

ECI Strengthens Its Metro Ethernet Position with New Switch Family and 1Net Framework to Deliver Integrated Broadband, Optical and Ethernet Services

Type: Competitive Intelligence Report **Current Perspective:** Positive
Analyst: G. Hunt **Vendor Importance:** High
Report Date: March 17, 2008 **Market Impact:** Moderate/High
Module: Carrier Infrastructure

■ Summary

Event Summary

March 17, 2008 – ECI Telecom announced its 9000 Family of carrier Ethernet products for metro transport and service delivery plus a new architectural framework for IP, Ethernet and MPLS services – ECI 1Net. 1Net leverages a common framework for WDM/ROADM, MSPP and now Carrier Ethernet. The 9000 Family includes the high density 9700 Series Ethernet switch routers for the metro core and the 9200 Series for the metro edge where cost optimization, footprint and service aggregation are critical.

Analytical Summary

- **Current Perspective:** Positive on ECI Telecom's announced launch of its new line of carrier Ethernet switches, the 9000 Family. The 9000 Family offers a solution built with a transport-oriented approach to address the needs of metro core and access/demark aggregation. The announcement also marks the debut of ECI's new 1Net framework, which offers full life cycle services as well as products and applications to add value and tie together the company's carrier Ethernet, MSPP/MSTP, Access and Optical product families under its common LightSoft management system. The announcement leverages the advances ECI has made in adding intelligence to its broadband and access products to offer a one-stop shop for service provider's metro needs.
- **Vendor Importance:** High to ECI, because the launch of the new purpose built Ethernet switch portfolio and expansion of its professional services offer represent the culmination of the company's overall product direction and focus since the formation of the Network Products Division in February 2007. ECI's investments have been directed toward adding unique differentiable value to its optical and broadband access portfolio by leveraging the IP/MPLS and network management technologies, derived from its acquisition of Laurel Networks. The launch of 1Net and the 9000 Family significantly improves its capabilities to deliver full lifecycle support for integrated solutions across broadband, optical and metro core/access networks.
- **Market Impact:** Moderate to high on the carrier Ethernet market, because the new 9000 Family of switches provides a feature rich set of Ethernet capabilities to address the metro market which leverages the company's momentum in the broadband and optical markets. ECI has been somewhat absent from the rapidly growing carrier Ethernet market and the 9000 Family of switches plus the services, solutions and management focus provided by 1Net, presents a comprehensive proposition for service providers seeking a solution that leverages a transport-oriented model to building next generation infrastructures by integrating the metro, broadband and optical networks under a unified umbrella.

Target Markets

CLECs, Global Carriers, ILECs, IOCs, ISPs, Mobile Wireless Operators, MSOs

■ Perspective

Current Perspective **Positive**

We are taking a positive stance on ECI's announcement of its new 9000 Family of carrier Ethernet switches and the umbrella framework, 1Net, which defines the company's overall focus on optical, broadband and Ethernet products and services. With 1Net, ECI has pulled together a consistent set of products that address the access, optical, MSPP and carrier Ethernet requirements. The new 9000 Family provides the company with a broad range of Ethernet solutions ranging from the demarcation point through the metro core. In addition to the new Ethernet platforms that fill out the company's access/metro offer, 1Net also provides focus for high value solutions such as IPTV, NGN voice, business services and others. Completing the announcement is a formalization of a suite of services includes full life cycle support for its service provider customers. The new services umbrella defined by 1Net includes everything from planning, program management, consulting, building, turnkey and management of the network. The services piece is not new to ECI, but this is the first time it has elevated its services capabilities to the same level as its product capabilities.

ECI has been investing in its optical and broadband product portfolio heavily over the past few years, and in each area it has infused its intellectual property such as IP routing, MPLS, QoS and OAM features to make these products offer best-of-breed capabilities to support emerging advanced service offerings. The launch of the 9000 Family also takes the best of its IP technologies and provides a scalable family of Ethernet switches capable of being managed by the same LightSoft management system that manages the other products in its access portfolio. Over the past two years, ECI made strategic investments in its access and optical portfolios to differentiate its offerings from its competitors by adding features such as MPLS and multi-level QoS.

