



**Arbinet TheXchange™ Telephony Clearinghouse  
Drives Utilization Efficiency for Carriers and  
Enhances Profitability for Providers of CommWorks-Powered VoIP Services**

**Overview**

In today's ubiquitously interconnected and rapidly converging communications environments, service providers all around the world are faced with a constantly evolving assortment of challenges in order to deliver locally differentiated service offerings that are seamlessly backed by globally competitive backbone carrier services. While the convergence of both data and voice traffic over IP networks is opening many attractive new opportunities for service providers, they also must interface with traditional PSTN services that will continue to play a major role for the foreseeable future.

To be successful in this rapidly changing global environment, providers of Voice over IP (VoIP) must be able to rapidly create and deliver their targeted VoIP offerings using robust and readily deployable system solutions. At the same time, they also need to leverage strategic opportunities for economically providing backbone carrier capacities tailored to meet their end customers' requirements. In this brief overview, we will explore how the combination of capacity brokerage services from Arbinet-TheXchange and advanced VoIP system solutions from CommWorks are empowering VoIP providers to quickly and effectively ramp-up both their market penetration and their overall profitability.

**Dynamic Changes Impacting Global Telephony Markets**

Driven by global competition, sweeping deregulation and rapidly increasing worldwide network capacity, today's telephony industry is seeing continuous erosion of both revenues and profit margins for telecommunications services. In effect, backbone transport minutes have now become a commodity, however traditional telephony business models have not kept pace with this trend. With the market dynamics of both price and demand constantly fluctuating on a region-by-region, route-by-route and day-by-day basis, the conventional approach of negotiating bilateral agreements for exchanging telephony minutes can no longer respond to real-world market requirements.

Lengthy contract negotiations and implementation timeframes with multiple providers, combined with constant fluctuations in prices, reduce carriers' opportunities to efficiently buy and sell capacity. Combined with the need to design network infrastructures to meet peak load demands, this lack of efficient market mechanisms has led to typical network utilization rates of less than 20%. Not only are carriers left with significant unsold capacity and recurring loss of revenue; the overall inefficiency of the market tends to keep prices higher than necessary for subsidiary carriers and their customers.

## **Arbinet-TheXchange: The Clearinghouse for Telephony Carriers**

### Creating a Real-time Global Spot-market for Telephony Capacity

Arbinet-TheXchange provides a complete full-service online global exchange that enables both buyers and sellers of network capacity to carry out dynamic on-demand trading. By bringing together buyers and sellers from throughout the world within a neutral and anonymous environment that provides complete market-driven pricing, transaction settlement support and automated delivery of purchased capacity, TheXchange brings all of the inherent advantages of a true commodities market to the efficient exchange of telephony minutes.

### Least-Cost-Route Market-pricing Benefits Both Sellers and Buyers

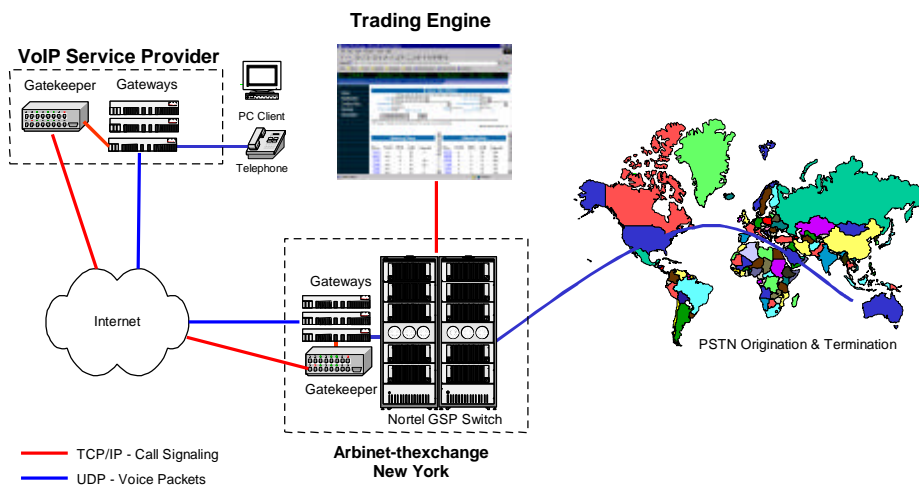
Carriers buying and selling capacity can change their price and quality specifications on a dynamic basis, thereby changing their position in TheXchange's Least-Cost-Route routing table. Each route on TheXchange is also measured and graded by Answer Seizure Ratio (ASR), enabling Arbinet to monitor and adjust scores accordingly, thereby assuring carriers a consistency of quality with the capacity they purchase. Because all prices are based on supply and demand with standardized quality parameters, the net result is that buyers can get constant access to the best available prices to meet their requirements and sellers can dynamically adjust pricing to maintain high levels of utilization and revenue.

