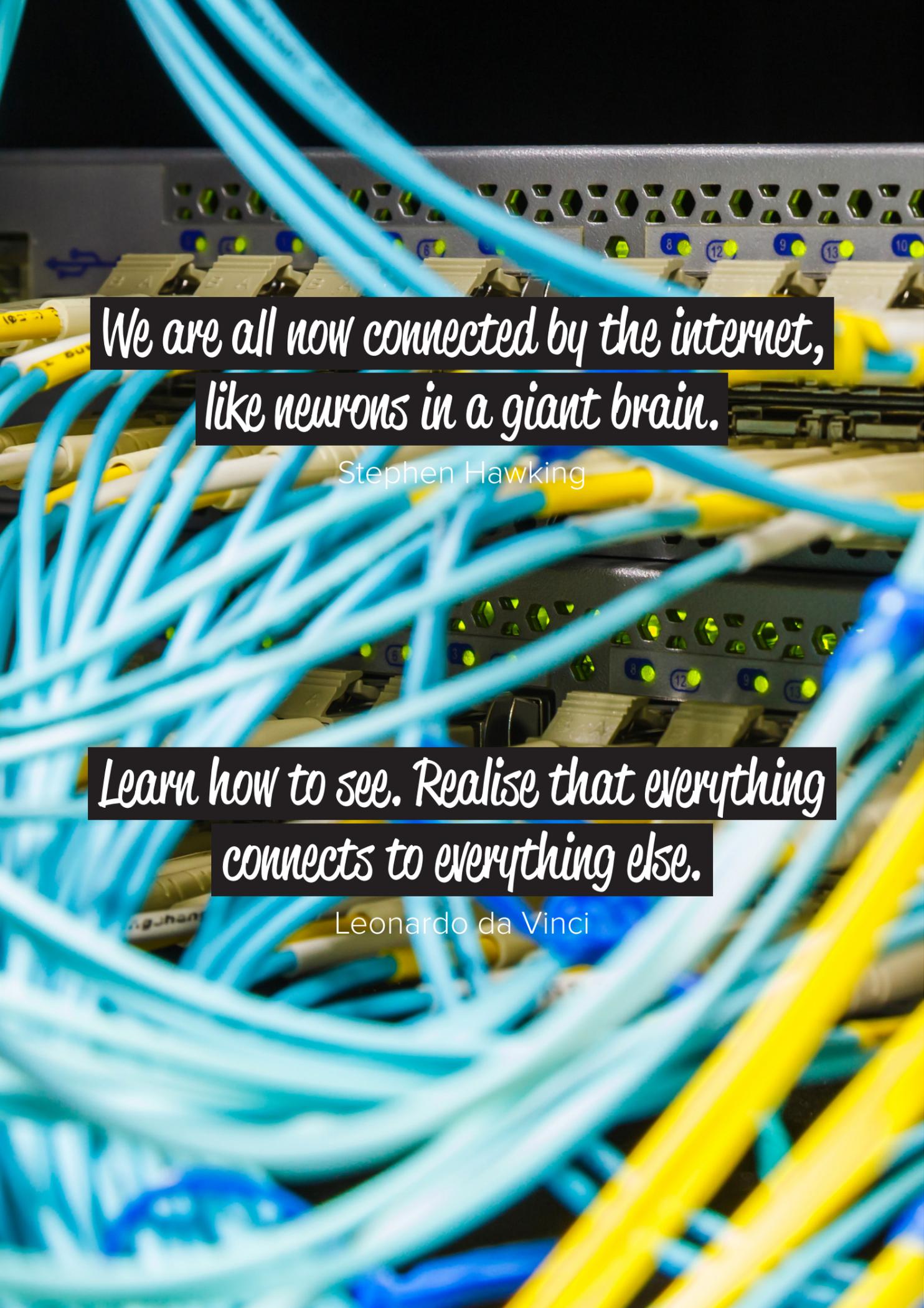


CONNECTIVITY IN BELGIUM

LCL's guide to connecting you to the world





*We are all now connected by the internet,
like neurons in a giant brain.*

Stephen Hawking

*Learn how to see. Realise that everything
connects to everything else.*

Leonardo da Vinci

WORLD CLASS CONNECTIVITY OPTIONS

LCL, with over 40 telecom providers, is an important hub to connect your data not only with your business, but also with other data and data providers. In fact, we're the largest interconnection point in Belgium. At LCL, these telecom operators interconnect and provide a multi-direction data highway and therefore create endless possibilities to support and grow your business. Below we list some reasons as to how your business can take advantage of the hyperconnectivity at LCL. And on the next pages we provide an overview of all telecom operators which are currently available at LCL (listed alphabetically). These operators themselves, they exchange traffic at the LCL meet-me-rooms.

WHY CONNECT AT LCL?

A multitude of connectivity options

We carry about 40 telecom operators. We're sure you'll find the right partner to expand your connectivity. Check out the overview of operators on the next few pages of this connectivity guide.

Carrier neutrality

Since we carry this broad range of telecom operators at LCL, you will find a neutral place to connect with the telecom operator of your choice.

2 separate meet-me-rooms, several completely separated cable intros

Redundancy is key in our connected world. That's why we have two meet-me-rooms, the beating hearts of our data centers in terms of telecommunication and connectivity. On top of that, to maintain our high levels of connectivity, we have several completely separated cable access points into our datacenters.

Bandwidth

Are you in search of extra bandwidth? You'll find it at LCL. We have plenty available in our meet-me-rooms.

48V DC power for telco equipment

All three LCL data centers can supply 48V DC power directly from the socket. So, basically it's just a matter of plugging in your telecom equipment and you're ready to go. No need for you to provide the 230V AC to 48V DC conversion, we do that for you.

