

INFRASTRUCTURE

WAN Outsourcing – Effective and Optimal

Comarch Network Managed Services



COMARCH
INFORMATION TECHNOLOGY

2

Comarch provides a comprehensive service of constructing Wide Area Networks (WAN) and implementing network solutions throughout Poland and beyond. These solutions are most frequently deployed according to the outsourcing model.

WAN outsourcing means entrusting responsibility for your communication and data transmission infrastructure to a qualified external company. The fundamental components of outsourcing projects require that the subject of the contract be well defined and that the expectations of the commissioning party and the capacities of the commissioned party are precisely stipulated. The harmonization of the parties' organizational structures and the bilateral definition of procedures is of no less importance when working together.

When supplying WAN networks, Comarch takes full responsibility for their operation. The WAN outsourcing service provides the customer data transmission functionality with guaranteed quality and reliability.

The Solution

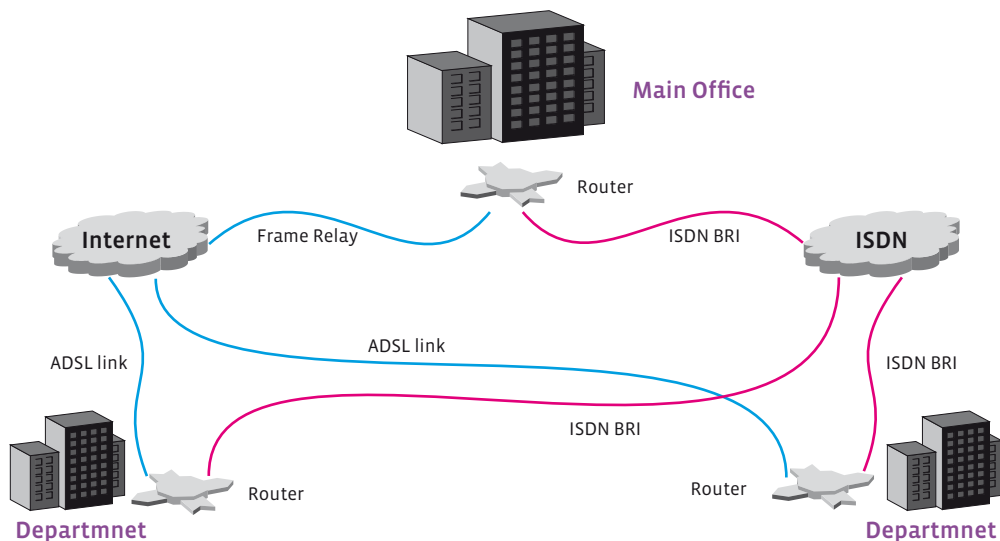
WAN outsourcing gives the customer:

- Telecommunications connections that are optimal for structure and throughput
- Essential hardware to rent or buy; the customer's existing hardware based on older technologies can be exchanged for new network equipment
- Implementation and integration with already existing systems; customer network downtime minimized; extensive, long term experience in IT systems integration
- Network management and monitoring including 24/7 system failure prevention
- Ongoing optimization; the system can be modified as needs change; the connection throughput and the hardware configuration can both be adjusted
- Consultation available for extending and optimizing the system; monthly reports with proposals for network modification
- Call-Center and HelpDesk. This involves a one-stop service for system event notifications which is supported by a knowledge base compiled from failures and problems that occur. System event notification progress reports are prepared regularly and the time taken for reaction and repair in the event of system failure is also recorded
- The customer is no longer reliant on one operator with an inflexible service portfolio ensuring that the technology can be changed as the telecommunications market changes

- The system is guaranteed to function for 99.8% of the year (a maximum of 18 hours of down-time!) and system failures are guaranteed to be rectified within four hours or even less.

Comarch provides optimum solutions in the following areas:

- Technology:
 - Access lines to XDSL, ISDN and GPRS packet switching networks, to satellite networks, and using Frame Relay technologies including ATM, VPN, MPLS and VSAT
 - Back-up connections – ISDN, GPRS, LMDS, VSAT.
- Telecommunications operators:
 - TPSA.
 - Telefonía Dialog.
 - Netia.
 - GTS.
 - Exatel.
 - Crowlay Data Poland.
 - Telekomunikacja Kolejowa.
 - Orange.
 - PTC-ERA GSM.
 - Polkomtel.
 - Satlynx.
 - Academic networks (Nask, Cyfronet).
- Comarch services as agreed upon within the terms of the service level agreement (SLA).



Strategic Benefits

4

The responsibility for the functioning of all network elements is taken by one company – Comarch

- The selection of an optimal architecture to match the company's applications and organizational structure
- The network is optimized and adapted to the real needs of the company
- Guaranteed network connection for any customer location
- System extension and expansion without the necessity of further IT investment
- Access to the latest technology
- Guaranteed continuity of IT system services
- Clear quality assessment guaranteed by the SLA
- The company can focus on its most vital activities.

