

For What's Next

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"Tekelec. For What's Next." is a quarterly information bulletin issued by Tekelec for its customers.

Feedback and comments are welcome at forwhatsnext@tekelec.com.

FROM THE DESK OF...

Wolrad Claudy, Executive Vice President, Global Sales



As you may already know, in early May Tekelec acquired policy control leader Camiant and subscriber data management pioneer Blueslice Networks. We're grateful for the feedback you've given us over the past weeks, and excited about the broader opportunities to partner with you as a result of the acquisitions.

I'd like to extend a special welcome to customers new to Tekelec through Camiant and Blueslice. This quarterly newsletter is one of several ways you'll hear your peers' innovative uses of Tekelec solutions, Tekelec experts' views on market trends, updates on our portfolio, and industry events we'll attend.

The combination of Tekelec, Camiant and Blueslice creates a company that is driving the evolution of the broadband Internet, whether fixed or mobile, with best-of-breed solutions focused on the network, service and customer. We uniquely blend and capture the synergies between session, policy and subscriber data management, performance intelligence, and mobile messaging – with R&D teams evaluating a number of new service and product opportunities.

Camiant's and Blueslice's solutions are highly complementary to our current portfolio, and we share common design philosophies. All three companies have established thought leadership and mindshare in the control layer. We all design solutions that support multi-generation and multi-vendor network deployments. Creating a unique network intelligence layer gives our customers independence from underlying network technologies and interoperability with any vendor in the network. These are essential to helping you save capex and opex, enable new revenue opportunities, and improve customer experiences across the board.

With Tekelec, you now have a single source for the network intelligence layer that will help

shape your next-generation core networks. Our combined solutions provide a consolidated view of the network, service and customer profile – to be leveraged for new, personalized services, faster service rollout, and better utilization of network resources – all of which improve the customer experience.

For example, our solutions will enable real-time feedback from the network, service, or customer, in order to dynamically adjust policies to balance traffic flows, adjust bandwidth controls, or ensure adherence to contracted service level agreements. The combination of dynamic subscriber database management and mobile messaging software will allow you to manage personal preferences and other applications such as presence, location-based services and network address books. This capability becomes even more important as service providers migrate to Rich Communication Suite and converged IP messaging.

As always, Blueslice, Camiant and Tekelec remain committed to your success. We thank you for your confidence in us as a partner, and we look forward to working with you to address your business challenges. ■

“Camiant's and Blueslice's solutions are highly complementary to our current portfolio, and we share common design philosophies.”

POLICY & SDM ADD CONTROL PLANE INTELLIGENCE

By Vince Lesch, Chief Technology Officer

Tekelec's acquisitions last month of policy control leader Camiant and subscriber data management (SDM) pioneer Blueslice Networks give service providers a unique network intelligence layer that will help shape the definition of next-generation core networks.



PROFILE

Vince Lesch, CTO of Tekelec, has been working in the telecom and communications software industries for more than 20 years. He brings a unique perspective and diverse background having spent time with a variety of companies, ranging from large communications services providers, such as AT&T, to early stage software startups engaged in interactive advertising. He previously held positions with Bell Laboratories, Lucent, and General Electric in engineering, product management and marketing and has served on the board of the IMS/NGN Forum and the strategic advisory board for Solid Technologies which was acquired by IBM.

Service providers gain new real-time visibility and intelligent control for resource and policy management, and the ability to unify subscriber profiles across 2G, 3G, IMS and LTE networks.

Shira Levine, directing analyst of next gen OSS and policy at Infonetics Research, said, "The combination of core network and SDM technology, advanced policy controls, and subscriber data analysis gives service providers unprecedented ability to build a truly subscriber-focused business. As mobile data usage and subscribers' quality expectations grow, these capabilities will be essential to proactively meet customers' needs, manage network resources and maintain high-quality service."

Our portfolio now addresses several of the industry's most pressing business challenges and opportunities:

- » Mobile data traffic far outpacing revenues. Mobile data traffic is forecasted to grow at almost five times the pace of mobile data revenue from 2009 to 2013 (59% to 12%, according to Informa Telecoms & Media).
- » Subscribers' desire to personalize services, such as high-bandwidth apps on smartphones and on-demand cable features like "power boost" to increase movie download speeds on a per use basis.
- » Millions of new mobile Internet devices (MIDs) coming onto the network. Infonetics forecasts that MID unit sales will increase at an average of 108% from 2009 to 2013, approaching 13 million units in 2013.
- » Flat-rate pricing models becoming unsustainable. Earlier this month, both

AT&T and O2 UK announced tiered data plan pricing models based on consumption. Verizon Wireless also indicated that it would implement tiered pricing for its LTE network.