Structured cable management

At LCL we not only lay out our cables neatly, we also meticulously record every single connection in our cable book, because we believe in efficiency and professionalism. This may seem obvious, though believe us, it's not the standard in all data centers.

Access to fibre networks, or even a direct connection to the internet

Our meet-me-rooms are a market place of connectivity between Tier 1, 2 and 3 telecom providers. When you need high quality connections with a high guaranteed continuous bandwidth, you can get that directly at LCL. And very likely at a much lower cost than from your telecom operator 'in the street'.

Peering with internet exchanges

Peering with an internet exchange gives you the advantage of exchanging IP traffic directly with other connected parties, free from extra charges from a third party to carry that traffic. Peering can be set up where an internet exchange is present. We have that at LCL; in fact we have two: BNIX and NL-ix.

CDN (Content Distribution Networks)

Our digital world claims fast and accurate content delivery. User experience these days is what drives the world's economy. And people expect everything to be immediately available by the click of a button. A content delivery network can help you improve your content distribution, securely. LCL offers direct access to the world's largest CDN.

Operational speed

We are on top of our ticketing system, because we believe speed in interconnecting businesses is important. Should you require patchings, cabling or other installations, you'll swiftly receive answers on how and when we will tackle the request.

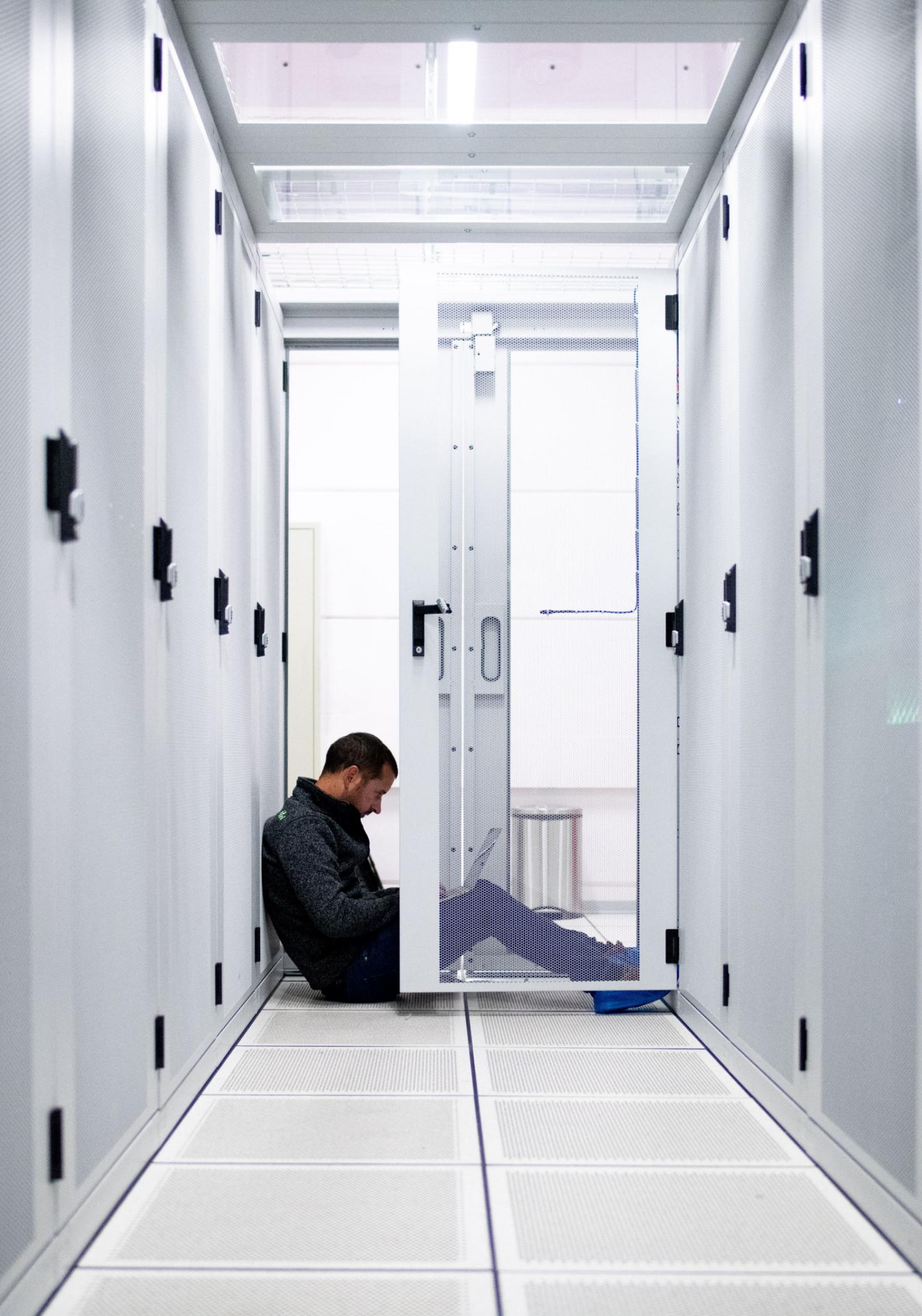
Easy access

LCL is located at locations that are easily accessible 24/7; of course, with a high level of security.

One single connection to all major public cloud and SaaS-providers

There are plenty of reasons why connectivity is key and which you might not have thought about yet. There's no limit to the possibilities. Contact us, or a connectivity provider listed on the next few pages to find out how you can add an extra layer of business opportunity to your organisation.

Reliable. Available. Connected.



LCL first data center in Belgium with DCspine technology

LCL Data Centers is the first Belgian data center company to connect to DCspine. In concrete terms, LCL customers can use this to quickly set up a reliable, scalable and flexible connection. We are expanding our range again and are increasingly becoming the heart of Belgian connectivity.