However, this left a gap in ECI's offerings. Case in point, for the carrier Ethernet access and aggregation roles the vendor had to rely on its ST-series multiservice routers which, although capable, did not meet the scale and price points required for CapEx and OpEx conscious service providers. The new 9000 Family addresses this gap by providing the scale, cost and operational simplicity to enable ECI to compete more cost effectively in the carrier Ethernet segments against a crowded field of rivals.

On the upside, the announcement brings several notable positives, which include the new 9000 Family of Ethernet switches that fill the company's earlier Ethernet product gap. Two 9000 Family models have been announced, the 9200 for demarcation to access aggregation chores, and the 9700 for high density Ethernet aggregation and metro core functions. The 9700 touts the highest per rack line rate GigE/10 GigE industry densities with the 9710 providing 1,200/120 GigE/10 GigE respectively. In addition, the 9700 supports direct WDM interfaces to enable smooth integration with the optical network layer. From a network management perspective, the 9000 Family is managed by the company's LightSoft management system, which also manages other platforms in the ECI broadband portfolio, thereby offering the potential of considerable OpEx savings since the entire portfolio from the customer edge to the metro core is handled by a common management system. LightSoft also provides multi-layer alarm correlation, OAM and offers wizards to simplify and automate provisioning of Ethernet and IP services with QoS, which again, helps to simplify network operations and optimize network OpEx.

At the same time, the announcement comes with some concerns. The first is that ECI's services strategy (defined within its 1Net framework) will have to contend with well-established services giants such as Alcatel-Lucent, Ericsson and Nokia Siemens Networks who have significant services staff in place and a decade or more of experience under their belt delivering full life cycle services to their Tier 1 service provider customers. Going further, ECI has not captured measurable market share for carrier Ethernet deployments, indicating that it is somewhat behind its larger competitors who have made significant inroads during the past year. These factors combined will likely make it difficult for ECI to ramp up the required critical mass quickly. Regardless of its public or private status, the fact remains that ECI is a relatively small company in the global telecom market and does not have the same well of resources that its much larger rivals can tap into to drive continued product line innovation and scale its professional services organization. Finally, ECI's historical strongholds have been in emerging markets; markets where most all competitors are also pursuing the same opportunities. So, while the creation of the 1Net framework and a highly competent Ethernet product set will bolster ECI's competitiveness, there is little doubt that the Israeli vendor is certain to see increasing competitive pressure on what has traditionally been its "home turf".

The launch of 1Net and the new 9000 Family of Ethernet switches will have a moderate to high impact on the carrier Ethernet market because the new switches provide a feature rich set of Ethernet capabilities to address the metro market which leverages the company's momentum in the broadband and optical markets. The 9000 Family of switches plus the services offerings, solutions focus and management focus provided by the 1Net framework, presents a compelling proposition for service providers seeking a solution that leverages a transport-oriented model to building next generation infrastructures by integrating the metro, broadband and optical networks under a unified umbrella. Now that ECI has filled out its portfolio with a comprehensive carrier Ethernet offer, the vendor's traditional optical rivals – most of whom are also addressing the carrier Ethernet market – will need to take stock of ECI's new capabilities and factor them into their own counter-marketing efforts.