### Financial Strength & Stability Enhances Transaction & Payment Processes

After becoming registered members of TheXchange, all carriers are able to efficiently conduct anonymous transactions for exchanging capacity, without the inefficiencies and time delays associated with traditional negotiated contracts. In addition, because all transactions on TheXchange are underwritten by Arbinet's pre-established on-going relationship with financial giant GE Capital Services, the settlement process is secure, consistent and much faster than with conventional mechanisms. Payment terms on TheXchange are a maximum of 15 days, as compared to an industry average of 66 days, thereby greatly improving cash flow and reducing outstanding credit balances.

### Spanning and Unifying PSTN and VoIP Markets

In addition to improving efficiency of capacity utilization within conventional PSTN markets, Arbinet-TheXchange also provides an ideal technology bridge for VoIP providers to leverage universal connectivity. Whether the VoIP providers focus on delivering PC-to-phone or phone-to-phone traffic services, a primary challenge thus far has been how to efficiently provide ubiquitous connections into non-VoIP environments. Questions such as, "How do I increase overall traffic?" and "How do I terminate 'off-net' minutes?" have been key concerns for most VoIP providers, and a lack of interoperability between platforms along with a limited pool of VoIP partners has made the answers hard to come by. Because TheXchange supports integrated connectivity for both PSTN and VoIP, a single connection can immediately open a seamless interface to the entire world for VoIP carriers, giving them automatic access to the world's leading PSTN carriers.



## Enhanced Opportunities for CommWorks' VoIP Partners

As a strategic partner with Arbinet-TheXchange, CommWorks is in a position to provide our customers with optimal platform solutions for deploying VoIP services and help them take advantage of TheXchange services to enhance their market growth and profitability.

### Leveraging CommWorks 3-Tiered Architecture to Create and Deploy VoIP Services

Already in use by Arbinet-TheXchange as a key element of the global transport network, CommWorks system solutions also can provide VoIP service providers with a robust and extensible foundation for rapidly implementing advanced VoIP solutions. CommWorks' Total Control comprehensive 3-tiered architecture spans the entire spectrum from Tier 1 universal carrier-class connectivity for media processing through Tier 2 signaling/control functions for network management to powerful Tier 3 service creation environments. Backed by CommWorks' extensive internal applications expertise and a strong network of strategic partners, the CommWorks platforms provide an ideal environment for cost-effectively developing and deploying carrier-class VoIP service.

### The Bottom Line: Maximizing Utilization, Efficiency and Profitable Business Ramp-up

With VoIP predicted to account for as much as 12% of worldwide voice and fax traffic by 2005 according to *Probe Research*, a major market growth opportunity has opened up for carriers that are able to effectively address the delivery of VoIP capabilities. By leveraging seamless access to least-cost capacity through Arbinet-TheXchange, CommWorks-powered VoIP providers can buy, sell and deliver unrestricted traffic capacities while greatly reducing their back-office costs, transaction times and financial risks. Additionally, VoIP carriers can significantly expand their market reach and efficiently generate incremental revenues through participation as sellers of their own VoIP capacities on TheXchange.

In parallel, CommWorks's Total Control systems and advanced VoIP solutions provide the highly scalable and extensible foundation of carrier-class network capabilities that service providers need in order to keep up with rapid and continued growth, while ensuring consistent user satisfaction and enhancing overall profitability.