Financial Benefits

- Significant reductions in telecommunications costs
- Service costs do not change (the monthly subscription is stipulated in the contract)
- Start up expenditures kept to a minimum
- Guaranteed optimization of parameters resulting in lower external costs (connections, hardware updates)
- The outsourcing charge is tax deductible
- Guaranteed selection of optimum IT solutions matched to business needs.

By entrusting your telecommunications system to Comarch, your company gains a partner that is independent of telecommunications operators and can suggest the most functional and cost effective solutions.

The approach that Comarch and its partners adopt in outsourcing projects means that the solution that is finally implemented is always fitted to the customer's needs and requirements. This is the approach in which Comarch delivers optimized solutions to customers.

Integration and Service Choices

WAN outsourcing with Comarch brings with it a wide range of extra services:

- The central network point (CPR) is moved to the Comarch Data Center (CDC), where high levels of reliability and security are guaranteed by the center's professional infrastructure and the around-the-clock supervision of Comarch engineers.
- Disaster Recovery Center. This service ensures the company's operational continuity and so avoids the serious financial losses or, possibly, the destruction of the IT or office infrastructure, which could result from IT system failures.
- The CDC provides centralized access to the Internet. Low costs along with the highest security standards are ensured by back-up, duplicate connections with Border Gateway Protocol (BGP), independent firewalls, IDS and IDP systems and 24 hour supervision by the center's administrators.
- VoIP voice transmission over the WAN: Providing free telephone connections between the company's different locations, and cheaper inter-city, international and mobile calls. This can be fully integrated with the company's existing telephone system.
- Effective and efficient GSM/GPRS transmission. The reliability and security of wireless GPRS is increased thanks to a private connection with the mobile operator's network that is part of the CDC's infrastructure.
- Constructing independent and secure networks. The use of VSAT two-way satellite data transmission gives full independence from ground connections, a global range and a secure and reliable data flow.
- Building mobile network access points using wireless GSM technologies including GPRS and EDGE and WLAN and WiMAX standards 802.11 and 802.16, as well as satellite access with VSAT in SCPC and TDMA.
- Constructing complete call center solutions. This involves traditional systems and IP contact centers, dispersed call/contact centers, integrating solutions from different producers, integration with other business systems, as well as CRM and ERP.
- Quality of service. This involves the systematic modulation of data traffic using quality of service mechanisms to maximize network effectiveness and ensure bandwidth for key applications.
- A minimum reduction of 20% in telecommunications costs results from entrusting your entire telecommunications infrastructure to Comarch outsourcing.

5

Full service integration in WAN outsourcing means 20% lower telecommunications costs.

Working with Operators

Comarch works closely with telecommunications operators in contractually bound relationships with many years of experience in large integration projects.

For Comarch customers this means:

- Operators react rapidly, giving us priority.
- Operators, who may not have had the means or desire to establish connections, are ready to invest.

- Services of the highest quality are provided and matched as closely as possible to the requirements.
- The guaranteed best prices.
- System failures are rapidly resolved.

Our intimate knowledge of the mobile network operators market also ensures that we can integrate their services within one project so that the solution we deliver is uniform and coherent.

6

The Benefits of Working with Comarch

- **QUALITY** – an SLA guaranteeing the highest quality from us.
- **EXPERTISE** – highly qualified engineers and managers.
- **EXPERIENCE** – we have been on the market for 12 years and have 2000 customers in the telecommunications, finance and banking, industry, trade and services and public administration sectors, as well as 40,000 small and medium enterprise customers.
- **STABILITY** – we are a stable company with a global reach.
- **KNOWLEDGE** – we are partners with the biggest IT suppliers in the world, including Sun Micro-systems, Hewlett-Packard, IBM, Cisco Systems, Checkpoint, Siemens and 3Com Corporation. We have extensive experience in providing outsourcing services to companies. Nearly twenty of the largest companies from different sectors and in different countries have already made the decision to place their trust in Comarch.
- **DEVELOPMENT** – we constantly monitor the IT market in order to keep pace with costs, trends and solutions.

We take full responsibility for the WAN networks that we supply and make sure they operate in order to provide customer data transmission functionality at the guaranteed levels of quality and reliability.

