ADC PROFESSIONAL SERVICES

Plan - Deploy - Maintain

ADC offers turnkey services built on a foundation of Plan - Deploy - Maintain

When service providers are asked what goes into choosing a professional services partner, technical expertise is the single most important criterion. Service providers expect in-depth knowledge, extensive experience and total accountability from their professional service partners.

ADC's unique experience as a true multivendor, multiservice, multitechnology professional services partner sets us apart. ADC has completed more than 200,000 network projects while deploying equipment from more than 60 network equipment manufacturers. With more than 20 years of experience working with many of the world's leading wireline, wireless and cable service providers, and with service teams throughout the United States and Europe, ADC stands as a trusted and highly valued business partner.

ADC has enhanced its professional services to further align with evolving network lifecycles. ADC offers turnkey services built on a foundation of PLAN - DEPLOY – MAINTAIN. Our network lifecycle approach helps our customers:

- Reduce the complexity of network planning, deployment and maintenance
- Bring additional network capacity and coverage online quickly to realize additional revenues
- Better assess the condition of their networks and their readiness for technology upgrades
- Ensure the quality of new-equipment deployments
- Integrate newly acquired assets into their networks
- More efficiently utilize their existing assets
- Decommission and remove equipment for redeployment or obsolescence

ADC Professional Services offers the knowledge, expertise and experience to handle any type of network project. ADC has the resources needed to accommodate local projects to large-scale multicity rollouts in environments that include:

- Central offices and remote sites
- Headend and hub sites
- Mobile switching offices and cell sites
- Data centers and labs

In short, we help our customers get the most out of their networks.

PLAN - DEPLOY - MAINTAIN

ADC®

Plan

It's often said that planning is everything, and that's never been truer than with network planning. The right plan can ensure on-time, on-budget deployments that integrate efficiently into the network and ensure service continuity and availability.

At ADC, we have a unique perspective on planning, based on these main foundations:

- We're experienced in wireline, wireless and cable networks
- We engineer and install equipment from more than 60 different vendors
- We support legacy and next-generation network needs
- We incorporate industry, network equipment manufacturer and carrier standards into our planning-and-engineering approach and documentation

ADC is also the world's leading provider of network infrastructure products and solutions, which gives us tremendous insight into the latest in network trends, connectivity and cable management practices.

Our planning services incorporate network assessment, design engineering and program/project management to create a thoughtful and methodical approach to match our customers' precise needs.

With resources throughout Europe and the United States, ADC can help plan and build local, regional and international networks regardless of network infrastructure.

Our planning services include:

Program and Project Management – Our planning process includes discovery and analysis leading to a detailed scope of work as well as plans for:

- Project schedules and critical paths
- Communication
- Quality management
- Material procurement
- Change management
- Risk identification
- Vendor management
- Project budgets and costs

Network and Inventory Audit – Our network assessment service uncovers and details network architectures, legacy records, processes and databases, along with a physical audit of network assets. The results are detailed project plans covering the transition of current assets to new and efficient operating models, as well as transformation plans that address a systematic migration to new technologies and more efficient utilization of capital and network assets.

Engineering – ADC's engineering process begins with a comprehensive understanding of our customer's long-term business objectives to ensure we help build the capacity, scalability and flexibility needed to support evolving business models. Using our extensive experience in design and detail engineering of voice, video and high-availability data networks, we create planning documentation to help build networks for delivering new and future services.

ADC planning services help service providers build flexibility into their networks to support existing and new business models and strategies, as well as evolving technology strategies.

Deploy

When it comes time to deploy network assets, ADC offers a full range of turnkey services designed to:

- Simplify the deployment process
- Speed time to market
- Improve quality
- Reduce service interruptions
- Reduce deployment costs

One of our strengths is our commitment to multivendor, multitechnology, multiservice deployments. We've installed equipment from more than 60 network equipment manufacturers, making us one of the most experienced professional services partners for all types of network deployments.

Our deployment services include:

Program and Project Management – In addition to Program and Project Management for planning, ADC provides turnkey services for deployment. ADC project managers serve as the primary interface. As project leaders, they:

- Manage key products deliverables
- Proactively manage all materials required
- Facilitate project meetings
- Maintain the project schedule, critical path and documentation
- Provide real-time project status information, including change requests, schedule variances and issues logs
- Maintain and ensure quality control
- Assess and report on project financials

Engineering Services – ADC's expertise in multivendor, multitechnology, multiservice solutions makes us the ideal choice for detail engineering. For each project, we develop a comprehensive Engineering Design Package filled with network infrastructure diagrams, installation notes, deliverables, commissioning and provisioning sheet, test data sheets and other information to ensure that the job is done right the first time, every time. We also provide an installation package that includes items such as material lists, cable running diagrams, configurations, interconnect tables and other critical information as well as firm price quotes based on a detailed scope of work. ADC's turnkey engineering services provide a single source of contact for all types of projects ranging from a single-site deployment to wide-scale programs across multiple geographies.

