Architecture for the 21st Century Network
Avici is a leading provider of scalable core routing solutions for intelligent IP-over-optical networks. The Company designs and manufactures high-speed data networking equipment that enables communications service providers to intelligently transmit high volumes of data across fiber optic networks.
January
- Enron Communications announces agreement with Avici.

March
- Avici stages first public demonstration of dynamic provisioning with optical-cross connect product.

April
- *Network Magazine* names Avici’s TSR product of the year.

May
- Avici demonstrates IP services delivery over all-optical network with optical switch.

July
- Initial Public Offering: Proceeds of $232 million.

September
- Avici teams up with IBM for service and support.

October
- Qwest Communications to use Avici TSR in all-optical broadband network.
- Avici’s IPriori Software with MPLS and QoS support shipped to customers.

December
- Avici announces first European customer: France Telecom R&D.
- AT&T signs three year procurement agreement with Avici.
Dear Fellow Shareholders:

It is our privilege to present you with our first annual report as a public company. Since Avici was founded at the end of 1996, we have achieved many significant milestones. Our accomplishments in the year 2000 are the result of a great deal of hard work, innovation, and dedication on the part of our employees to get the job done.

With the goal of building a successful company, we began the year 2000 with the following objectives:

- Demonstrate success against our aggressive business plan;
- Deliver the market’s first scalable core router;
- Win purchase commitments from three major carriers;
- Create a world-class sales and service organization; and
- Complete our initial public offering.

We are pleased to report that during the past year, we met or exceeded each of these targets.

Let us share with you some of our key highlights:

We exceeded our financial goals in each of four quarters in 2000.
We recorded our first revenue in the first quarter of 2000. For the year ended December 31, 2000, we reported revenue of $15.9 million. Sequential growth from third quarter to the fourth quarter 2000 was 102%, and for the full year, our compound growth was over 160% per quarter. Additionally, we have seen our gross margins improve each quarter as our delivery volumes have increased and product mix has shifted. We completed our IPO in July and at the end of the year our financial condition was strong, with cash, securities and investments totaling $255 million. By the fourth quarter, our net loss before stock based compensation and special charges began to narrow on a sequential quarter basis.

The year 2000 was a foundational year for Avici. As we made the transition from private to public company, our accomplishments have been meeting, quarter after quarter, our financial, strategic and operational milestones. While our stock price suffered as networking stocks came down from mid-year highs, we are confident in the underlying market opportunity and remain focused on execution.

Our TSR is the first, and only, scalable core router in the market.

As 2000 came to a close, it became clear to us that backbone carriers are under pressure on three fronts. First, they need to lower the cost of building and operating the backbone. Secondly, they want to offer new services more rapidly in order to meet the demand for bandwidth. Third, they are looking to provide services to their customers over core IP networks.

Today, of the three vendors with routers deployed in the backbone of the Internet, ours is the first and only router with a fully distributed scalable architecture, unique Velociti switch fabric and Composite Link technology. By scalable architecture, we mean one that not only meets the immediate needs of service providers, but addresses their future requirements as well. This is in direct contrast to centralized designs, which may be unable to keep up with the fast-paced and unpredictable IP environment. The advantage we bring to our customers is an ability to invest today’s capital to address not only today’s bandwidth needs but also those of tomorrow. As their networks grow, our customers can add additional capacity without interrupting the services they are offering and without reassigning their scarce IP
engineers to manage the capacity increase through major upgrade programs. Our Composite Link technology enables our customers to dynamically provision additional lines and to increase or decrease transmission speeds on a particular link without network disruption.

Additionally, we delivered our OC-192c interface to the market with the highest level of port density in the industry. Our product enables customers to deploy up to 20 OC-192c ports or 80 OC-48c ports in a single seven-foot rack. Taken together, these technical advances enable our customers to reduce capital expenditures, conserve scarce central office space and power, and lower ongoing operational expense.

One of the continuing challenges facing us is to provide our customers with new features when the market demands them. In 2000, we shipped the third generation of our IPriori software, which provides support for MPLS traffic engineering – the most recent improvement to core Internet protocols. We proved full interoperability between the TSR and routers from Cisco and Juniper through testing conducted and certified at George Mason University’s Advanced Internet Lab. In keeping with our theme of scalability and reliability, our MPLS implementation supports the establishment of thousands of connections, which carriers can use to reliably deliver advanced revenue-generating IP services.

We established a presence in Europe by winning our first European customer, France Telecom R&D. Our scalable router was selected for inclusion in the VTHD, a very high bandwidth experimental network established by France Telecom and the French government, comprised of a multi-vendor platform to support next-generation Internet technology. The TSR will enable the evaluation of high throughput routing combined with advanced traffic engineering solutions, technologies that will provide the essential foundation for future deployment of high value-added, IP services.