■ Positives and Concerns

Competitive Positives

- ECI's 1Net framework brings together its portfolio of products targeted at transport and aggregation applications (MSPP, MSTP, optics and Ethernet), a focus on high value solutions (IP transport, NGN voice, triple play and business), expanded services (full life cycle including PM, planning, build, manage, consulting and turnkey) plus a common management system (LightSoft). To this end, ECI can now claim an integrated solution from access to metro core that addresses the scale, OpEx and CapEx requirements for next generation transport networks.
- The 9200 Series of access switches and demarcation units delivers wire-speed performance in a small form factor for Ethernet aggregation and circuit emulation services. The 9200 Series supports resilient carrier Ethernet access rings for better infrastructure utilization with fast service restoration. Migration of legacy services is supported through T1/E1 circuit emulation, enabling those services to be conveyed over the metro Ethernet network via MPLS.
- The 9700 Series of Carrier Ethernet switches provide industry leading wire-speed GigE port density (1,200 GigE ports per rack, or 120 10 GigE ports). Initially, the system supports 40 Gbps per slot, with the ability to scale up to 100 Gbps per slot and 1 Tbps per shelf in the future. The platform's hierarchical quality of service implementation and scalable IP multicast enable side-by-side deployment of services such as business (L2/L3 VPNs), triple play and IPTV services.
- ECI's LightSoft management system supports the new 9000 Family plus the existing XDM and BroadGate families of WDM/ROADM and MSPPs. This enables ECI to offer one converged view, by managing Layers 1, 2 and 3 services via the LightSoft network management system. The integrated approach helps to reduce network management complexity and associated OpEx issues being faced by service providers as they roll out advanced services.
- Service providers' workforces, already familiar with transport operational methods, will find the ECI model a familiar approach to deploying and managing new services based on carrier Ethernet. LightSoft delivers features such as multi-layer alarm correlation and root-cause analysis. LightSoft also provides OAM capabilities to aid in fault detection, fault isolation, performance monitoring and automated provisioning for Ethernet and IP services with QoS.

Competitive Concerns

- ECI's services strategy (defined within its 1Net framework) will have to contend with well-established services giants such as Alcatel-Lucent, Ericsson and Nokia Siemens Networks who have significant services staff in place and a decade or more of experience under their belt delivering full life cycle services to their Tier 1 service provider customers.
- While ECI has made significant investments to refresh its metro optical and broadband access product lines, the downside is that these investments might have delayed ECI's ability to focus on development of the 9000 Family products. As such, while ECI can now make robust technology claims for its optical and broadband products, ECI has clearly foregone the opportunity to compete for early momentum in the carrier Ethernet market.
- ECI is introducing the 9000 Family products to a market that is dominated by larger, entrenched competitors. Case in point, vendors such as Alcatel-Lucent, Cisco, Foundry and Extreme garnered 13.1%, 70.5%, 6.8% and 3.3% of the carrier Ethernet access and aggregation market respectively in 2007 according to Synergy Research. While the new purpose built 9000 Family should strengthen ECI's position in this segment, the vendor must clearly overcome stiff competition from the best known names in data networking.
- With most equipment vendors in the world focusing on Asia and other emerging markets – such as, China – ECI's status as a mid-tier player could be a disadvantage as the Tier 1 giants and Asian incumbents (i.e., Huawei, ZTE, etc.) leverage name recognition and deep-rooted sales channels in the fight for market share. For example, Huawei's Quidway S Series Ethernet switches and CX Series metro services platforms represent significant competition in Asia.
- The fact remains that ECI is a relatively small company in the global telecom market and does not have the same well of resources that its much larger rivals can tap into to drive continued product line innovation and scale their professional services organizations.