By implementing the DCspine technology in our data centers, we are once again giving our customers additional connectivity benefits. Connectivity is just important. It determines the speed of work, not only for employees but also for online shoppers. LCL focuses on connectivity, so we are happy that we can add this to our offer.

DCspine is an Eurofiber spin-off that was established two years ago in the Netherlands. As a central connectivity node in the Belgian telecom landscape, LCL was the first Belgian party to offer this additional connectivity solution to its customers. DCspine is, after all, a unique technology on the data center market.

How does it work?

Clients of data center company LCL can request connections via the DCspine online portal with other data centers that implemented the technology. They then book a “spine gate” for this. That way you can quickly and easily make connections with other data centers.

Via DCspine there is the possibility to flexibly adapt connections to the specific needs at that time. The minimum duration of the contracts is one day. The connectivity can also be scaled up instantly if, for example, that would be required immediately.

A connection with its own character

LCL already had a wide telecom offer, which means that customers sometimes save considerably. Today 40 operators are connected to the LCL data center in Diegem. However, the ability to connect with DCspine at LCL has specific advantages. The powerful DCspine connection, for example, offers scalability and delivery can take place very quickly. The connection also offers solutions for DDoS protection. It protects you against Distributed-Denial-of-Service attacks, a specific technique used by hackers to crash a site or service.

In addition, DCspine also uses the SD-WAN technology. SD-WAN stands for Software-Defined Wide Area Network. That is a kind of Software Defined Networking applied to Wide Area Networks. A fast and flexible technology that is interesting for both companies and telecom providers. Among other things, it makes it easier to connect different locations to an internal network.

“We are pleased that we can incorporate the previously specialized DCspine into our ecosystem of more than 40 operators. Software Defined Networks are the future for transmission in the telecommunications market.



Arcadiz Telecom

Arcadiz is a leading optical Network Integrator with more than 18 years of experience in designing, building, maintaining and monitoring business critical telecommunication networks in the Benelux. The networks are delivered turnkey and built with the most advanced optical technologies. They help meet our customers' ever-growing demand for bandwidth, security and efficiency.

Arcadiz is a knowledge hub for service provider transport and access networks, data communications networks for utility companies and for enterprise market secure Data Center Interconnect (LAN / SAN transport between data centers).

- Optical network integrator

Contact

Rudy Willems
Tel: +32 16 392 670
E-mail: rudy.willems@arcadiz.com

www.arcadiz.com

Available at



BICS

As a leading international communications enabler, BICS is connecting the world by creating reliable and secure mobile experiences anytime, anywhere. We are a global voice carrier and the leading provider of mobile data services worldwide. Our solutions are from global mobile connectivity, seamless roaming experiences and fraud prevention to global messaging and the Internet of Things. We are headquartered in Brussels, with a strong presence in Africa, Americas, Asia, Europe and the Middle East.

Unrivaled capacity solutions powered by an extensive global network

BICS' global networks gives operators in need of increased capacity the flexibility of owning a network at a fraction of the cost without losing operational control. BICS' global network provides carriers and communication service providers with point to point data services and access to the IPX community. With its more than 140 Points-of-Presence worldwide, BICS is not only able to deliver capacity between major data centres, but also up to any street address in 70+ countries.

- Voice operator
- Internet provider

Contact

Geert Fore
Tel: +32 2 547 52 10
E-mail: geert.fore@bics.com
www.bics.com

Available at



Belnet

Belnet is the federal government agency that is responsible since 1993 for the Belgian national research network. It provides internet access to very high bandwidth and internet services to Belgian universities, colleges, research centres and government agencies. Belnet has 75 employees and is part of the Belgian Federal Science Policy Office. It provides its services exclusively to some 200 institutions representing more than 800,000 end users. Thanks to its acquired expertise, its unique market position and scale advantages, Belnet will help accelerate the growth of the knowledge and information society in Belgium. Belnet is also responsible for BNIX, the Belgian internet exchange.

- Internet provider

Contact

Frédéric Libotte
Tel: +32 2 790 33 33
E-mail: info@belnet.be

www.belnet.be

Available at



BNIX

BNIX (Belgian National Internet eXchange) is the heart of the Belgian internet. The high-performance BNIX network is used by Internet service providers (ISPs), Internet content providers and large private companies to exchange IP traffic in Belgium. The platform supports both IPv4 and IPv6 (the latest evolution of the IP protocol) and is suitable for specific applications such as multicast. BNIX also promotes more innovative and future-oriented internet technology in Belgium. Starting in 1995, the BNIX network has been run by Belnet, the Belgian national research network. Currently, BNIX has more than 60 participants.

- Internet Exchanges

Contact

Frédéric Libotte
Tel: +32 2 790 33 01
E-mail: servicedesk@bnix.net

www.bnix.net

Available at





BT

We serve global multinational organisations around the globe with our security, cloud and networking services. We can help your organisation to move to the cloud; turn collaboration into part of your culture; improve your contact centres; transform your customer service and simplify your network. All with security built-in, not bolted on.

Available at

DIEGEM

- Voice operator
- Internet provider
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

E-mail: via contactform on website
(www.globalservices.bt.com/en/aboutus/contact)

www.bt.be



Citymesh

Citymesh has set itself the goal of making its extensive expertise available in the planning, installation and maintenance of large-scale, complex and / or high-density Wi-Fi networks. Our mission is to take the worries inherent in offering Wi-Fi out of your hands and to allow our customers to reach their end customers in an innovative, smooth, legal and extremely flexible way. We try to provide WiFi As A Service (WAAS) and on top of WiFi connectivity, we implement tailor made solutions such as private virtual cloud controllers, captive portals,... for our clients. Citymesh has expanded its portfolio and is currently the only Belgian operator with a 5G license that can help companies built low latency and mission critical networks without interference. Enterprise 5G connectivity is born and ensures that you are no longer dependent on public mobile networks for business critical tasks. And before we forget, you can also use our 5G connectivity to fly our autonomous safety drones to support emergency services!