Material Services – With secured warehouses throughout the United States and Europe, ADC serves as a single point of contact for material management and supply-chain logistics. We help operators reduce their inventory investment, improve parts availability, and eliminate internal warehousing and distribution costs associated with network deployments. ADC's strength in material services ensures the right products are available and staged to achieve on-time project results.

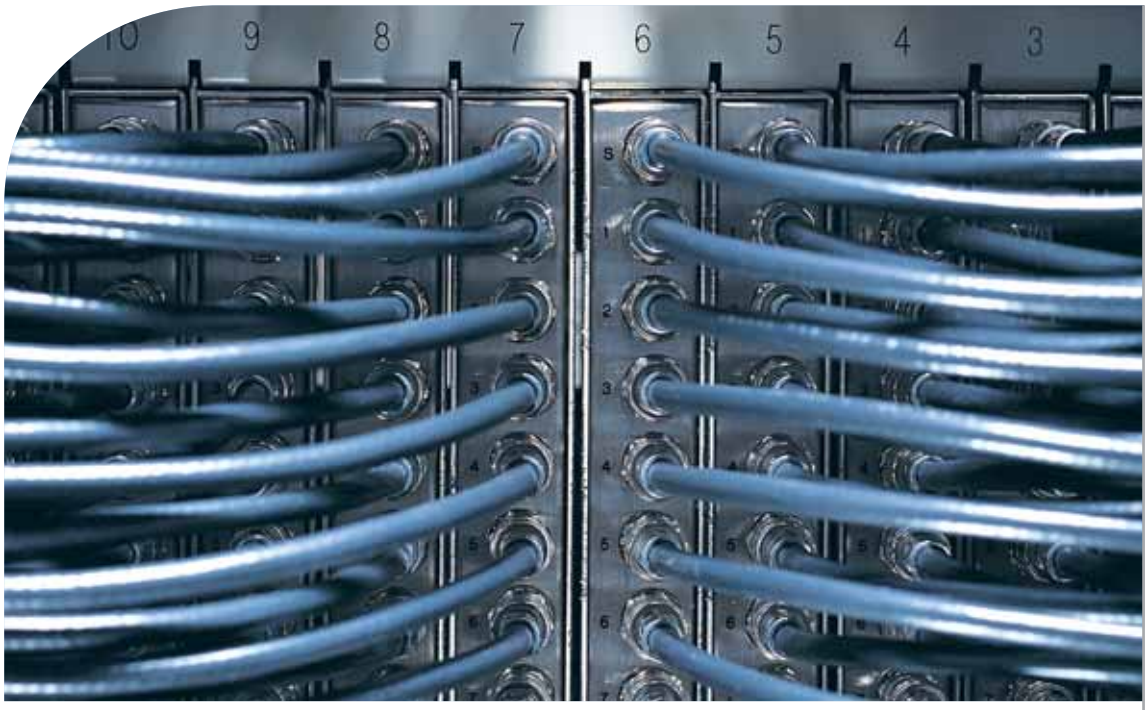
Preconfigured Equipment Solutions – ADC's Preconfigured Equipment Solutions help reduce deployment time and costs. We configure and assemble appropriate components in a secured, controlled environment instead of building these in the field, and test each solution to ensure it's fully functional before it's shipped. From a single rack or cabinet configuration to a fully loaded equipment shelter, ADC designs and builds customized solutions for all types of networks deployments, including:

- Simultaneous multicity rollouts
- New technology introduction, such as digital subscriber lines, next-generation wireless, Voice-over-IP and video-on-demand
- Major network upgrades
- Multiple equipment configurations

Power Services – As part of our Deploy and Maintain services, ADC offers services for primary DC power at the central office, headend, mobile switching, data centers and remote field facilities. We provide a single source services solution for both primary and secondary power services requirements in multivendor, multitechnology, multiservice environments. Additionally, we have extensive experience with products from all the major primary power equipment vendors. Our services include:

- Site surveys
- Detail engineering
- Method of procedures
- Furnishing
- Installation
- Preventive maintenance

Installation Services – When it comes time to install new network equipment, ADC helps operators by providing installation services that take the risk out of the equation. ADC installation teams have the breadth of capabilities, services, reach and scalability to handle everything from large-scale national build-outs and regional deployments to local installation projects. ADC has dedicated processes and training programs to ensure that our installation teams are continually evolving their skills as networks evolve with next-generation equipment deployment. Quality is ADC's #1 objective to deliver completed projects that are done right the first time, every time.



Commissioning and Integration – ADC's commissioning and integration services ensure the rapid deployment of network elements. ADC provides a single turnkey solution that helps to reduce costs and the time it takes to deliver new services, regardless of equipment type, platform or service. We rapidly and efficiently incorporate current and next-generation equipment into wireless, wireline and cable networks. We simplify even the most complex of network integration projects, and in the process cut the time it takes to deploy new services. Less deployment time means faster time to revenue. From physical design to end-to-end testing and integration into a live network, from DWDM and DSLAM to wireless signaling and VoIP, ADC has the experience, expertise and quality commitment to make your next network project a complete success.