- » The value of new quad-play bundles to drive both fixed and mobile market share. These sophisticated offerings require a unified subscriber view across landline and wireless networks.

Service providers need to know more about their subscribers' preferences, usage patterns, as well as how their services and networks are performing under various traffic conditions.

Adding insight of what subscribers are allowed to use as well as real-time feedback on whether usage aligns with their service profiles is a powerful tool for competitive differentiation. These tools create new cost savings and revenue-generating opportunities. Understanding this granular data will better equip service providers to improve the subscriber experience and reduce churn by proactively addressing their needs.

This also provides the framework to meet uncertain regulatory actions aimed at preventing "bill shock" and fairly managing data traffic – with regulatory bodies in the European Union, United States and elsewhere discussing options.

Finally, these acquisitions align multiple proven solutions that support multi-generation and multi-vendor network deployments. We're well under way with integration efforts, and look forward to sharing specific product integration plans in the near future. ■

INTERVIEW: SUSIE KIM RILEY ON POLICY CONTROL



Since founding Camiant in 2003, Susie Kim Riley has been well recognized as the thought leader and key advocate for policy control, the new area of technology that has been identified as a key tool to enable operators to manage and monetize their IP-based networks. She brings more than 15 years of technology innovation and development focused primarily around quality of service and networking, including the early develop-

ment of routing technology, network processors and policy. Riley is Tekelec's new Chief Marketing Officer.

What makes Tekelec and Camiant a natural fit?

Tekelec's strengths include a diverse global customer base, including eight of the world's 10 largest mobile operators, unmatched SIP expertise, a strong next-generation signaling platform and proven sales and support channels. Camiant technologies have become the strategic tool that enable service providers to get the most out of their networks by proactively managing network resources, and at the same time deliver compelling new services such as video and multimedia communications over an increasingly congested IP pipe. Together, we provide operators with the tools that enable high levels of service segmentation and control – the key aspects to growing their business. We have deployments with Tier 1 operators in mobile, fixed and cable networks worldwide, including our recently announced LTE win with Verizon Wireless. We are a natural fit because we can leverage Tekelec's large sales and support organization to accelerate deployments of our technology, and we provide a key technology in the core of the service provider Internet network.

What benefits will this give to Tekelec and Camiant customers?

The combination of technologies and philosophies gives service providers a unique set of solutions to address the mobile data explosion and evolution to broadband networks. Customers can expect integrated technologies that will enable them to accelerate their move towards providing higher levels of intelligence and controls in their networks. For example, integration with the Blueslice subscriber data management solution will facilitate the scaling of large policy deployments and consolidation of disparate siloed subscriber databases. Integration with Tekelec's performance management offering will provide operators with the necessary network visibility and real-time performance intelligence on their systems and services. This is a key operational tool to manage next-generation deployments of IP-based services.



CAMIANT OVERVIEW

- Founded: 2003
- Locations: Marlborough, Mass., USA and Nanjing, China
- 150+ systems shipped, reaching more than 185 million subscribers
- 12 patents pending
- Customers include Verizon Wireless, Vodafone, Sprint, Comcast, Cox Communications
- Completed integration with 35+ vendors

What are the immediate plans for the Camiant product line?

Integration is already under way, aided by Tekelec's strong underlying EAGLE XG platform. Coincidentally, in February we announced interoperability plans with Blueslice to capitalize on the synergies between subscriber data management and policy management – especially as LTE deployments start going live.

What is the next evolution of policy control?

Tekelec is in a position to re-define and scale the intelligent control layer by combining session management with policy management, giving service providers new abilities to add revenue and reduce costs with network efficiencies. Some of the longer-term innovations will come with enhancing our policy capabilities by creating a feedback loop with Tekelec's performance management solution, letting service providers make more sophisticated decisions about controlling the network and delivering services and applications. Other innovations will enable operators to more actively participate in the value chain of delivering Internet-based services to subscribers. We are also in the early stages of developing solutions that provide more flexible linkages between new consumer devices and operators' networks. We are seeing just the tip of the iceberg of how operators will use our technologies. ■

- » **Multimedia Policy Engine (MPE)**
- » **Bandwith on Demand Application Manager**

Camiant Product Family



INTERVIEW: FREDERIC BASTIEN ON SUBSCRIBER DATA MANAGEMENT



Based in Montreal, Frederic Bastien was formerly the Vice President of Products for Blueslice Networks. He led the product vision and strategy for the Subscriber Data Management portfolio and will continue to head this line of business for Tekelec. Over the last 15 years, Bastien played a pivotal role in the launch of Canada's

first GSM network, and later on contributed to Nortel's first 3G deployments and LTE technology innovations in Europe and the U.S.