Available at

DIEGEM

- Wireless networks

Contact

Nico De Muynck
Tel: +32 50 41 02 00 - Mobile: +32 494 61 87 64
E-mail: nico.demuynck@citymesh.com

www.citymesh.com



CenturyLink - Level 3

CenturyLink is a global technology company providing digital solutions to global customers. With customers in more than 60 countries and an intense focus on the customer experience, CenturyLink strives to be the world's best converged networking and cloud company – both on premises, hosted or hybrid and reliable and secure network solutions. Through CenturyLink's portfolio of digital business solutions our customers are able to connect better with their customers and provide a superior customer experience.

Available at

ANTWERP **DIEGEM**

- Internet provider
- Waves - Ethernet - Dark Fiber
- Cloud Services - Hybrid - Multi Cloud

Contact

Perry Smit
Tel: +31 20 808 3894 - Mobile: +31 64 690 3826
E-mail: perry.smit@centurylink.com

www.centurylink.com



Cogent Communications

Cogent is a multinational Tier 1 Internet Service Provider consistently ranked as one of the top five networks in the world. Our primary service offering consists of Internet access and data transport, offered over our award-winning fiber optic, IP data-only network, along with colocation in any of our 52 Internet data centers. We service two customer segments: "Corporate" (small businesses to Fortune 100 companies) and "NetCentric" (Carriers / Service Providers and Application / Content Providers, whose businesses rely primarily on Internet access).

Available at

AALST **ANTWERP** **DIEGEM**

- Dedicated Internet Access
- IP Transit
- Ethernet Services
- Sd-WAN
- Colocation Services

Contact

Ron Wijsman
Tel: +33 1 49 03 18 98 - Mobile: +31 61 592 00 54
E-mail: rwijman@cogentco.com

www.cogentco.com

Reliable. Available. Connected.



COLT Telecom

Colt enables the digital transformation of businesses through its intelligent, purpose-built, cloud-integrated network, known as the Colt IQ Network.

Colt is the New Standard in high bandwidth network and voice services for enterprises and wholesale customers in Europe, Asia and North America's largest business hubs. With a global reach but a deep local presence, Colt is big enough to deliver and small enough to care.

- Voice operator
- Internet provider
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Floris Veulemans
 Tel: +32 2 790 18 24 - Mob: +32 473 99 39 08
 E-mail: Floris.Veulemans@colt.net
 www.colt.net

Available at

AALST ANTWERP DIEGEM



Destiny

Destiny offers a cloud interaction platform that gives companies the possibility of communicating more efficiently, worry-free and at a lower cost – from any place with any device.

By understanding and listening to the needs of our clients, we offer simple and scalable solutions and tools. With optimal security, telecom and IT to flow together seamlessly.

In this way our customers are ready for the digital challenges of tomorrow.

- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Thomas Wouters
 Tel: +32 2 401 97 77
 E-mail: thomas.wouters@destiny.be
 www.destiny.be

Available at

AALST ANTWERP DIEGEM



DC Spine

We are a fully automated high capacity software defined network data center interconnection platform. With DCspine you can connect to the services you need, when you need them. DCspine can be seen as the "Virtual Meet Me Room" for all connected data centers. DCspine makes it as easy to cross connect between data centers as if it were within a single data center.

- Contracts on a daily base / pay per use
- On demand SDN network via a online portal
- High capacity 100G network

Contact

Jerry Hofstra
 Tel: +31 6 408 54 93 6
 E-mail: jerry.hofstra@dcspine.nl
 www.dcspine.nl

Available at

ANTWERP DIEGEM



Deutsche Telekom Global Business Solutions

The network solutions by Deutsche Telekom Global Business Solutions (DT GBS BE) enable the connection of international locations of any size, individual branches or mobile employees with a common company infrastructure, ensuring the availability of centralized applications. Deutsche Telekom Global Business Solutions assumes end-to-end responsibility as a service provider and serves as a single point of contact to simplify network management even after the platforms and technologies have been established.

- Business to Business; Private companies and Public institutions
- Providing best services in IT and TC
- International delivery capabilities

Contact

Stefanie De Smedt
 Tel: +32 2 300 91 61
 E-mail: stefanie.de-smedt@telekom.com
 www.business.telekom.com/be/en

Available at

DIEGEM



EDPNET

Edpnet is an independent telecommunications service provider specialized in offering voice and fixed line services in Belgium, the Netherlands and Russia.

Since 1999, companies have trusted edpnet to take full advantage of their network infrastructure and internet connections.

Edpnet is your 'clever' alternative for the large telco players. We have a wide product and service range for both professional and consumer market.

- Voice operator
- Service provider for voice
- Internet provider
- Service Provider for IP
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Christophe Salden
 Tel: +32 3 265 67 00
 E-mail: c.salden@edpnet.net

www.edpnet.net

Available at

ANTWERP DIEGEM



euNetworks

euNetworks

euNetworks is a Western European provider of bandwidth infrastructure services. We focus on delivering scalable, fibre based products and solutions to a customer base that is at the centre of technology transformation. Our customers require fibre based data centre to data centre connectivity, both within the key cities in Europe and between these cities, supporting both their bandwidth growth and the performance requirements that their applications demand. Our customers' needs shape how we develop our network further.

