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INDIA TELCO 2013

Scope: India is the fastest growing telecommunication market in the world. Adding close to 10 million cell phone lines a month and a broadband base of 100 million, India is *the* market for telecommunication systems and services. Being largely a green-field network with minimal legacy network infrastructure, India is able to absorb the latest and greatest technological innovations in the telecommunications domain.

The question that attracts the most attention is – by when can India provide broadband to its 1.2 billion citizens? And when this happens, what would be the nature of this behemoth network. Technologies like WDM, Carrier Ethernet (PBB-TE and MPLS-TP), OTN, IP/MPLS and next generation networking are awaiting their adoption by metro networks in India. Likewise, FTTH/FTTC, WiMAX and advance LTE are the forerunners in the access part of the network. The huge demands of the access – as witnessed by the 3G revolution will have a strong impact on the metro and the core. The physical layer in the core will adopt new variants of WDM – such as grid-less, colorless and directionless ROADMs. The data-layers will use new transport technologies such as OTN, MPLS-TP and PBB-TE. The legacy IP layer may be restricted to just the core of the network with the rest of the network functioning using managed transport solutions.

From a business perspective, there seems to be a need for new business models and public-private partnerships. Further, the role of R&D institutions needs to be examined. The theme of India Telco 2013 continues to be *telecommunication systems and technologies for realizing broadband connectivity that makes business sense*.

To achieve this goal, the summit will feature a technical program of keynotes, plenary presentations, tutorials and panels bringing together experts from industry, government, vendors, providers, integrators and R&D institutions. The forum will cater to those who are involved in the research, design, development, deployment, regulation, and application of communication and networking technologies. India Telco 2013 provides a common meeting ground for the confluence and exchange of ideas with a rich mix of participation from global and local industry, and other stakeholders. The summit will be held in the financial capital of India – Mumbai – during **December 16-17, 2013**.

India Telco 2013 will feature the following areas covering a variety of topics consistent with the theme of telecommunication systems and technologies for realizing broadband connectivity that makes business sense. These areas are:

- 1. Transport Networks (including topics such as):
 - a. High-Speed Optical and Transport networks
 - b. Colorless, Grid-less, Direction-less ROADMs, OXC architectures
 - c. Carrier Ethernet and its flavors

- d. Optical Transport Network (OTN)
- e. Router and switch architectures: IP, SONET/SDH, MSPP
- f. Multi-domain and multi-layer transport networks
- g. Mobile Backhaul
- 2. Access Networks (including topics such as):
 - a. FTTH/FTTC Networks and long-reach PON (NGPON)
 - b. First-mile access networks using LTE, WiMax, FTTH solutions
 - c. Access network architectures and protocols
 - d. Legacy access networks: ADSL, DOCSIS, VDSL, Cable, etc.
- 3. Applications as Broadband Drivers
 - a. Data security, Content processing/billing, OSS
 - b. Strategic networks
 - c. Cloud computing and the data-center
 - d. Utility networks and mission critical networks
 - e. IPTV, Video-on-Demand, Telepresence

Who Should Attend?

CEOs, CTOs, COOs, VPs, Directors, Managers and Planners/Developers in the telecommunication/networking segment.

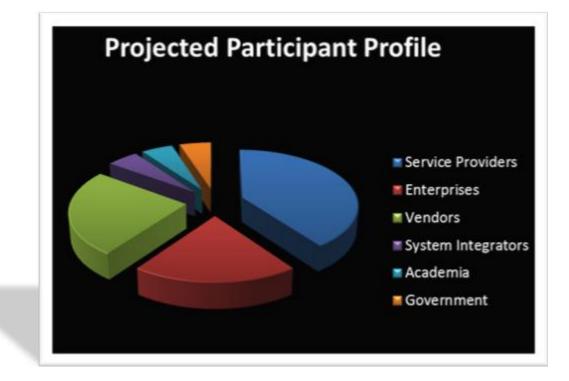
Equipment vendors, service providers and network integrators would immensely benefit from the rich knowledge exchange.

Government officials, decision makers, funding agencies etc.

Scientists, eminent scholars, technology leaders would also be stimulated by the focused and technologically relevant stream of discussion and talks.

Academics, post-doctoral associates, research scholars, post graduates would also benefit from the mix of industry and academic exposure in this very practical aspect of networking technology and telecommunications.

The expected participant profile is as shown below:



You can attend IndiaTelco Summit 2013 for FREE.

