

## January

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### **Profiting From Big Data**

Moderating Analyst ▶ Ari Banerjee

The potential returns for telecom operators from effective use of the information already in their databases are tremendous, including vastly improved operational efficiency, better use of deployed assets, improved service development and management, better customer services, and, ultimately, increased sales or profitability. Using that data effectively is a challenge for today's siloed carriers, but, as this webinar explains, it is possible and worthwhile.

### **Redefining Packet-Optical Transport With Software-Defined Networking**

Moderating Analyst ▶ Sterling Perrin

The optical control plane now tops the list of operator requirements for next-generation transport networks, in part because of the rising potential of OpenFlow and SDN. OpenFlow's applicability for more complex telco environments is being hotly debated, but its existence has sparked investigation of how SDN can be applied to telco networks, including the role of the IETF-defined Path Computation Element (PCE). In addition, the industry has seen new hardware, including switched OTN, CDC ROADMs, and converged packet-optical transport systems (P-OTS). This webinar will separate the hype from the reality to chart a realistic course for the future of SDN in optical and packet-optical transport networks.

### **The 411 on Docsis 3.1**

Moderating Analyst ▶ Alan Breznick

The budding Docsis 3.1 specs promise to deliver top speeds of 10 Gbit/s downstream and 1 Gbit/s upstream for cable operators. But how will D3.1 do that, and how will it differ from the current Docsis 3.0 standard? In this Webinar, industry experts will examine the unique components of D3.1, including its proposed higher upstream and downstream capacities, greater spectral efficiencies, move to orthogonal frequency division multiplexing (OFDM) subcarriers, use of low-density parity-check (LDPC), and shift toward higher orders of QAM modulation. Panelists will also discuss how much bandwidth will be needed for D3.1 and how equipment suppliers and cable operators plan to carry out the migration to the new specs over the next three years.

### **NFV: What Gets Virtualized First?**

Moderating Analyst ▶ Caroline Chappell

The drive to move away from collections of vendor- and function-specific boxes to virtualized deployments on COTS hardware is just getting started, and many service providers are wondering where to start. Discrete appliances are one possibility, and policy management is also widely considered a first option, but service providers need to have a strategy in mind for how to manage the overall migration to virtualization as well. This webinar will focus on how to craft such a transition strategy, including the major considerations and points of debate.

### **Unified Communications on the Rise**

Moderating Analyst ▶ Carol Wilson

The long-awaited promise of Unified Communications – selling converged voice, data, and video to businesses – is finally being kept, based in part on the success of cloud services. Carriers of all types are selling more hosted and cloud-based UC, and UC-as-a-service (UCaaS) is actually growing even faster than other forms. This webinar looks at the different ways in which service providers are delivering UC, and what is required for success in this market.

### **100G/400G Transport: Technology & Components**

Moderating Analyst ▶ Simon Stanley

Demand for 100G and 400G connections continues to grow, driven by new service delivery, smart device adoption, and the proliferation of 10 Gigabit Ethernet. To support this demand, carriers, cloud service providers, and enterprise network managers must deploy higher-bandwidth solutions across the network. Components are a critical part of the 100G/400G network solution that represents a major opportunity for carriers and system developers. This Webinar will explore key technologies and challenges for carriers and telecom equipment manufacturers in delivering 100G and 400G solutions and review the expanding range of components and the development options available.

## February

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### **Bandwidth on Demand in the Cloud Era**

Moderating Analyst ▶ Carol Wilson

The growing popularity of cloud services is driving interest in bandwidth-on-demand, as business customers want to buy and pay for their network services as they use them, just as they do compute and storage functionality. Service providers initially responded with usage-based billing options but are now beginning to deliver true BoD, which uses portals or other user controls to let customers turn up and turn down bandwidth as needed and tracks both the quality of the service delivered and what it will cost. This webinar looks at the growing range of BoD options and what service providers must do to deliver them.

### **Delivering Multi-Channel Customer Experience**

Moderating Analyst ▶ Ari Banerjee

Today's consumers interact with their service providers in many ways, using self-service means via mobile, web, interactive voice response, or social networking apps, or interacting via retail stores, channel partners, and traditional call center agents. The challenge for service providers is to provide a consistent customer experience across these platforms, both in terms of the offers extended and the quality of response in meeting the customer need. This webinar will look at what is required to do this and the challenges that service providers face.