■ Recommended Actions

Recommended Vendor Actions

- ECI Telecom needs to highlight both the technical merits and advanced service delivery capabilities of its 9000 family solution set. ECI can point to the scalable offering provided by the 9200 and 9700 series switches and the rich feature set it provides (i.e., bandwidth and traffic management, virtual routing and multi-level QoS capabilities) that differentiate it from competitor solutions. ECI needs to challenge rival vendors to provide proof points where they can exceed ECI's next-generation service delivery capabilities.
- ECI needs to leverage its optical and broadband presence with large and medium telcos and introduce its latest carrier Ethernet solutions into these friendly environments that are familiar with its LightSoft management system and the rich features of its solution portfolio. Slotting new 9000 Family deployments into existing customer networks will undoubtedly add credibility to ECI's claims that its new carrier Ethernet products lower TCO and help operators ease the transition from circuit to packet networking.
- ECI can point out that it has efficiently leveraged the core technologies and intellectual property developed by Laurel Networks by incorporating it into the company's Ethernet, broadband and optical solutions ECI should highlight how this will facilitate enhanced quality of service (QoS) and quality of experience (QoE) capabilities that operators are now requiring in order to deliver advanced services over their access and metro networks.
- ECI needs to highlight its strengthened overall competitive positioning as a result of going private. Even as vendor consolidation has reduced ECI's list of direct rivals, it has also strengthened the rivals that remain. ECI should point to the the 1Net concepts and the ongoing enhancements in the optical, broadband and carrier Ethernet market segments as proof that it has the required resources to deliver solutions that are in lock-step with emerging carrier requirements.
- ECI should establish a reference customer for its 9000 Family of Ethernet products. Although, ECI is attacked as having a limited customer base, the vendor can note that several of its highest-profile customers cannot be revealed at present. Publicly announcing a customer for the 9000 Family will add credibility to the notion that ECI has proven its ability to compete with all rivals not only in terms of technological/solution set capabilities, but also in terms of offering highly competitive systems pricing.
- ECI should highlight its \$1.24 billion acquisition by the Swarth Group et al. as evidence that its product portfolio and customer base hold considerable value despite the sales/marketing tactics of rival vendors currently claim overwhelming market share positions. In fact, under the private equity leadership, ECI can more likely to make life difficult for its rivals, which will no longer have "open book" access to ECI's financial data and related corporate details.

Recommended Competitor Actions

- Alcatel-Lucent should note its overall service provider access through multi-service edge solutions based on its fully managed IP/MPLS portfolio. Alcatel-Lucent should highlight the capabilities of its common SR OS which runs on all platforms and show how its portfolio of 7XXX routers and management platforms (5620 SAM, 5750 SCC, and 5650 CPAM) provide a cost effective end-to-end solution to support service providers with their network transitions. Alcatel-Lucent's should also note its IP router customers total more than 180, spanning more than 70 countries.
- Cisco should highlight its leadership and its Aggregation Services Router (ASR) 1000 Series, which is designed to address the emerging Exabyte era in network traffic. Increasing, access routers need to deliver higher per subscriber performance and offer embedded services to reduce cost and complexity. The ASR 1000 Series delivers the performance needed plus embedded services such as firewall, IPsec, DPI, integrated service gateway and SBC functions in the base platform.

- Ericsson needs to highlight its consistent pursuit of its Full Service Broadband (FSB) strategy for transforming broadband access to support services such as mobile broadband, VoIP and IPTV. Ericsson should stress that the experiences gained in these areas are relevant for providing optimal solutions at the network edge to meet the requirements for voice and video applications. Ericsson should note that its Global Services has 24,000 employees in 140 countries, and that it now manages networks that support 135 million subscribers.
- Juniper should provide proof points for the MX-series of Ethernet service routers in each of its targeted service areas such as: wireline, wireless, MSO, CSP and enterprise. It should highlight the MX-series plus capabilities such as automated MPLS Plug N Play which offers a strong solution for carrier Ethernet and data center applications. Juniper should also stress its global services capabilities which are provided by its direct service organization plus by its extensive channel partners.
- NSN should highlight three specific areas in addition to its services offering where it provides carrier Ethernet solutions. First, it should show how its hiD6600 series Ethernet switches provide the scale and QoS required to achieve simplified access and aggregation network. Second, it should show how through its Atrica acquisition and its strategic partnerships enable an end-to-end Ethernet solution ranging from the demarcation point to the IP core. Third, it should highlight its leadership in PBB-TE to build effective mobile backhaul solutions and metro networks.
- Nortel, Ciena, Extreme, Huawei, Soapstone and others should highlight their leadership in driving down the cost of carrier Ethernet deployments through new simplified control plane management mechanisms and protocols centered around PBB-TE. Vendors championing this technology should highlight the merits of PBB-TE with those of IP/MPLS and layer 2 MPLS models. Ciena should highlight the value proposition of its FlexSelect product architecture to deliver integrated optical Ethernet solutions. Huawei should stress its optical, broadband and carrier Ethernet solutions.

