FROM THE PROVINCIAS

Provinces also welcome at Stedenlink

A network is dynamic. This is also apparent from Stedenlink's composition. In late 2008 two new candidate members registered: the provinces of Overijssel and Gelderland. This is a remarkable development. On the one hand it is logical given that both provinces follow an active ICT and innovation policy, but on the other hand it is remarkable and very welcome that cities and provinces are able to work together on such an important file. The province of Gelderland and the province of Overijssel recognize the importance of open networks for citizens, businesses and institutions. For many years the Stichting Stedenlink has been a major advocate of Open Networks. In an interprovincial agreement Gelderland, Overijssel and Noord-Brabant have supported an increased role of the province in the roll out of fiber optic in the city and in the region. Provinces can play an important role by bringing players together and organising demand bundling. An important issue in this is the linking of different regional networks via digital markets and the scaling up of broadband services. To assist in this in 2006 the provinces set up a broadband classroom with the support of the Ministry of Economic Affairs. On 4 September 2008 during a joint symposium of IPO (interprovincial consultation), the Ministry of Economic Affairs and Stedenlink this long-running programme came to a festive end. During this same symposium, on behalf of Stedenlink, councillor Gosse Hiemstra (Deventer) invited the executive councillors Carry Abbenhues (Overijssel) and Marijke Van Haaren (Gelderland) to join the Stedenlink network. Both executive councillors accepted this invitation.

As an introduction below is a summary of the broadband activities of the provinces in 2008.

Province of Gelderland

Broadband in Gelderland

With the Telemann-network in Nijmegen, SSGA in Arnhem, CAI Harderwijk and BIT in Ede Gelderland has a number of major broadband pioneers in-house. The province itself does not invest in fiber optic but organises the demand bundling for the realisation of fiber optic projects. This has resulted in a Gelderland-wide 'open' fiber optic loop, twenty business parks connected to fiber optic and eight NDIX markets.

NDIX Markets

There are numerous active fiber optic initiatives and players. To avoid fragmentation the NDIX (Netherlands - German Internet eXchange) from Enschede ensures that underlying

fiber optic networks are connected through a number of exchange hubs 'digital market places'. Suppliers of internet, telephony and TV obtain access to customers throughout the entire network via the NDIX. NDIX already has operational markets in Arnhem, Nijmegen, Zutphen, Winterswijk, Harderwijk and Doetinchem. Last year executive councillor Marijke van Haaren opened NDIX markets at BIT in Ede and in Tiel. With the opening of the market place in Barneveld (2009) the network of linked market places is complete.

Fiber to the Farm

The fiber optic loop between cities and centres is a fact. This fiber optic backbone means that it is now technically and economically feasible to connect rural areas. Because of the larger distances to centres ADSL in rural areas is substantially slower than in urban areas. Operators have little interest in rolling out cable in thinly populated areas. The feasibility survey showed that between 60 and 80 percent of households and businesses in rural areas would like a faster connection. With the advent of so called knowledge farms the country is experiencing a new economic boost. In addition cable is giving the quality of life in the country a new impulse. Consider ICT applications in the distance education and care sectors. With a contribution from the province of Gelderland the project Fiber to the Farm has been launched. If participation is sufficient about 10,000 fiber optic connections will be created on the provincial road between Vorden-Ruurlo-Borculo. The project management is being financed by the Bronckhorst and Berkelland City Councils, SEO Achterhoek, Rabobank and the province of Gelderland. The actual laying of the fiber optic will be funded by the participants' subscriptions. To keep the costs of laying the connection as low as possible participants are helping with the digging. They will become owners of the network as a corporation. The association therefore decides which service providers will supply internet, telephone and TV. If this project is a success the other rural areas will follow.