- Fibre networks

Contact

Hans Kuijken
 Tel: +31 203 54 80 90
 E-mail: hans.kuijken@eunetworks.com

www.eunetworks.com

Available at

DIEGEM



EQUINIX

Equinix

ECX Fabric is a dynamic on-demand interconnection solution, connecting businesses to clouds, partners and their own infrastructure, directly and securely in over 35 metros across the globe. As a result of the partnership with Equinix, customers doing business in Belgium can:

1. simplify their hybrid cloud strategy by using one vendor to directly connect to the highest concentration of major cloud service providers globally optimize their network through dynamically selecting the traffic routes, integrating network and cloud services; wherever in the world they need to reach.

2. address security concerns of the public internet by deploying private connection

3. improve end user experience through connecting distributed data to networks, clouds and IT infrastructure at the edge

- Cloud

Contact

Joke Ploegmakers
 Tel: +31 6 527 69 192
 E-mail: Joke.Ploegmakers@eu.equinix.com

www.equinix.com

Available at

AALST ANTWERP DIEGEM



Eurofiber

Eurofiber has been a fast-growing international provider of industry-leading digital infrastructure since 2000. Relying on our own fiberoptic network and datacenters, we provide smart, open, future-proof infrastructure to companies, government bodies and non-profit organizations. Customers have complete freedom to choose the services, applications and providers they need. Eurofiber has an extensive fiberoptic network in the Benelux, covering 31.000 km. Almost all public datacenters in the Benelux are connected to our network, as well as our own datacenters. Supplementing that vital infrastructure, we now also offer fully flexible interconnectivity between datacenters in the Netherlands and Belgium. Eurofiber's smart, open, digital infrastructure has built the foundation for the digitalization of society. Eurofiber's services are provided through five companies: Eurofiber Netherlands, Eurofiber Belgium, Dataplace, UNET and DCspine.

- Voice operator
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Daniel De Bondt
 Tel: +32 2 307 12 00 - Mob: +32 492 91 27 59
 E-mail: daniel.debondt@eurofiber.com

www.eurofiber.com

Available at

AALST ANTWERP DIEGEM



FedMAN

The Federal Metropolitan Area Network (FedMAN) connects the various federal government services while providing them with central access to the Internet.

Belnet is the federal government agency that is responsible since 1993 for the Belgian national research network. It provides internet access to very high bandwidth and internet services to Belgian universities, colleges, research centres and government agencies. Belnet has 75 employees and is part of the Belgian Federal Science Policy Office. It provides its services exclusively to some 200 institutions representing more than 800,000 end users. Thanks to its acquired expertise, its unique market position and scale advantages, Belnet will help accelerate the growth of the knowledge and information society in Belgium. Belnet is also responsible for BNIX, the Belgian internet exchange.

- Network services for government

Contact

Frédéric Libotte
 Tel: +32 2 790 33 33
 E-mail: servicedesk@fedman.be

Available at

DIEGEM



GTT

GTT provides enterprise, government and carrier clients with a comprehensive portfolio of transport and infrastructure, SD-WAN, wide area networking, managed services, internet, voice and video services. A Fortune Future 50 company, we own a global Tier 1 internet network and provide a suite of cloud networking services to any location in the world. Our clients benefit from a superior service experience that is built on GTT's core values of simplicity, speed and agility.

- Tier 1 Internet Provider
- Transport services : Ethernet (2 Mbps - ...), DWDM (10 Gbps – 100 Gbps)
- Largest fiber network in Europe
- Submarine cables to North America
- Voice operator

Contact

Wouter Vandewalle
 Mobile : +32 498 44 63 98
 E-mail : wouter.vandewalle@gtt.net

www.gtt.net

Available at

AALST ANTWERP DIEGEM



Fluvius

Fluvius is the new network company that was created on 1 July 2018 from the merger between Eandis and Infrax. Fluvius offers network solutions for electricity, natural gas, telecom, heating and public lighting. The company also plays an important social role in achieving climate objectives, combating energy poverty and the independent management of energy data. Fluvius is active in Flanders and employs around 5.3 000 people."

- Voice operator
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Koen Meganck
 Tel: +32 9 263 45 88 - Mobile: +32 475 98 28 57
 E-mail: koen.meganck@fluvius.be

www.fluvius.be

Available at

AALST DIEGEM



KDDI Belgium

KDDI Europe is a growing ICT solution provider based in London and a subsidiary of KDDI Corporation. It is the regional headquarters of EMEA and CIS regions offering a host of ICT services as a 'One-Stop' solution, including Network, Data Centre, System Integrations, Voice, Cloud Computing, Security, IT Consulting, and IT Outsourcing services. The excellent reputation and trust enjoyed by our TELEHOUSE data centres positioned around the world have kept us at the forefront of service and quality.

- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Kenkichi Honda
 Tel: +32 2 541 48 25
 E-mail: sales@be.kddi.com

www.eu.kddi.com

Available at

DIEGEM



NL-ix

NL-ix, offers various interconnection services; free peering, premium peering, routing, cloud connection and dedicated transport

Today, all of this has made NL-ix Europe's most experienced - and largest - international Interconnect Exchange. NL-ix has over 600 member networks and operates a stable, low-latency, transparent fabric interconnecting many European DC's in important metropolitan areas like Brussels, Antwerp, Amsterdam, Rotterdam, Paris, Marseille, London, Frankfurt, Dusseldorf and Copenhagen.

- Internet exchanges

Contact

Youri van der Perk
 Tel: +31 (0)70 312 07 10
 E-mail: youri@nl-ix.net

www.nl-ix.net

Available at

ANTWERP DIEGEM



OVH

OVH offers a wide range of IT services to companies, and to individuals who are passionate about tech. Whether you're looking at our Private Cloud, Public Cloud or Hybrid Cloud services, web hosting plans, virtual datacentres, dedicated servers, storage solutions or even xDSL and VoIP connections, our services are constantly being improved with the very latest innovations, and are regularly developed with new features.