### **Datacenter Switching: Preparing for SDN**

Moderating Analyst ▶ Simon Stanley

The development of Software Defined Networking (SDN) is promising a significant increase in the flexibility and performance of datacenter networks. Open standards such as OpenFlow and high-speed interconnects, both electrical and optical, are changing the way companies design switching systems for datacenters. Flat architectures and low latency are key requirements for next-generation datacenter switching. The latest solutions integrate greater intelligence and will deliver far better performance than previous generations, enabling the deployment of SDN. This Webinar will explore both SDN and switching technology and review important developments for datacenter switches and related systems.

### **SDN: Testing 1, 2, 3**

Moderating Analyst ▶ Carol Wilson

In the rush to bring software-defined networking into the carrier world, the important need to strenuously test SDN deployments cannot be overlooked. New tools are coming to market that will enable this testing. This webinar will look at the state-of-the-art in testing virtualized networks and also explore the special challenges virtualization brings to telecom networks.

## March

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### **Policy Management & Virtualization**

Moderating Analyst ▶ Graham Finnie

Policy management is taking on greater importance as networks and network functions are virtualized and service providers require new levels of control to make use of all that new flexibility and potential efficiency. This webinar will explain the new uses of analytics and policy management in delivering real-time control over virtualized network piece parts to create a seamless network infrastructure that can deliver new services more quickly and allocate resources on-demand.

### **Small-Cell Backhaul: Considering the Options**

Moderating Analyst ▶ Patrick Donegan

Wireless network operators are looking to small cells to help them boost coverage, maximize spectrum use, and deliver better service to smartphone customers, but the success of small cells depends on the ability to cost-effectively provide reliable backhaul coverage. This webinar looks at the range of options and what wireless network operators need to consider in making their decisions on backhaul.



### **Managing Virtual Network Functions in the Cloud: Why, How & Where**

Moderating Analyst ▶ Caroline Chappell

Software-defined networking and network functions virtualization create major new management challenges that, left unaddressed, will substantially complicate and slow their deployment. Because they require change at every level – in employee skillsets, process reengineering and automation, and new OSS capabilities – NFV and SDN will require new network management approaches such as bringing together OSS, cloud management, and network knowledge and skills, which have previously existed in separate domains. This webinar will look in detail at these new approaches and the management challenges that must be addressed.

### **Optimizing Mobile Video**

Moderating Analyst ▶ Alan Breznick

Mobile network operators know they must deliver video content in a way that optimizes the user's quality of experience, but they also want to avoid reducing their data revenues – many of which are driven by mobile video – and protect their networks from the unpredictable impact of over-the-top video apps and services. New, more intelligent video optimization approaches use an integrated approach and let operators consider how delivery of OTT content might actually be monetized. This webinar looks at those new approaches and the assessment network operators need to conduct in choosing their path.

### **LTE Platform Consolidation: Scalable Solutions for NFV & the Mobile Core**

Moderating Analyst ▶ Simon Stanley

Mobile data traffic is growing rapidly, driven by increasing smartphone and tablet adoption and higher bandwidth services. Much of this traffic growth is enabled by the deployment of LTE and LTE Advanced services. The mobile network core required to deliver LTE and LTE Advanced services includes the enhanced packet core (EPC), IMS for VoLTE, media gateways, video caching, policy, and billing. These functions can be implemented in multiple chassis, integrated into a single chassis, or provisioned on virtual platforms using network functions virtualization (NFV). By using ATCA and other COTS platforms, carriers and equipment providers can deploy scalable solutions with best-of-breed implementations. In this webinar we will explore the latest platform developments and explain how you can use these flexible platforms to rapidly deploy scalable solutions for LTE networks.

### **Diameter Signaling: The Implications of Service Enabling the Control Plane**

Moderating Analyst ▶ Jim Hodges

The Diameter protocol touches nearly every part of a mobile network operator's network, and Diameter Signaling plays a significant role in enabling more sophisticated data plans and more personalized services, as well as new policy use cases for over-the-top services or mobile advertising. This webinar will look at what service providers can expect as they begin to use Diameter Signaling in a more strategic way.

