



Shenick Network Systems: Recipient of  
2007 Global Frost & Sullivan Award for Product Innovation



Pictured from Left to Right: Kevin Glavin, CTO, Shenick Network Systems and Aroop Zutshi, President & Senior Partner, Frost & Sullivan

*“Partnering with clients to create innovative growth strategies”*

## 2007 Global Frost & Sullivan Award for Product Innovation

### Award Description

The Frost & Sullivan Award for Product Innovation is presented each year to the company that has demonstrated excellence in new products and technologies within its industry. The recipient company has shown innovation by launching a broad line of emerging products and technologies.

### Research Methodology

To choose a recipient of this award, the analyst team tracks all new product launches, R&D spending, products in development, and new product features and modifications. This is accomplished through interviews with the market participants and extensive secondary and technology research. All new product launches and new products in development in each company are compared and evaluated based on degree of innovation and customer satisfaction. Companies are then ranked accordingly.

### Measurement Criteria

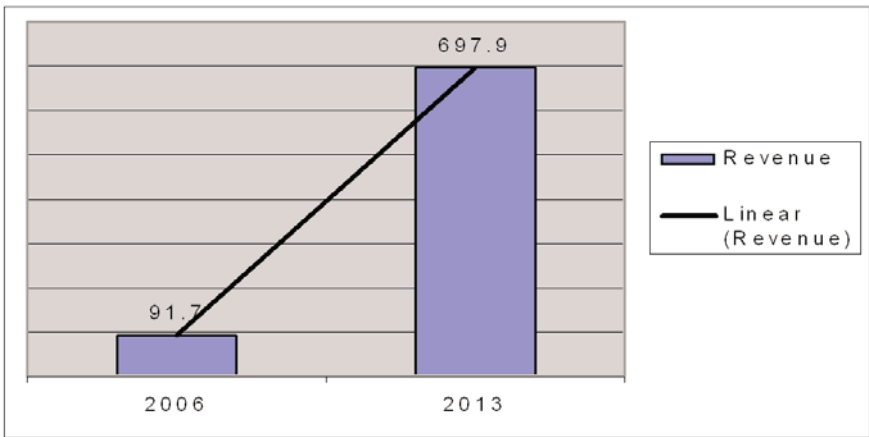
In addition to the methodology described above, there are specific criteria used to determine final competitor rankings in this industry. The recipient of this award has excelled based on one or more of the following criteria:

- Significance of new product(s) in its industry
- Competitive advantage of new product(s) in its industry
- Product innovation in terms of unique or revolutionary technology
- Product acceptance in the marketplace
- New product value-added services provided to customers
- Number of competitors with similar product(s)

Shenick Network Systems Limited (Shenick) is one of the major participants in the integrated triple play test equipment market and a company to watch in the next couple of years. Shenick was the first test equipment vendor to introduce an integrated triple play test solution, to test IP based voice, video, and data in a single, integrated test platform. In 2005-2006, the world triple play test equipment market experienced tremendous growth and recorded \$91.7 million in revenues. This growth was in large part due to the increased deployments of triple play and next generation services networks, in particular, IP video by service providers. The triple play test equipment market is still in its infancy so, introducing innovative and cutting-edge testing solutions is critical to company success in this highly competitive marketplace.

Chart 1.1 shows the revenue for the world integrated triple play and next generation services test and monitoring market from 2006 to projected revenue at 2013.

**Chart 1.1**  
**Integrated Triple Play Test Equipment Market: Revenue Forecast (World), 2006**



Source: Frost & Sullivan

Convergence has been key for the communications industry in the past few years. The market has realized a need for voice, video, and data to be integrated onto a common platform and Shenick successfully addresses this market need with its diversifEye™ product. Any service provider deploying next generation services such as IP video which includes broadcast IPTV and Video on Demand, VoIP, and high speed data applications needs to understand the effect of deploying all applications simultaneously in a common platform. While, customers prefer the convenience of receiving all three services from one single service provider, service providers, in turn, prefer to deal with one test equipment vendor, which can offer an integrated solution that tests and monitors voice, video, and data, in one box. This saves time, money, and space. Shenick’s innovative integrated triple play test solution is used by over 90 top tier service providers and equipment manufacturers in more than 24 countries. Shenick has a prestigious blue chip customer base for its integrated triple play test systems including network service providers such as T-Com, BT, FT, Bellsouth, Sprint, Qwest, NTT, Korea Telecom, Chunghwa Telecom, Malaysia Telecom and major network equipment manufacturers, Cisco, Juniper, Alcatel-Lucent, Ericsson, Nokia-Siemens, Fujitsu, Tellabs and Samsung.



## Market Overview / Key Challenges

Deployments of triple play bundles in the telecommunication industry are still in the early stages of adoption. This is expected to change, however, as triple play offers subscribers savings as they opt for a single provider and a single bill. Currently, the lack of standards, especially with regard to quality of experience (QoE), challenges the triple play test equipment market. There is in fact, no standardization for IP video encompassing IPTV and VoD features of triple play. The mean opinion score (MOS) in VoIP testing is widely accepted by customers as a measure of anticipated QoE, there is an equivalent for video but still a number of competing methodologies. Service providers (SPs) and cable multiservice operators (MSOs) offering IP based services do not realize the need for large scale performance testing until their systems fail, which results in loss of revenues and customer churn. Quality problems in triple play services may in fact accelerate the decline of customers from fixed line services. Currently, testing is not mandatory. However, an increasing number of SPs and cable MSOs realize the importance of testing for better quality of service (QoS) and QoE. They are also beginning to acknowledge the fact that their revenues are directly linked to the QoE of their services.