Frederic, what does Blueslice Networks bring to Tekelec?

Blueslice is the innovator of Subscriber Data Management (SDM) solutions, pioneering significant game-changing technology in the traditional HLR market. Since 2001, we have focused 100% of our R&D into improving the way operators manage subscriber data across all of their access types, giving consolidated profiles regardless of 2G, 3G, IMS or LTE access. In short, we bring a culture of innovation, advancement and flexibility.

Can you tell us more about Subscriber Data Management?

Blueslice manages the service provider's most valuable asset: the subscriber. Blueslice was the first to recognize that subscribers are multi-dimensional. In other words, they have multiple identities, multiple devices, multiple profiles, etc. Consolidating SDM isn't just about merging database silos into one; it's about fundamentally enabling an operator to use the subscriber information across network domains, identities and devices to identify new revenue opportunities and reduce network costs.

How will Blueslice complement Tekelec's portfolio?

- » Next-gen Home Location Register (ngHLR)
- » Home Subscriber Server (HSS)
- » AAA Server
- » Subscriber Data Server (SDS)
- » ENUM Server
- » Subscription Locator Function (SLF)

Blueslice Networks Product Family



KEY FACTS ABOUT BLUESLICE NETWORKS

- Founded: 2001
- Location: Montreal, Canada
- 59 systems shipped, 19 customers globally, including mobile, multi-play, VoIP, FMC, MVNOs and M2M
- 20+ channel and technology partners
- Unified subscriber management across 2G, 3G, Wifi/WiMAX, IMS and LTE networks

Subscriber Management is about "knowing who the subscriber is and what their preferences are." It is the perfect complement to session management (knowing how one uses the network) and policy management (controlling what one is allowed to use). These three elements together provide a powerful network intelligence layer that will be key for operators to differentiate in such a competitive market. Moreover, the combination of dynamic subscriber profile management and mobile messaging software will allow service providers to manage personal preferences and other applications such as presence, location based services and network address books. By leveraging the synergies of fundamental building blocks such as SDM, policy, session management, messaging and network performance intelligence, Tekelec is well positioned to shape the definition of next-generation core networks as global providers evolve to all-IP architectures such as LTE and IMS.

What are the strategic growth areas for the joint solution?

We see many opportunities around LTE, VoLTE, user data convergence, machine-to-machine and next-generation number portability. All of the above areas bring significant network challenges to operators, and require flexibility and scalability. Thanks to its capability to perform "on-the-fly" data schema changes, our User Data Repository, the SDS, can easily scale to support HLR/HSS subscriber data, VoIP/WiFi subscriber profiles, policy profiles for Camiant's PCRFs, as well as any third-party subscriber information. The exponential growth in machine-to-machine applications will also drive new requirements that cannot be met by legacy voice-centric SDM platforms. In summary, it's all about helping the operators leverage the wealth of information they have on their subscribers, by breaking the subscriber data silos. ■

MOBILE MESSAGING

The mobile market has changed dramatically over the past few years with growing popularity of smartphones, social networks and apps. Mobile network operators (MNOs) will need to focus on enabling a messaging experience that provides subscribers with more value and relevance than the competition in order to remain relevant in tomorrow's messaging market. Tekelec believes that new industry-based initiatives such as the GSMA Rich Communication Suite will allow MNOs to implement next-generation messaging systems that have a global reach.



This, along with the move toward all-IP networks, will allow MNOs to reduce network operating costs while enabling the launch of new, all IP-based messaging services such as OMA CPM, the eventual successor to RCS standardization. Tekelec has the right tools to help operators navigate the transition to an all IP messaging service. Its modular architecture can easily adapt to support new services and technologies. Our SIP knowledge and resources, as well as our membership and participation in RCS standardization will help drive and guide next generation messaging development.

EAGLE 5

Tekelec's EAGLE 5 platform offers enhanced routing and screening solutions to allow operators to better plan networks based on their requirements and provide greater flexibility. Global Title Translation (GTT) actions on the EAGLE 5 platform allows operators to extend the availability of a variety of actions as needed, such as the ability to discard a message or to duplicate a message to another location. GTT actions also allow for the same search flexibility as GT translations and increase the number of EGMS entries. TCAP operations code based routing provides the ability to allow routing decisions to be based on the operation code in the message. The operation code is useful in determining the type of

application server (e.g. prepaid, HLR, SMSC) a particular message is destined for. Operators can then use this information in the message to determine the correct destination for the message. Use cases for features include using linksets to screen incoming messages and detecting SMS fraud from an outside message.