Recommended End User / Customer Actions

- Service providers expanding their IP-based service offerings should evaluate ECI's 1Net model and the broad range of technologies that it encompasses to support advanced services such as business VPNs, IP-video, triple play and other advanced services over their DSL, WDM and carrier Ethernet infrastructures. Specifically, network operators should pay attention to ECI's LightSoft management system and its ability to control all products in the suite to deliver basic and advanced transport services with a simplified point-and-click interface.
- Service providers who are seeking a strategic partner to help them build their next generation access, optical and/or Ethernet infrastructures should evaluate the depth of the services offered under ECI's 1Net framework. ECI has a long history of providing a unique combination of innovative and flexible solutions for its customers. With the announcement of 1Net, ECI has formalized its promoting services such as planning, program management, consulting, building, turnkey and management under a common umbrella.
- Service providers looking to deploy or expand their Ethernet access and aggregation service areas should consider the solutions offered by ECI's 9000 family of Ethernet switches. The new Ethernet portfolio includes two purpose built models, the 9200 and 9700, that address the full range of requirements beginning at the Ethernet demarcation point through the metro core. Providers should consider the rich QoS capabilities plus the common management which support Ethernet, broadband and optical portfolios with a common interface and provisioning model.
- Service providers evaluating carrier Ethernet solutions need to compare/contrast ECI's 9000 Family with solutions from leading router-based competitors such as Alcatel-Lucent, Cisco, Ericsson, Juniper and from Ethernet switch-based competitors such as Extreme, Foundry, Huawei, NSN and others. Providers should evaluate alternative solutions based on their specific service delivery needs, network scale and overall network architecture. For example, Layer 2-centric networks may find that a switch based approach is more beneficial while other service providers may find a router-based solution better fits their overall requirements.
- Service providers should press ECI and other vendors that are championing a common MPLS-control plane for access and aggregation services for details on how cost effectively their solutions can scale to the levels required to meet projected service demands. MPLS is a proven technology for IP edge and core networks, but can appear to be overly complicated for Ethernet access and aggregation applications and for the optical transport layers of the network.
- Service providers should evaluate the progress of the PBB-TE ecosystems as vendors bring their solutions to market which include not only switches, but management and control solutions to support advanced services and network scale. Specifically solutions from Nortel, NSN, Extreme and Soapstone networks should be evaluated from a functional perspective and their ability to seamlessly mesh with existing MPLS-based edge and core networks. Service providers should determine which model will best meet their long term scale and service delivery requirements.

All materials Copyright 1997-2008 Current Analysis, Inc. Reproduction prohibited without express written consent. Current Analysis logos are trademarks of Current Analysis, Inc. The information and opinions contained herein have been based on information obtained from sources believed to be reliable, but such accuracy cannot be guaranteed. All views and analysis expressed are the opinions of Current Analysis and all opinions expressed are subject to change without notice. Current Analysis does not make any financial or legal recommendations associated with any of its services, information, or analysis and reserves the right to change its opinions, analysis, and recommendations at any time based on new information or revised analysis.

Current Analysis, Inc.
21335 Signal Hill Plaza, Second Floor, Sterling, VA 20164
Tel: 877-787-8947
Fax: +1 (703) 404-9300

Current Analysis, Inc.
2 rue Troyon, 92316 Sevres Cedex, Paris, France
Tel: +33 (1) 41 14 83 17

<http://www.currentanalysis.com>



Horsebridge Network Systems Ltd, 1 Pate Court, North Place, Cheltenham, GL50 4DY England.

Tel:+44 (0)1242 530630 Fax: +44 (0) 1242 530660 E-Mail info@horsebridge.net www.horsebridge.net