- cloud services
- VoIP connections
- webhosting
- dedicated services

Contact

Tel: +31 (0)20 808 6057

www.ovh.nl

Available at

DIEGEM



Orange

Orange Belgium is one of the main players in the telecommunications market in Belgium and Luxembourg through its subsidiary Orange Communications Luxembourg. The company offers its residential customers prepaid mobile services and subscriptions as well as a host of other innovative telecom services. Orange is also a convergent operator offering TV and internet services via the cable network in Belgium.

- Voice operator
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Kurt Lybeer
 Mobile: +32(0) 485 33 64 64
 E-mail: kurt.lybeer@orange.com

www.orange.be

Available at

AALST ANTWERP DIEGEM



Proximus

Proximus is offering a wide-range of connectivity services towards (i) Enterprise through its enterprise business unit and (ii) others licenced operators active in Belgium through its Carrier & Wholesale unit.

Proximus Carrier & Wholesale Solutions

Since 1998 Proximus Carrier & Wholesale has been offering a wide range of high-quality and innovative networks and telecommunications services towards Others Licenced Operators.

Depending on your needs, our team of experts (pre-sales, sales, product and service managers) will define together with you which solution (including technology, Service Level Agreements & Quality of Service) matters most to you. We will ensure that you get access to our state-of-the-art network in the most simple and flexible way.

- cloud services

Contact

Guillaume Leclercq
 Mobile: +32 (0)497 15 27 75
 E-mail: guillaume.leclercq@proximus.com

www.proximus.be

Available at

AALST ANTWERP DIEGEM



Post Luxembourg

Our telecommunications services range from landlines and mobiles to internet and television, as well as many specially designed services for businesses. POST Luxembourg owns its fixed and mobile infrastructure and, together with its subsidiary POST Telecom, offers secure, superfast broadband connectivity solutions, as well as voice and data management services to private individuals and businesses. Network quality and security are a priority for the company, which works to ensure that its infrastructure is entirely redundant. POST Luxembourg's superfast TERALINK broadband network, connects several major European cities.

- Broadband connectivity provider
- Voice and data management solutions

Contact

Tel. +352 2462 8004
E-mail: contact.telecom@post.lu

www.post.lu

Available at

ANTWERP



TELE 2

We believe in unleashing the unlimited opportunities that connectivity provides, to all our customers, no matter where or when they need it. Ever since Tele2 was founded in 1993, we have continued to challenge prevailing norms and dusty monopolies. Today, our award winning networks enable mobile and fixed connectivity, telephony, data network services, TV, streaming and global IoT solutions for millions of customers.

- Mobile voice messaging & handset data
- Mobile and fixed broadband
- Business to Business

Contact

Jennifer Walles
Tel: +31 640 003 613
E-mal: jennifer.walles@tele2.com

www.tele2.com

Available at

ANTWERP



Sofico

Since early 2000, SOFICO has been striving to connect the least profitable areas of the territory to the telecommunications network. For this purpose, it lays down optical fibres along the motorways and waterways. SOFICO was entrusted with the management and development of Wallonia's optical fibre network. This network now constitutes approximately 4,000 kilometres of cables and covers the whole of Wallonia, Brussels and a small part of Flanders (Gand and Anvers mainly). The backbone of this network runs mainly along Wallonia's main highways and waterways.

This optical fibre is used to :

- Manage traffic dynamically on the waterways and motorways while meeting the new needs of intelligent motorways;
- Deploy optical fibre in areas with low profitability;
- Provide broadband access through telecommunication operators to connect their private customers, SME, health care sectors, administrations, etc.

Contact

Raoul Kirstein
Mobile: +32 (0)479 86 35 35
E-mail: telecom@sofico.org

www.sofico.org

Available at

DIEGEM



Telefonica International Wholesale Services

We are one of the largest integrated telecommunications companies in the world in terms of market capitalisation and a top performing operator in the sector when combining both growth and profitability.

We own and operate our own global IP network in more than 40 markets. And through strategic agreements with partners we also provide service in over 170 countries, giving our customers coverage wherever they are, and wherever they want to be. With over 125,000 employees across the globe we are able to offer a personal service whenever you need it. So we can help you realise your objectives, locally and around the world.

- Voice operator
- Internet provider
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Arturo Aguilera
Tel: +32 (0)2 709 21 83
E-mal: arturo.aguilera@telefonica.com

www.wholesale.telefonica.com

Available at

DIEGEM



Telenet

We help Belgian businesses– from large and medium enterprises to small, local entrepreneurs - turn digital challenges into opportunities by making digital, unconventionally simple and frictionless. We therefore offer our business customers seamless connectivity and state-of-the-art, end-to-end IT solutions.

Available at

- AALST
- ANTWERP
- DIEGEM

- Voice operator
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)
- Phone Lines for Remote Access and Cable TV

Contact

Lode Van Elsen
 Work: +32 (0)1 536 41 36
 E-mail: lode.van.elsen@telenetgroup.be

www2.telenet.be/nl/business/mle/



TI Sparkle

Sparkle is a leading global telecommunication service provider, offering a complete range of IP, Data, Cloud, Data Center, Mobile and Voice solutions designed to meet the ever changing needs of Fixed and Mobile Operators, ISPs, OTTs, Media & Content Players, Application Service Providers and Multinational Corporations (MNCs).

Available at

- DIEGEM

- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Eric Boudant
 Tel: +33 1 78 56 99 69 - Mobile: +33 6 29 62 64 48
 E-mail: eric.boudant@tisparkle.com

www.tisparkle.com



Verizon Business

Our mission: Verizon delivers the promise of the digital world by enhancing the ability of humans, businesses and society to do more new and do more good.