Province of Overijssel

The programme ICT-diensteninnovatie Overijssel 2008-2011 (ICT services innovation) is one of the pillars of the policy strategy 'Overijssel Werkt!' (Overijssel Works!). The programmes encourage economic innovations in the non-profit and commercial service provision sector by giving directed impulses to a few social sectors such as education, housing/care, creative industry and local authority services and knowledge transfer. The province of Overijssel and the three major City Councils hereby extend the successful collaboration in the field of broadband infrastructures and the development of social ICT

services. The programme follows two tracks: innovation/creation of improved applications and upscaling/distribution of existing applications within the province. Projects must be on the regional innovation agendas of Twente, Deventer/Stedendriehoek and Zwolle/N.W.



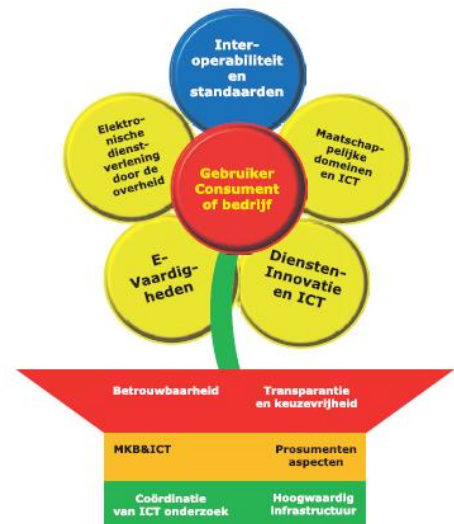
Overijssel. This means that projects in other City Councils in Overijssel can also be supported. In early October 2008 the project management started operating in the new form together with the partners. In 2008 a number of promising projects were submitted to the province of Overijssel for co financing. The proposals have been assessed and financed by the

Provincial Executives. Projects for the coming years are also being actively sought for in the stated sectors.

Stichting Stedenlink has contact with other provinces and cities with a view to further extending the Stedenlink network in the future.

STEDENLINK 2009

In 2009 Stedenlink shall focus principally on the Open Net Works-campaign and knowledge exchange. The Open Net Works-campaign is making good progress but should be given more support. Stedenlink noted with pleasure that on the ICT Agenda 2008-2011 of the Ministry of Economic Affairs 'interoperability and standards', fully in line with our Open Net Works concept, are stated as being one of the five priorities. Because these Open Net Works can and must be laid, by cooperating with the parties involved. It goes without saying that Stedenlink is also an active participant in BreedNed, the independent, national platform on which the market, institutions and the government meet to discuss pragmatic and solution oriented issues related to the linking of digital networks. We welcome cooperation with parties in the field with a view to realising objectives and are happy to encourage the Ministry to stick to its ambitions here. Let the Ministry of Economic Affairs' 'ICT flower' bloom in full!



In 2009 Stedenlink will naturally also continue to assemble and distribute knowledge. Themes that Stedenlink will definitely be working with more include the upscaling of services, the development of local media through fiber optic, the open services standard, sustainable ICT, FttH and the applications for the social sectors and businesses. Open Innovation will be a key issue, too. Periodic meetings to discuss these themes have been arranged with Stedenlink members. But open knowledge studios will also be organised for discussing the latest developments regarding broadband applications and the (desired) social effects. Stedenlink members display the best practices to each other and go in search of opportunities to upscale these. Furthermore as in 2008 various Stedenlink partners will once again welcome interested delegations from other cities and inform them about the developments and opportunities of broadband applications in the social sector. Finally, Stichting Stedenlink continues to seek partners and coalitions with the objective of maintaining the Netherlands' lead in the field of broadband and in doing so to promote innovative capacity and the socio-economic perspectives in the Netherlands, especially at local level!

Colofon

This annual report was elaborated
in cooperation with the cities and provinces included

EDITOR

Yvonne Sprick

TRANSLATION

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Projectbureau Stedenlink

c/o Gemeente Deventer

P.O.Box 5000

7400 GC Deventer

The Netherlands

Tel.: +31 570-69 4240

Mail: info@stedenlink.nl

www.stedenlink.nl

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