Decommissioning and Removals – During the deployment process, it's often necessary to consolidate underutilized network elements or to replace existing assets with newer equipment to support service demands and the migration to new technologies. ADC offers complete turnkey services for the decommissioning and removal of all types of equipment, from a single site to multicity projects. We also offer cable mining to identify unused cables and to label, organize and protect cables that are in service. This process can significantly improve space availability and alleviate potential service interruptions or fire hazards caused by overloaded cable racking and infrastructure.

Maintain

ADC offers maintenance and optimization services designed to keep networks running at their peak. We help operators improve their service quality, reduce operational costs and eliminate unnecessary expenses.

Our maintenance services consist of a comprehensive network assessment, preventive maintenance, and the shifting of network assets through decommissioning and removal services. Along each step, we offer comprehensive program and project management to simplify the entire process, and to give our customers a single point of accountability.

Program and Project Management – In addition to Program and Project Management for planning and deployment, ADC provides these services for maintenance.

Network and Inventory Audit – As part of the maintenance process, ADC can assess network architectures, legacy records, processes and databases that have an immediate and direct effect on operational areas that include:

- Asset verification and recovery
- Provisioning
- Trouble administration
- Facilities optimization

Preventive and Routine Maintenance – It goes without saying that preventive and scheduled maintenance are essential to maintain operational integrity. As well, maintenance services can also reduce the overall costs of network ownership. A well-maintained network, serviced by the technicians with the widest array of equipment and facilities expertise, decreases service disruption caused by faulty elements and reduces expenditures for emergency service. ADC offers services for power, equipment and facilities maintenance, including scheduled maintenance of HVAC systems. We also perform all necessary preventive maintenance recommended by equipment manufacturers including scheduled software updates for active elements. We work closely with our customers to develop additional requirements for reactive/emergency maintenance services and we offer maintenance programs tailored to each customer's unique needs.

Decommissioning and Removals – Preventive maintenance is only part of the picture when it comes to maintaining the overall health of a network. It's often necessary to consolidate underutilized network elements or to replace existing assets with newer equipment to support service demands and the migration to new technologies. These changes in the network create a number of operational issues, including:

- Prevention of service disruptions
- Proper disposal or recycling of hazardous materials
- Reconfiguring battery distribution fuse bays
- Fire hazard reduction
- Safety equipment and training
- Network/environment compliance

ADC offers complete turnkey services for the decommissioning and removal of all types of equipment, from a single site to multicity projects.

Experience and Stability You Can Trust
The choice of professional service partners is a strategic decision that can affect the overall success of any network initiative as well as the overall business agility of the entire organization. Service providers choose ADC for our experience, in-depth expertise and relationships with a multitude of carriers and network equipment manufacturers. Our resource coverage combined with our multivendor, multitechnology, multiservice approach truly distinguishes ADC as a premier service partner.

Customers value ADC's long history of financial stability. ADC was founded in 1935 and has served the communications industry for more than half a century. We hold hundreds of patents and developed the original bantam jack technology still used in networks. Today, ADC is a world leader in providing global network infrastructure products and services that enable the profitable delivery of high-speed Internet, data, video, and voice services to consumers and businesses worldwide.

ADC's knowledge, expertise, experience and quality commitment are second to none. To find out more about what ADC Professional Services can do for you, contact your ADC representative or visit us on the web at www.adc.com/professionalservices.

ADC®

About ADC Professional Services

Through its Professional Services organization, ADC helps plan, deploy and maintain telecommunications networks throughout the United States and Europe. ADC's unique experience in multivendor, multitechnology, multiservice solutions makes ADC the ideal choice for projects that require an in-depth, hands-on understanding of simple to complex network environments.

Planning Services
- Program and Project Management
- Network and Inventory and Audit
- Engineering

Deployment Services
- Program and Project Management
- Engineering
- Material Services
- Preconfigured Equipment Solutions
- Power Services
- Installation Services
- Commissioning and Integration
- Decommissioning and Removals

Maintenance Services
- Program and Project Management
- Network and Inventory Audit
- Preventive and Routine Maintenance
- Decommissioning and Removals

ADC Professional Services offers comprehensive solutions for network operators delivering voice, video and data services over wireless, wireline and cable networks. Learn more at www.adc.com/professionalservices

PLAN - DEPLOY - MAINTAIN

Regional Headquarters

U.S.
ADC Professional Services
ADC World Headquarters
13625 Technology Drive
Eden Prairie, MN 55344
Ph. 1.800.366.3891 ext 70595

France
47, rue du Bois Chaland
Lisses
Evry Cedex, 91029
Ph. +33 (0) 1.69.112.269

Germany
Müggellandstraße 8-10
12559 Berlin
Ph. +49 30-65 92 01-0

Web Site: www.adc.com

From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080
Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our web site.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101

Specifications published here are current as of the date of publication of this document. Because we are continuously improving our products, ADC reserves the right to change specifications without prior notice. At any time, you may verify product specifications by contacting our headquarters office in Minneapolis. ADC Telecommunications, Inc. views its patent portfolio as an important corporate asset and vigorously enforces its patents. Products or features contained herein may be covered by one or more U.S. or foreign patents. An Equal Opportunity Employer

1314747 7/05 Revison © 2005 ADC Telecommunications, Inc. All Rights Reserved