We have strengthened the organization. We accomplished one of our primary objectives by building out a world-class customer service and support organization to support our revolutionary new product and the expansion of our customer base. We opened our Global Service Center to provide critical 24x7 technical assistance to our customers worldwide and established partnerships with key customer and professional service organizations, including IBM and Dimension Data, to complement our internal service offerings.

We have five carrier customers.

We are currently operating in AT&T’s 10 Gigabit (OC-192) coast-to-coast IP network, one of the largest IP backbone networks in the world. We also won commitments from Qwest, Etron and Williams. The migration to a scalable IP backbone is a way for our customers to make their networks more efficient, provide superior service and reduce costs.

We increased our direct sales team in North America, and put in place the nucleus of our European sales organization. We augmented our direct sales effort by partnering with distributors such as Nissho and Itochu in Japan, Samsung in Korea and CommVerge Solutions for pan-Asian coverage. These relationships will provide us with a more focused approach to the delivery of our product in specific geographic markets.

Furthermore, we extended our manufacturing capabilities by outsourcing to Sanmina and Celestica to build, test and ship the TSR. By outsourcing the manufacturing process to reliable partners, we believe we are better able to meet our customer’s product expectations for timely, high quality solutions, while focusing our internal resources on product development.
What are the challenges looking ahead in 2001?

While growth in the overall carrier equipment market slowed at the end of 2000, there is a continued fundamental investment in the buildout of next generation IP infrastructure and a shift in spending away from legacy circuit-switched equipment. Thus Avici continues to participate in one of the fastest growing market segments in the telecommunications industry today — a market estimated by industry analysts to be more than $15 billion by 2004.

To fully realize our potential to gain share in this growing market, in 2001 as in 2000 we will continue to focus on three key areas:

- Adding new customers: we have expanded our reach into Europe and would expect to see results from that initiative. We have also begun to increase our focus in Asia, an area that promises to be one of the long-term drivers of new network buildout.

- Product innovation: we will deliver new features such as Gigabit Ethernet and MPLS enhancements to meet customer demand. We will continue to strive towards new levels of scalability, cost effectiveness and reliability necessary for carriers to deliver new, revenue-generating services to their customers.

- Profit improvement: we are focused not only on growing the business, but doing so in a profitable manner. As our volume increases, manufacturing efficiencies should continue to improve. We will continue to invest strategically in the business but will do so with a clear view towards bottom line improvement.

We would like to thank our shareholders, employees, customers, suppliers and other business partners for their continued confidence and commitment to us. In the coming year, we look forward to reporting on our continuing progress.

Steven B. Kaufman
President and Chief Operating Officer

Surya R. Panditi
Co-Chairman and Chief Executive Officer
Core Routing Opportunity

The core router market is expected to grow from $4.5 billion in 2001 to more than $15 billion in 2004.

Avici’s Core Value Proposition

- Scalability with Composite Links gives carriers lower costs, faster provisioning and higher profits when building and operating converged networks.

- How carriers benefit from Avici’s solution:
  - Avici’s solution lowers capital and operational expense by increasing the useful life of a network design.
  - Avici’s TSR gives customers the ability to add capacity on demand – increasing service velocity.
  - The TSR provides a reliable network platform to support and deliver high margin IP services.

Avici is addressing the critical needs of carriers with the world’s first scalable router by providing features such as:

- Carrier-class reliability;
- Intelligent management of high volumes of network traffic at high speeds;
- Composite Links that deliver maximum service flexibility;
- Interoperability with existing carrier equipment and advanced traffic engineering protocols such as Multiprotocol Label Switching (MPLS);
- Quality of Service functionality that facilitates the provisioning of new revenue-generating services, such as video streaming, VoIP, and MPLS VPNs.
Corporate Officers and Directors

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Paul F. Brauneis
Vice President and Chief Financial Officer
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Investor Relations
For further information on the Company, please visit www.avici.com and see the investor relations section.

“Safe Harbor” statement under the Private Securities Litigation Reform Act of 1995: Any statements in this Annual Report that are not statements of historical fact are forward-looking statements that are subject to a number of important risks and uncertainties that could cause actual results to differ materially. Specifically, this Annual Report contains forward-looking statements related to the size, characteristics, regulation and growth of the markets for the Company’s objectives and plans for future growth in operations, revenue and profitability; the development, introduction and market acceptance of new products and enhancements to existing products; and the Company’s position in its markets. All of these forward-looking statements are subject to a number of risks and uncertainties which are included in the Company’s filings with the Securities and Exchange Commission.

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