Available at

- DIEGEM

- Voice operator
- Internet provider
- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Axel Hengemuehle
 Tel: +32 (0)2 400 82 20 - Mobile: +49 174 989 0630
 E-mail: axel.hengemuehle@de.verizon.com

www.verizonbusiness.com/be



Verixi

Verixi is a registered Belgian Telecom operator since 2009. We are offering our services to small, medium and large companies, public institutions and to other licensed operators. Our HQ is located in the Axis Parc, at the edge of Louvain-La-Neuve. Our local team is monitoring and supervising the network on a 24/7 basis. A fiber network of more than 2000km operated in Belgium. We are delivering solutions to Small & Medium Entreprises, Corporates, Hosting providers, Web agencies and other telecom operators.

Available at

- DIEGEM

- Fiber network provider

Contact

Piery Garot
 Work: +32 10 39 16 91
 E-mail: p.garot@verixi.com

www.verixi.com



Vlaams Glas

Thanks to our services connectivity and network transport you can easily build your own network between your sites over the Flemish fiber network. Together with you we look at the optimal routes for your network. We work out the connectivity and set up reliable network transport. You can build your own IP network yourself or call on us for network services over this transport network.

Available at



- Fibre network for government

Contact

Jeroen Avau
 Tel: +32 2 2 553 78 21 - Mobile: +32 475 87 07 84
 E-mail : jeroen.avau@mow.vlaanderen.be

 www.wegenenverkeer.be



Win

As an operator and integrator of ICT services, Win offers tailor-made solutions to businesses, the public sector and the healthcare sector, with an optimal level of service. Win offers a complete range of solutions covering all the needs of professionals:

Available at



- Internet and networks
- Communication and mobility
- Security
- Cloud and data center
- Services

Contact

Benoît Piret
 Mobile: +32 491 35 82 12
 E-mail: benoit.piret@staff.win.be

 www.win.be



VOO

VOObusiness is the department for professionals of VOO. Our job is to simplify yours and allow you to focus on your business.

Derived from the Walloon TV cable, which is more advanced than telephony, VOO has a clean (coaxial) cable system that allows it to provide hyper fast and stable connection speeds. No matter where you are, at VOO the flow is guaranteed at the beginning or at the end of the line.

Available at



- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)

Contact

Eric Davaux
 Work: +32 71 96 71 86 - Mobile: +32 490 58 08 60
 E-mail: eric.davaux@staff.voo.be

 www.voo.be



Zayo-Viatel

Zayo Group Holdings, Inc. (NYSE: ZAYO) provides communications infrastructure, including fiber and bandwidth connectivity, colocation and cloud infrastructure to the world's leading businesses. Zayo's 130,366-mile network in North America and Europe includes extensive metro connectivity to thousands of buildings and data centers. In addition to high-capacity dark fiber, wavelength, Ethernet and other connectivity solutions. Zayo provides flexible, customized solutions and self-service through Tranzact, an innovative online platform for managing and purchasing bandwidth. Our robust network of communications infrastructure gives you the ability to connect to thousands of data centers, on-net buildings and service providers across North America and Europe.

Available at



- Network solutions provider

Contact

Marco Bes
 Tel: +31 6 5 315 39 28
 E-mail: marco.bes@zayo.com

 www.zayo.com



Available at

DIEGEM

Ziggo

Ziggo is the largest cable operator in the Netherlands, providing digital cable television, Internet, and telephone service to both residential and commercial customers

- Leased lines (SDH, SDSL) – Dark Fiber – Ethernet (WAN)
- internet provider

Contact

Ziggo

Tel: +31 900 0730

E-mail: <https://mail.ziggo.nl/appsuite/>

www.ziggo.nl



Available at

ANTWERP

ZeelandNet

ZeelandNet is a cable internet provider in Zeeland. It is a subsidiary of DELTA NV, 2015 based in Middelburg, but founded in 1995 in Kamperland. The clientele is mainly located in Zeeland. In 2015 more than 100,000 internet connections will be provided and more than 60,000 telephone connections will be provided, in 2012 it would be 90,000 and 47,000 respectively. This made it the largest internet provider in the region and the only cable provider.

Since 1 March 2016, ZeelandNet has adjusted its speeds and is now the first in the Netherlands to deliver a maximum speed of 400 Mbps.

In 2011, the provider was chosen as the best provider of the Netherlands by a consumer association panel.

- internet provider

Contact

Sjaak Aarnoutse

E-mail: Sjaak.aarnoutse@zeelandnetbv.nl

www.zeelandnet.nl

External data centers & hybrid IT environments grow hand in hand

As a company you have various options for your IT environment: your on-premise data center, an external data center such as LCL, the cloud, etc. Which option did your company choose? Or does it combine multiple options? The combination of on the one hand the cloud and on the other hand the use of your own physical infrastructure, on-premise or external, involves the much-discussed “hybrid” IT environments.

Hybrid environments are gaining popularity today. Sometimes the link is made to a declining success of external data centers. Nothing could be further from the truth. According to a study by Uptime Institute (‘19), the need for data center capacity, both on-and off-premise, is increasing in almost half of the companies surveyed. Furthermore, the study “predicts a fundamental, structural evolution towards the increasing use of external data centers and cloud services” in the long term. The choice for own data centers would decrease sooner, although they will not become superfluous.

The lack of flexibility and the high investment costs at a data center within the company undoubtedly contribute to this. You don’t just expand your own data center due to lack of space, let alone arrange it quickly. Setting up your own data center infrastructure is a costly affair and also maintaining a server room has a considerable price tag. And then you don’t have a good DCIM (Data Center Infrastructure Management) for the control of all important parameters in the room, such as the temperature and the power consumption.