EAGLE 5 Enables Operators to:

- Maximize existing resources while deploying next-generation networks;
- Reduce CAPEX and OPEX;
- Interwork networks and platforms with different technologies;
- Control fraud, and
- Create new, revenue-generating services.

EAGLE XG

The Network to Network (NNI) feature (sometimes referred to in the industry as SBC-N) on Tekelec's EAGLE XG SIP Signaling Router (SSR) enables operators to set up peering agreements for signaling and bearer traffic with other operators, while protecting the core of their network. The NNI solution is deployed at the network boundary



between peers and offers topology hiding and DoS attack detection, among other capabilities. The NNI solution also analyzes source and destination IP addresses of inbound and outbound traffic to categorize and apply access policies based on such categorization. The SSR NNI solution includes a media relay component, which helps in configuring and enforcing codec usage policies on a per peer basis. The NNI solution also dynamically routes calls via a soft switch in cases where transcoding is needed.

INTEGRATED APPLICATIONS SOLUTION

The dramatic upsurge in IP traffic is causing strain on the mobile network, which has negative effects on the quality of service and quality of experience perceived by mobile subscribers. As a result, service providers are relying more heavily on performance monitoring tools to provide business relevant intelligence on network and service quality in a timely manner. However, because the volume of data is so large, it becomes impractical and cost prohibitive to monitor 100% of the traffic across the entire network, which jeopardizes the effectiveness and usefulness of the monitoring tools. In response to these challenges, Tekelec is offering a flexible and efficient solution to the problem via the new Intelligent Data Management (IDM) solution,



which is available in the upcoming release of its Performance Monitoring solution (IAS 7.0). With IDM, service providers have visibility into Key Performance Indicators (KPIs) across the entire traffic volume without the need to grow the monitoring hardware requirements linearly. This is accomplished through the unique traffic characterization algorithms while providing the option to perform full, in-depth data monitoring based on a variety of user defined criteria (on-demand, per subscriber, per service, etc.). Combined with Tekelec's flexible KPI generation and analytics capabilities, the service provider is able to have access to key business intelligence regarding the performance of specific services, customers or handsets.

TRADESHOWS & CONFERENCES

Recent Events

» [Next-Generation Mobile Messaging 2010](#)

April 26-28, 2010, Barcelona, Spain

Tekelec was Delegate Partner at the 3rd annual edition, which featured close to 20 experts speakers from the mobile messaging world. Taeke Castelein, Director Market Development, took part in a panel entitled "Understanding the Impact of Moving to All-IP Based Messaging".

» [Bynet Expo](#)

May 10, 2010, Tel Aviv, Israel

Tekelec took part in the largest ICT event in Israel, which was hosted by its largest integrator, and presented its portfolio of performance management solutions.

» [Management World](#)

May 18-20, 2010, Nice, France

Tekelec presented its portfolio of performance management solutions, which helps monitor customer experience through a holistic view of hybrid networks.

» [Next-generation Core Networks Summit](#), Co-Hosted with [LTE World Summit](#)

May 18-19, 2010, Amsterdam, Netherlands

Tekelec was conference sponsor of the first event. Matt McCann, Principal Engineer, presented a paper entitled "From SS7 to the Evolved Signalling Core".

Frederic Bastien, Director, Product Management, SDM, was amongst the LTE World Summit panelists discussing "How Will Customers Connecting Multiple Numbers of Devices Over the Network Affect the Operator's Business Model?"

» [EAAA Messaging Experts Forum](#)

June 8-10, 2010, Noordwijk, Netherlands

This event provided a wealth of messaging-related topics, mixing presentations by Tekelec experts, customer use cases and expert sessions covering Signaling, Prepaid, Applications, and Personalized Services.

» [Global Messaging Congress](#)

June 22-23, 2010, London, United Kingdom

As in 2009, Tekelec was a Silver Sponsor of this event. Alan Pascoe, Senior Manager, Market Development, Messaging, Tekelec spoke about "Overcoming the Scourge of Spam and Increasing Messaging Security," covering issues such as spam, mobile security, spoofing, faking, flooding, SMS spyware and antivirus, data protection and privacy, content filtering, as well as levels of security needed for messaging uses and how this can be ensured.

» [Mobile Broadband China](#)

July 1-2, 2010, Shanghai, China

Tekelec was Silver Sponsor of this event, which coincided with Shanghai World Expo. It focused on emerging markets around Asia and featured all three mobile operators.



Dan Bantukul, Principal Engineer, presented two papers entitled respectively: "Monetizing the Network: The Applications & Services Opportunity in 3G & LTE" and "The Evolution of the Mobile Packet Core."