TECHNICAL PROGRAM

Day 1, December 16, 2013, F. C. Kohli Auditorium, Kanwal Rekhi Building, IIT Bombay

	Registrations, Welcome address and Tea			
09:00-10:00	Head CSE UT Dembau Drof & Sudershap			
	Head, CSE, IIT Bombay, Prof. S. Sudarshan.			
10:00-10:45	Plenary Talk: Shri. N. Ravishanker, Chairman and Managing Director, BBNL, Bharat Broadband			
10:00-10:45	Nigam Ltd. India.			
	Session 1			
	Session 1	Session Chair:		
10.45 10.45	1. Vikas Arora, CTO, EXFO, Canada.	Prof. Ashwin		
10:45-12:15	2. Pranesh Babu, CTO, Sify Technologies	Gumaste,		
	3. R. S. Mani, Project Director, NKN in NIC, India	IIT Bombay		
	4. Dayavanti Kamat, IBM, India			
	Keynote 1	Session Chair:		
12:15-13:00		Saurabh Mehta		
	R. K. Bahuguna, Chairman and Managing Director, RailTel, India	IIT Bombay		
13:00-13:45	Networking Lunch and a display of the Gigabit Networking Lab products			
	Session 2	Session Chair:		
13:45-14:45	1. Shamim Akhtar, Sr. Director, Net. Architecture and Tech., Comcast, USA	Nilesh Bajaj		
	2. Vijay Jain, COO, Sterlite, India	IIT Bombay		
	Session 3			
	1. Deepak Saxena, VP, Idea Cellular, India	Session Chair:		
14:45-16:30	2. A. Velmurugan, VP, Reliance Jio, India.	Sarvesh Bidkar		
	3. Deepak Kakadia, DMTS, Verizon Wireless, USA.	IIT Bombay		
	4. Nitin Bhandari, A. V. P. Vodafone, India.			
16:30-16:45	Tea Break			
17:00-17:45	Keynote 2	Session Chair:		
		Y. V. Subbarao		

	Benoit Simon, SVP, Orange, France	
	Panel #1: Service Providers and Vendors Panel Panelists:	
	 Deepak Kakadia, Verizon Wireless. YS Subbarao, Telecom Division, ECIL India 	
18:00-19:00	3. Shamim Akhtar, Sr. Director, Net. Architecture and Tech., Comcast, USA	<i>Moderator</i> : Prof. Ashwin
18.00-19.00	4. D. Mukherjee, GM, MTNL, Mumbai	Gumaste, IIT
	5. Benoit Simon, Orange, France.	Bombay
	6. Pranesh Babu, Sify Technologies	
	7. A. Velmurugan, Reliance Jio, India	
	8. Deepak Saxena, Idea Cellular	

Day 2, December 17, 2013, F. C. Kohli Auditorium, Kanwal Rekhi Building, IIT Bombay				
09:00-09:30	Registrations and Tea			
10:00-10:45		Session Chair:		
	Keynote 3	Prof. Ashwin		
	Jayshree Ullal, CEO, Arista Networks, USA.	Gumaste, IIT Bombay		
	Jayshi'ee Olial, CLO, Alista Networks, OSA.	bombay		
10:45-12:00	Session 4			
	1. Asok Chatterjee, VP, Ericsson, USA.	Session Chair:		
	2. Mohamed Shajahan bin Mohd. Iqbal, Chief Executive Officer, Three-Opp	Prof. Virendra		
	(M) Sdn. Bhd., Malaysia	Singh, IIT		
	3. Gigi Joseph, Chief Info. Sec. Officer, BARC	Bombay		
	4. Venky Krishnaswamy, Director, Avaya, USA.			
	5. Jaysheel Shetty, Head, Technology, Nokia Solutions Networks, India			
12:00-13:00		Session Chair:		
	Keynote 4	Prof. Ashwin		
	Anuj Jain, CTO, Reliance Jio, India	Gumaste, IIT		
13:00-14:00	Networking Lunch and a display of the Gigabit Networking Lab products	Bombay		
13.00-14.00	Networking Lunch and a display of the digabit Networking Lab products			
14:00-15:30	Session 5			
	1. Upendra Manyam, CTO, Commtel Networks, India	Session Chair:		
	2. Ken Garrett, Director, JDSU, USA.	Geetha Patil		
	3. Craig Cameron, Director, Finisar, Australia	BARC		
	4. Girish Saraph, CEO, Vegayan, India			
	5. Nidhi Jain, DizitalBridge Inc.			
15:30-15:45	Tea break			
15:45-16:30	Session 6	Session Chair:		
	1. Jayant Bhatnagar, Director, CDOT, India	Prof. Bernard		
	2. Kumar Sivarajan, CTO, Tejas Networks, India	Menezes		
	3. Rajesh Rao, VP, JDSU, Singapore.	IIT Bombay		

	4. Arvind Mathur, Chief Strategy Officer, Cisco, India	
16:45-17:45	Panel #2: CxO's forum	
	Panelists:	
	 Shriprakash Pandey, CEO, Commtel Networks. Kumar Sivarajan, CTO, Tajas Networks, India 	<i>Moderator</i> : Shamim Akhtar
	 Kumar Sivarajan, CTO, Tejas Networks, India. Vijay Jain, COO, Sterlite India. 	Comcast
	4. Girish Saraph, CEO, Vegayan India.	
	5. Rajesh Rao, VP, JDSU, Singapore.	
17:45-18:00	Closing Ceremony	

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Conference Venue

F. C. Kohli Auditorium

KReSIT buildiing

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Indian Institute of Technology Bombay

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Tel: 91 222 576 4970.