COMARCH

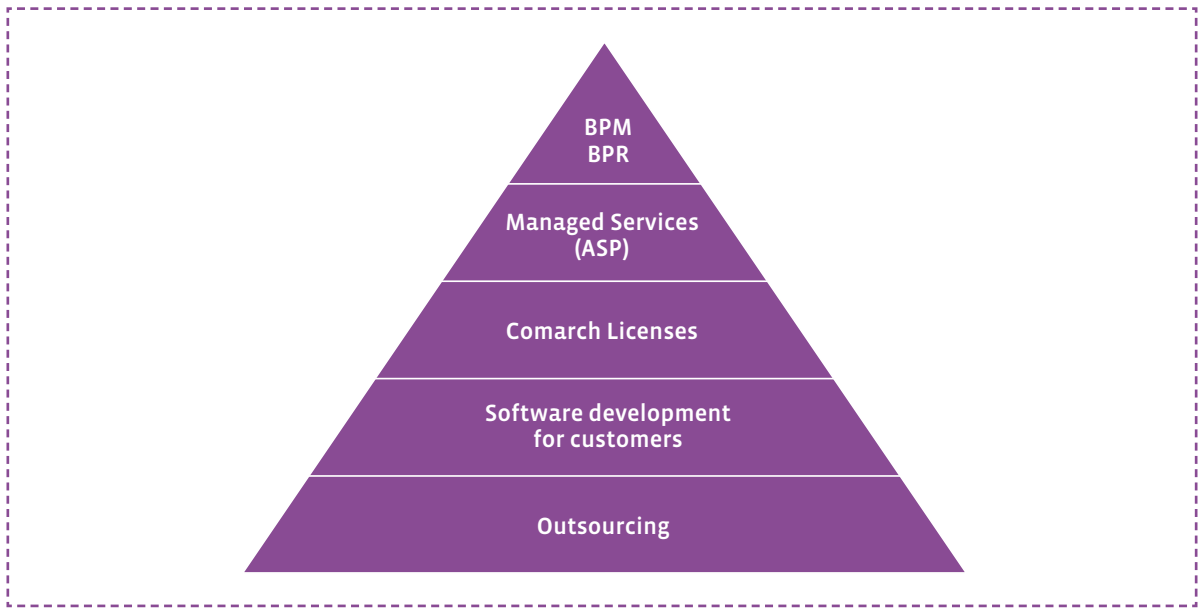
Comarch is the biggest IT systems integrator (Computer World magazine TOP200 ranking 2005) and software producer in Poland (the country's largest supplier of ERP systems according to an IDC report). The company delivers its integration, design, IT system production, project management and customer support products and services to the Finance, Banking and Insurance, Telecommunications, Small and Medium Enterprises, Industrial, Trade and Services and Public Administration

sectors. Inspired and informed by its academic roots, the company places a great deal of emphasis on innovation and combines this with an intimate knowledge of its customers' business needs which is the fruit of fifteen years experience. Comarch was established in 1991 and made its debut on the Warsaw Stock Exchange in 1999. The company complies with ISO standard 9001:2000 and is also implementing the Software Capability Maturity Model.

Contact

Please contact network_consulting@comarch.pl if you are interested in our products and services or have any further questions.

7



Comarch products and services pyramid

Comarch Headquarters

Al. Jana Pawła II 39 a
31-864 Krakow
Poland

phone: +48 12 64 61 000

fax: +48 12 64 61 100

e-mail: info@comarch.pl

Comarch Inc.

10 W 35th Street
Chicago, IL 60616
United States

phone: +1 800 786 4408

fax: +1 800 684 5916

e-mail: info@comarch.com

Comarch Software AG

Chemnitzer Str. 50
01187 Dresden
Germany

phone: +49 351 3201 3200

fax: +49 351 438 97 10

e-mail: info@comarch.de

Comarch OOO

Prechistenskiy Pereulok 14/1
119034 Moscow
Russia

phone: +7 495 783 36 71

Poland

Gdansk, Katowice Krakow,
Lublin, Lodz, Poznan,
Szczecin, Warsaw, Wroclaw

Belgium Brussels

France Lille

Germany Dresden,
Frankfurt/Main

Lithuania Vilnius

Panama Panama City

Russia Moscow

Slovakia Bratislava

UAE Dubai

Ukraine Kiev, Lviv

USA Chicago, Miami

www.services.comarch.com

www.comarch.com www.comarch.pl www.comarch.de www.comarch.ru

Comarch is a leading Central European IT business solutions provider specializing in forging business relationships that maximize customer profitability while optimizing business and operational processes. Comarch's primary advantage lies in the vast domain of knowledge accumulated in and applied to our software products. These products incorporate highly sophisticated IT solutions for businesses in all vertical sectors. Comarch has a multinational network of offices employing over 2800 highly-experienced IT specialists in Europe, the Middle East and the Americas.

ComArch Spółka Akcyjna with its registered seat in Kraków at Aleja Jana Pawła II 39A, entered in the National Court Register kept by the District Court for Kraków-Sródmieście in Kraków, the 11th Commercial Division of the National Court Register under no. KRS 000057567. The share capital amounts to 7,960,596.00 zł. The share capital was fully paid, NIP 677-00-65-406

Copyright © Comarch 2008. All Rights Reserved. No part of this document may be reproduced in any form without the prior written consent of Comarch. Comarch reserves the right to revise this document and to make changes in the content from time to time without notice. Comarch may make improvements and/or changes to the product(s) and/or programs described in this document any time. The trademarks and service marks of Comarch are the exclusive property of Comarch, and may not be used without permission. All other marks are the property of their respective owners.

COMARCH