## April

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### **Home Gateways Are in Your Future**

Moderating Analyst ▶ Alan Breznick

Home media gateways are taking off in response to consumer demand for more advanced video and home-networking services, especially multi-screen video. Both “headed” (TV-connected) and “headless” gateways are now available. This webinar looks at how video service providers need to respond to consumer demand for more in-home capabilities for video and app distribution and sharing.

### **SDM & Analytics: Key Tools for Operators**

Moderating Analyst ▶ Jim Hodges

SDM and analytics have established themselves as mandatory technologies for the delivery of personalized services, which operators now regard as a critical strategic requirement. SDM techniques and tools support the collection and analysis of individual subscriber usage data and preferences to enable the delivery of real-time and potentially location-based personalized services and content. This webinar will look at the factors and use cases that are motivating network operators to deploy SDM and analytics, and identify the functional capabilities that define SDM, including capturing the inherent differences between centralized and federated data approaches.

### **Securing LTE: Is IPsec in Your Toolkit?**

Moderating Analyst ▶ Patrick Donegan

With the move to an all-IP network for LTE, mobile operators now face new vulnerabilities, particularly in the backhaul segment from the eNodeB to the IP core, where traffic is unencrypted. One approach being adopted, particularly in Europe, is the adoption of IPsec, a well established security protocol for wireline networks. This webinar will look at how and why mobile operators should consider using IPsec, as well as challenges to that deployment, and detail the extent of its usage today.

### **NFV Infrastructure for Mobile Operators**

Moderating Analyst ▶ Gabriel Brown

Given the pressure on mobile network operators to deliver new services to market quickly, Network Functions Virtualization could be expected to show up in their networks rather quickly for some applications or specific domains. This practical approach lets MNOs get started with virtualization without broad adoption of potentially risky new technology ahead of standards. But MNOs also need to simultaneously plan for a broader platform-wide approach, to be ready to take advantage of the longer-term advantages of virtualization and prepare for the disruption it will cause. This webinar will look at where NFV can be practically implemented first and identify some potential pitfalls.

### **Transition Strategies for Transport SDN**

Moderating Analyst ▶ Sterling Perrin

The still-developing world of packet-optical networking is now working to integrate software-defined networking into the transport layers, impacting DWDM and OTN switch elements. While there have been early trials and testbeds established, there is still some uncertainty as to how this transition takes place. This webinar will adopt a practical approach, exploring potential use cases for transport SDN, as well as potential benefits and challenges for adopting virtualization in this part of the network.

### **Power-Efficient Multicore Processors Deliver Step Change**

Moderating Analyst ▶ Simon Stanley

IT now represents 10 percent of the world's electricity consumption, and power efficiency is a key focus for service providers and equipment manufactures. A new generation of power-efficient multicore processor architectures developed for mobile applications are being applied to datacenter and networking systems. There are multiple low-power multicore processor solutions based on several core architectures, including x86, ARM, and MIPS. This webinar will review the latest developments and discuss the benefits of using these new power-efficient multicore processors in servers and networking equipment.

## **May**

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### **RAN Congestion Control**

Moderating Analyst ▶ Graham Finnie

Mobile network operators urgently need to address network congestion arising from greater demand for data and video services in order to prevent customer dissatisfaction that leads to churn. Facing congestion challenges that are less predictable than they were in the past, MNOs are not without options, including solutions based around video optimization, inferring congestion from metrics such as video buffering and packet loss, and use of probes in the network to feed back information. Analytics and policy servers are also part of many solutions. This webinar will focus on how MNOs discern their best approach to managing RAN congestion for the long-term.

### **Managed Services: Evolution & Expansion Trends**

Moderating Analyst ▶ Jim Hodges

Managed services and professional services from vendors have been a telecom trend for almost a decade. In that time, the wireless industry has remained a primary driver of managed services revenue for network equipment manufacturers, and that continues to be the case. But as this webinar explores, managed services in the service provider IT arena continue to grow, and, increasingly, service providers are less committed to running their own networks. Learn how managed services are evolving to benefit the service provider community.

### **The Journey to 400 Gig**

Moderating Analyst ▶ Sterling Perrin

Even as 100G deployments are just ramping up, new 400 Gig routers are coming that their makers promise are smarter, faster, and greener than previous generations. Lab tests and even field trials of 400G routers have begun, leading to speculation as to how fast this next generation of technology might hit the market. This webinar will explain market and business drivers for the move the 400G as well as challenges and any reasons for caution.