According to Uptime Institute, external data centers will remain crucial in the vision of many companies regarding IT capacity. In general, the impact of the cloud on the need for own or external data centers is not significant. In a hybrid environment, the cloud is often just one of the various components of an IT environment, just as external data centers are.

The cloud naturally has a number of advantages. For example, it forms an easy backup option, without the need for investment in additional hardware. In addition, economies of scale of the cloud can ensure reasonable rates, and you no longer need to arrange software and security updates yourself. However, the benefits of data centers continue to exist and differ from the benefits of the cloud. Is the security of the data important for your company? Or the legal framework under which they fall? Then a local data center offers the ideal solution. A common advantage is the flexibility. Both the cloud and an external data center offer more expansion options to keep a close eye on things, compared to an in-house data center.

Anyone looking for a backup solution with a hybrid environment can use an external data center as the first storage location for the data. The cloud can then act as a backup. Be aware of the characteristics of a hybrid environment. Data security requires extra attention and your IT environment becomes more complex. For a good backup you can also rely on two data centers that are sufficiently far apart. It is partly because of the distance between Diegem, Aalst and Antwerp that LCL chose these data centers for these locations.

The different IT solutions each have their own specific advantages and disadvantages. Depending on the IT need and the business context, one will already be more suitable than the other. With a well-considered approach, they can complement each other nicely. Hybrid IT environments are on the rise and as a data center at LCL we are happy to grow along with that trend. We are ready for it!



LCL presents access to all major public cloud and SaaS-providers with one single connection

Thanks to Equinix Cloud Exchange Fabric™, LCL makes developing all-in-one solutions a convenient and flexible affair

LCL now offers customers the opportunity to develop multicloud all-in-one IT solutions through one single connection. Going forward, LCL Data Centers will be offering Equinix Cloud Exchange Fabric™, making their customers' connections to a variety of cloud services, including AWS, Azure, Google, Oracle, IBM and Salesforce, easy and straightforward. They will gain easy access to SaaS solutions through service providers such as ServiceNow and F5 Networks as well. Together with Equinix, the global interconnection and data center company, LCL are addressing Belgian market requirements for global interconnection. Once again, LCL confirms its pioneering role at the heart of Belgian connectivity.

LCL customers will be able to develop integrated all-in-one solutions quickly and easily, thanks to the Equinix Cloud Exchange Fabric (ECX Fabric™). Using just a single connection on the LCL connection platform, LCL customers will be able to connect directly and simultaneously to numerous cloud services, SaaS providers, cloud service providers, edge solutions, secure key management services, cryptography services and other partners available on ECX Fabric globally.

In doing so, ECX Fabric, via a single connection, opens up a world of possibilities for its customers. The solution gives access to a multitude of providers whose services can be used to design integrated all-in-one solutions. This holds promise for SaaS and cloud service providers in Belgium as well, as they get to open up their services to the entire world. A start-up, for instance, could conveniently tailor its business to a worldwide audience through its single connection to ECX Fabric.

LCL expands its range of services once again. In addition to 40+ telecom operators in the meet-me-rooms and numerous interconnectivity solutions, the arrival of ECX Fabric in Belgium will further broaden the connectivity options at LCL. That way, LCL expands its range for developing multicloud IT solutions even more. Multicloud IT environments, which use both cloud services and data center colocation, are currently on the rise. LCL underlines its role as the connectivity heart of Belgium. With Equinix Cloud Exchange Fabric the possibility to connect everything, across the globe, becomes increasingly tangible.

Connect globally, flexibly and conveniently

ECX Fabric provides very flexible and easy connections. Indeed, the customer dictates where and how the connections are made, with flexible bandwidth options. In addition, the portal enables full customer customization. This makes worldwide, direct and flexible on-demand connections with key IT providers a reality in Belgium as well.

LCL, the hub of Belgian connectivity

LCL is increasingly becoming the hub of Belgian connectivity. By continually offering additional connectivity advantages, LCL has increasingly profiled itself as a connectivity pioneer.

"It's not about storing data, but about exchanging them", says Laurens van Reijen, LCL CEO. "In terms of connectivity, we are the key hub in Belgium. This is where telecom operators connect to each other, where you hop onto the backbone of the internet and take the number one ramp onto the data highway. We offer physical options to enter into a wide range of virtual connections. From here, we can also offer every conceivable hybrid multicloud IT solution, a concept that is definitely on the rise."

About Equinix Cloud Exchange Fabric™

ECX Fabric is a dynamic on-demand interconnection solution, connecting businesses to clouds, partners and their own infrastructure, directly and securely in over 35 metros across the globe. As a result of the partnership with Equinix, customers doing business in Belgium can:

- simplify their hybrid cloud strategy by using one vendor to directly connect to the highest concentration of major cloud service providers globally
- optimize their network through dynamically selecting the traffic routes, integrating network and cloud services; wherever in the world they need to reach.
- address security concerns of the public internet by deploying private connections
- improve end user experience through connecting distributed data to networks, clouds and IT infrastructure at the edge



**ONE PLACE
TO BUILD YOUR HYBRID CLOUD,
SCALE SWIFTLY & CONNECT GLOBALLY.**

One connection. Endless clouds, SaaS providers and edge services worldwide.

Connect to cloud service providers like AWS, Azure, Google, Oracle, IBM and Salesforce, use SaaS solutions Service Now and F5, or give your company the virtual edge with Cisco. These and many more services make for a fully integrated IT solution for your business. Want to scale your start-up? Share your services and build your own digital success story. All through LCL and the unique Equinix Cloud Exchange Fabric™.





CONNECT YOUR COMPANY TO THE FUTURE OF DIGITAL

CLOUD CONNECTIVITY MADE FLEXIBLE.