## Award Categories & Relevance

Telecommunication companies are deploying complex wireline and wireless networks to support an extraordinary combination of voice, video, and data applications over a common infrastructure. Service providers and equipment manufacturers increasingly realize the importance of testing their networks for QoS and QoE. To meet their needs, test vendors are moving toward offering converged testing solutions. Currently, there is only a handful of test equipment vendors offering integrated triple play test solutions. After analyzing these companies carefully, Frost & Sullivan is proud to recognize the company that has most excelled in this domain.

## diversifEye, Shenick's Key Offering

Shenick is in a strong position as a triple play test vendor with a particular focus on next-generation IP digital subscriber line access multiplexers (DSLAM) and other triple play network access methods such as FTTx, edge, aggregation routing and switching node devices and head end delivery platform test such as video on demand server performance. These infrastructural components are emerging as key components for IP convergence in both fixed and mobile networking.

diversifEye is Shenick's flagship product. It offers a wide range of testing capabilities from layer 2 to layer 7 and is used in a variety of test applications including IP video, triple play, network security testing, peer-to-peer traffic shaping, and IPv4/IPv6 testing.

diversifEye is a converged IP network test system, which enables service providers and network equipment manufacturers test end-to-end network and system performance.

diversifEye is capable of emulating large volumes of real application traffic for IP television (IPTV), Video On Demand (VoD), voice over Internet Protocol (VoIP), and other next generation IP services and common internet applications such as HTTP and email, all running simultaneously to create the most realistic functional and performance test environment possible. diversifEye couples this testing with QoE and QoS evaluation.

Shenick was the first test equipment vendor to introduce peer-to-peer (P2P) emulation to test cause and effect when implementing VoIP and IPTV, which are sensitive to delay. Shenick diversifEye includes quality analysis at packet and application level and enables service providers to identify the exact causes of degradation in their networks. For example, diversifEye is capable of determining fundamental QoS issues such as packet loss, delay and jitter along with QoE key performance indicators like actual video quality for each IPTV channel or the time taken to change an IPTV channel under a variety of stress test scenarios. In addition, diversifEye provides the ability to simultaneously launch emulated network attacks such as distributed denial of service (DDoS) attacks in order to test security mitigation devices including Firewalls and Intrusion Detection Systems.

Shenick continually enhances its diversifEye solution and in February 2007, launched diversifEye10G™, the first, single module 10 Gigabit per second (Gbps) stateful IP application traffic tester. Now, for the first time, equipment manufacturers and network operators can test and perfect their IP services at an application, network and user quality of experience level in 10 Gbps environments to create large scale subscriber test scenarios.

### **Innovation & Differentiation through Shenick’s “Per Flow” Architecture**

The key to the success of diversifEye is its groundbreaking innovative ‘per flow’ architecture that allows service providers generate and analyze each individual application traffic flow. This degree of test granularity means that finally a true measure of individual subscriber quality can be determined in scenarios involving one to millions of individual customers. Being able to determine the quality of experience for each triple play user in a typical home subscriber environment is a key performance indicator directly linked to customer satisfaction. The ability to guarantee this level of subscriber quality is critical to customer retention. diversifEye helps its customers identify how a system responds to everything from a single IPTV viewer's experience to the continual traffic flows created by millions of Internet users.

### **Shenick’s Partnerships & Alliances**

Shenick has joined forces with a number of strategic partnerships in the triple play test equipment market such as Telchemy, Opticom and complementary test vendors such as Empirix, Shenick has a network of over 30 indirect channel partners.

### **Recent Success Stories**

March 2007, Shenick is First to Offer High Definition IPTV and VoD Testing to Determine Individual Viewer Quality of Experience

February 2007, Shenick announces world’s first 10Gbps stateful traffic emulator in a single test platform for integrated triple play testing.

January 2007, Shenick’s diversifEye, was chosen by Iskratel, a supplier of IP infrastructure to deliver high quality IPTV and triple play VoIP, IP video, and data applications.

October 2006, Shenick diversifEye was selected as the standard Triple Play tester for T-Com, Germany.

For further success stories please visit: <http://www.shenick.com/pressrelease.php>

## Shenick – Edge over Competition

Shenick introduced diversifEye to the market at the end of 2003 and has grown rapidly year on year with revenue growth in excess of 70 percent in 2006. The company attributes its tremendous growth to the increase in demand for triple play test and measurement equipment from service providers and network equipment manufacturers. Shenick developed its diversifEye solution to respond to the growing market demand. An innovative triple play offering and true per-flow differentiation coupled with strategic partnerships has made Shenick's presence in the test equipment market more visible than ever. Therefore, Frost & Sullivan presents Shenick Network Systems with the 2007 Product Innovation Award for developing products that meet and exceed the key requirements of equipment vendors and service providers, enabling them to test voice, video, and data in one single platform.

## Summary of Best Practices

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.



### About Frost & Sullivan

Frost & Sullivan, the Growth Consulting Company, partners with clients to accelerate their growth. The company's Growth Partnership Services, Growth Consulting and Career Best Practices empower clients to create a growth focused culture that generates, evaluates and implements effective growth strategies. Frost & Sullivan employs over 45 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 30 offices on six continents. For more information about Frost & Sullivan's Growth Partnerships, visit <http://www.frost.com>.

Frost & Sullivan • Stacie Jones  
+1 210.247.2450 • [stacie.jones@frost.com](mailto:stacie.jones@frost.com)  
[www.awards.frost.com](http://www.awards.frost.com)

Shenick Network Systems • Robert Winters  
+353 01 236.7002 • [robert.winters@shenick.com](mailto:robert.winters@shenick.com)  
[www.shenick.com](http://www.shenick.com)