Upcoming Events

» [OSS-BSS Summit](#)

September 8-10, 2010, London, United Kingdom

Tekelec is Gold Sponsor of this event. Michael Heffner, Director of Monitoring & Services Product Management, will present a paper on "Increasing Revenue through Real-time Charging & Key Performance Indicators (KPIs)." More on this in the next edition!



FEATURED COVERAGE



TEKELEC 'PROBES' CHEAPER, MORE UBIQUITOUS MOBILE DATA MONITORING

With traffic and services on mobile data networks exploding, operators must take a new approach to collecting and analyzing network performance data, Tekelec says.

One of the challenges in dealing with the onslaught of data usage on mobile networks is that operators need to change how they think about monitoring their networks. There's simply no way to actively watch all that traffic – let alone the apps running on top of those mobile data networks – in the same way service providers monitored the network and services on their traditional voice networks.

That reality has operations support system and test vendor Tekelec forwarding the concept of intelligent data management (IDM), a different take on network and service monitoring that gives carriers the ability “to be a little more flexible and dynamic related to network conditions at any point in time,” said Michael Heffner, director of product management for Tekelec.

The problem is the sheer volume of mobile data – and increasingly packetized voice – traffic running over today's 3G and 4G networks. Operators must compare that to yesterday's “circuit-switched 2G model, where it was easy to monitor control signaling to get a picture of what was going on with the network and with the quality of voice service,” Heffner said.

The challenge with mobile data services (and mobile voice-over-IP services, too) is that monitoring “pure signaling only does part of it; you have to look at what is going on in the user plane as well, what services are being used and how well they



'Operators need to change how they think about monitoring their networks'

are functioning,” Heffner said. “As user plane traffic is blowing up it is very cost prohibitive to look at [and monitor] 100% of the traffic all of the time.”

In essence, keeping tabs on 100% of network traffic is a “legacy” of legacy voice networks that operators simply can't afford to maintain, Heffner said. Instead, Tekelec is promoting putting new, patent-pending software algorithms onto its existing network probes – no new hardware deployment required – to enable operators to do real-time statistical sampling of the traffic running over their mobile data networks. ■

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RESOURCES

New Product Manager Video

Tekelec's EAGLE 5 Product Manager talks about the many capabilities of the industry's leading signaling platform.



New Use Cases

» Tekelec demonstrates in a multimedia presentation how its [Performance Management solution](#) allow operators to improve service quality and delivery. Featured use cases include:

- Monitoring broadband networks
- Real-time monitoring for VIPs
- Smartphone service inconsistencies
- Optimizing mobile Web experience
- Inter-carrier signaling transit accounting

» [Supporting SMS in LTE/IMS Networks](#) is a new mobile messaging multimedia presentation which can be found on the Tekelec website.



Other topics covered in the presentation include:

- Optimizing the SMS Infrastructure
- Managing Application-Originated Traffic
- Protecting the SMS Business
- Delivering Mobile advertising
- Offering SMS Personalized Services

ARCHIVED WEBINARS

» [Putting the Customer at the Heart of the Telco Experience \(Light Reading-produced panel webinar\)](#)

Speakers:

Karlyn Oberg, VP Administration, SureWest Communications
Timothy Samler, Head of Industry Solutions, Nokia Siemens Networks
Gareth Senior, CTO, Comptel Corporation
Kim Bagaasen, Senior Manager, Product Marketing, Tekelec

Event overview:

This webinar provided thought leadership on new OSS strategies, systems, and architectures that can help service providers successfully address the three imperatives facing them in 2010: Customer, Cost, and Cloud.

» [How to implement an effective solution for mobile number portability](#)

Speakers:

Gilberto Ramirez, Sales Engineer, Tekelec, CALA Region

Event overview:

The requirement to implement number portability may have a significant impact to operators' networks offering telephony services and mobile broadband. Operators that are preparing for the implementation of mobile number portability face an important set of challenges, centered around a significant increase in traffic.

This webinar covered three key areas:

- An overview of mobile number portability
- Architectural considerations and implications related to portability
- Solutions to implement number portability

» [The Applications & Services Opportunity With LTE/4G](#)

Speakers:

Randy Fuller, Business Development



Event overview:

Widespread deployment of 3G networks underpins the tremendous innovation currently occurring in mobile Internet applications and services. LTE/4G technology should further increase the opportunities available to developers, users, operators, and device makers, due to characteristics such as lower latency, Quality Of Service (QoS), higher bandwidths, and the all-IP system architecture. Combined with open network APIs, subscriber data management, and business model innovation, this session will examine the fundamental link between service innovation and 4G technology.