### **LTE Advanced: Deployment Drivers & Challenges**

Moderating Analyst ▶ Graham Finnie or Patrick Donegan

Operators in 20 countries have commercially launched LTE Advanced networks, according to the Global Mobile Suppliers Association (GSA), intending to offer a more reliable and consistent experience over 4G. Deployments of LTE Advanced, which promises to deliver on the 100-Gig bandwidth promise of 4G technology, are complicated by the need for 100MHz in linked channels, something not widely available today. But there are still near-term benefits to LTE Advanced, and this webinar will outline those benefits and the potential business drivers for this next generation of 4G Wireless.

### **100G COTS Platforms: Planning for the Next Upgrade**

Moderating Analyst ▶ Simon Stanley

The performance of COTS platforms like ATCA has grown significantly as the switching has developed from 1 to 10 and now 40 Gbit/s. At the same time Gigabit Ethernet interfaces have been replaced by 10GE interfaces and, in some cases, 40GE interfaces. Many companies have taken advantage of this scalability by upgrading part or all of a system during both development or deployment. This webinar will review the latest developments as the industry prepares for the upgrades that will deliver 100 Gbit/s switching and 100GE interfaces, and discuss how you can develop solutions today that can be upgraded to 100G when needed.

## **June**

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### **Fronthaul for Cloud RAN**

Moderating Analyst ▶ Gabriel Brown

Cloud RAN (or Centralized RAN) is emerging as an important new radio access architecture for technologies such as LTE Advanced. One of the biggest challenges to C-RAN, however, is the need for “fronthaul” connectivity between baseband pools and remote radio units deployed closer to the user. This webinar will examine the fronthaul connectivity options available today and look ahead to new fronthaul technologies and product development.

### **The Role of IP/MPLS in the Mobile Backhaul Network**

Moderating Analyst ▶ Patrick Donegan

Models of the backhaul network that presuppose a clean distinction between the access and aggregation layer on the one hand, and the use of L2 or L3 protocols on the other, oversimplify the operational reality in many networks. With some operators already running MPLS over an L2 network, others considering MPLS-TP, and many operators still preferring L2 in both the access and aggregation layers, this webinar will consider the role for different flavors of IP and MPLS in the backhaul network, as early volumes of 3G data applications and traffic evolve to the next level with LTE.

### **Virtual Routers in the WAN**

Moderating Analyst ▶ Sterling Perrin

One of the key promises of SDN is the ability to move away from purpose-built routers for large telecom networks and instead use commodity hardware with specialized software. Is it realistic to expect this transition to commercial hardware in the network’s core? What must be done to enable this important step? Are virtual routers more likely to show up at the edge of the network first?



### **LTE Advanced: Components Drive Next-Generation Basestations**

Moderating Analyst ▶ Simon Stanley

LTE Advanced features such as carrier aggregation and higher data rates are quickly becoming essential for new LTE deployments. At the same time, carriers are shifting towards heterogeneous networks (HetNets) with a mix of small and large (macro) base stations to provide the coverage and bandwidth that is needed to meet subscriber expectations. The availability of scalable and highly integrated LTE components that support LTE Advanced features are a key issue for carriers and mobile network equipment manufacturers. At this critical time we take a look at the latest developments and the benefits for both carriers and equipment manufacturers.

### **Understanding the BSS/OSS Requirements in a Virtualized World**

Moderating Analyst ▶ Ari Banerjee

Software-defined networking and network functions virtualization are major disruptive forces that will impact carrier BSSs and OSSs in dramatic ways, from redefining demarcation points to requiring new capabilities to track virtualized assets once they are distributed through a network. Significant new requirements are expected, and this webinar will explore what those are likely to be, as well as possible transition strategies for today's back-office systems.

### **Carrier Cloud Evolution: Keys to Success**

Moderating Analyst ▶ Caroline Chappel

The earliest versions of carrier cloud services weren't particularly well received in a market already dominated by the likes of Amazon and Rackspace, but as carriers have continued to invest in cloud technology and talent and have placed a new emphasis on the cloud orchestration layer, things are looking up. This webinar will focus on how carrier cloud services need to continue to evolve, explaining the significance of taking a holistic "fabric" approach to cloud management with an integrated view of the entire cloud environment that can enable them to orchestrate multiple components, including compute and software resources and network services, security services, and more.