Speaker's/Participant's Host Institutions from 2011 (many likely to be part of 2013) (comcast verizon Connectine In Reliance Sod L airtel STATE BANK OF INDIA ERICSSON 🗲 Nokia Siemens Networks **CISCO** Tech ahindra IT Services and Telecom Solutions FUITSU LSI vodafone HUAWEI NETWORKS Juniper* **JDSU** ZTE中兴









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Plenary/Keynote/Invited Speakers



Shri. N. Ravi Shanker, IAS, Chairman and Managing Director, Bharat Broadband Network Ltd.

Shri N. Ravi Shanker, IAS, Additional Secretary & Administrator, USOF, Department of Telecommunication, Ministry of Communications and IT, Government of India, is presently appointed as Chairman cum Managing Director (CMD) of Bharat Broad Band

Network Ltd., New Delhi. He is an 1980 batch IAS officer of UttaraKhand cadre.

Shri. R. K. Bahuguna, Chairman, and Managing Director

Railtel India, New Delhi, India



He is a qualified Electronics and Communication Engineer from I.I.T. Roorkee. He started his career in Railways as IRSSE and had long association with Railways working in all fields mainly in Signalling and Telecom. He underwent training programmes abroad on several occasions. He has to his credit more 25 years of experience in the field of electronics and communications. He is associated with RailTel since October, 2001 and is responsible for all marketing of RailTel services

and network planning of RailTel network. He is member of IRSE (London), Fellow of IETE and Fellow of IRSTE. He has presented number of papers in seminars and Conferences in India and abroad.

Benoit Simon, Vice President, Orange, France

Benoit Simon is responsible for Transformation for Orange Business Services. His title is Vice President Transformation and reports to the CFO, Jean-Michel Thibaud. In terms of expertise, Simon specializes in a wide array of areas between technical to commercial and management.

Jayshree Ullal

President and Chief Executive Officer



Jayshree Ullal is a networking executive veteran with 25+ years of experience and was named one of the "50 Most Powerful People" in 2005 Network World and one of the "Top Ten Executives" at VMWorld 2011. As President and CEO of Arista Networks, she is responsible for building the company's business in cloud networking. Formerly, Jayshree was Senior Vice President at Cisco and responsible for \$10B in annual revenue from Data Center, Switching and Services, including Cisco's flagship Nexus 7000

and Catalyst 4500 and 6500 product lines. During her tenure at Cisco, Jayshree forged key alliances with EMC, VMware

and Microsoft in virtualization and application acceleration. Prior to joining Cisco, Ullal was the Vice President of Marketing at Crescendo Communications, which was Cisco's first acquisition in 1993. Jayshree holds a B.S. in Engineering (Electrical) from San Francisco State University and an M.S. degree in engineering management from Santa Clara University



Shamim Akhtar

Sr. Director, Network Architecture and Technology Comcast, USA

Brief Bio: Shamim Akhtar, Sr. Director Network Architecture & Technology is responsible for driving the network technology platform and architecture roadmap for Comcast's truly converged national IP backbone, Metro, Edge and Access network. His technology & operations leadership, both inside and outside Comcast has brought tremendous momentum in the area of:

- Vendor agnostic network evolution; from "prescription" based approach to "generic" approach offering much lower \$/Mbps & TCO
- 2. IPoDWDM front runner ranging from 1G to 100G
- 3. Sophisticated Photonic & Ethernet probes for higher SLA offerings
- 4. Re-tooling the converged residential focused IP/Optical infrastructure to gracefully carry North American Mobile backhaul traffic supporting T1 over PWE3 & MEF based services with full SLA commitment.
- 5. He is the founding member of 100G user group for 100G+ acceleration for BB & Metro Transport and also a founding member of Docsis provisioning of IEEE EPON/10GEPON for faster commercial RGU growth
- 6. Shamim has been involved in critical technology acquisition and investment decisions in IP/Optical industry with help of his experience and insight on the length and breadth of network technologies.

Shamim is an IIT Kharagpur'95 graduate having working knowledge of MSO and Carrier networks across APAC (including India), Europe and North America through his prior work at Philips Broadband, VPISystems & IPI/Ciena.

Deepak Kakadia



Distinguished Member of Technical Staff (DMTS), IP Network Architect Verizon Wireless, USA

Brief Bio: Deepak is a Distinguished Member of Technical Staff (DMTS), IP Network Architect, with Verizon / Verizon Wireless, in the Transport Strategy and Analysis Group in Walnut Creek, California USA since 2005. Previously he was a Staff Engineer, IP Network Architect at Sun Microsystems Inc., Menlo Park, California, for a total of 11 years since 1994. He also worked at Corona Networks as a Principal Engineer in the Network Management Systems group; Digital Equipment Corp, where he worked on DEC OSF/1; and Nortel Networks (Bell Northern Research) in Ottawa, Canada. He

received a certificate in Networking from the Dept of Electrical Engineering at Stanford University, Palo Alto, CA. He received a Bachelor of Engineering in Computer Systems, a Master of Science in Computer Science, and has completed Ph.D. qualifiers and course work in Computer Science. He has 3 awarded patents and filed 10 patents in the area of Network and Systems Management and Wireless Technologies.

Y. V. Subbarao GM, Telecom Division ECIL



Vijay Jain CTO, Sterlite Technologies Network Infrastructure business

Brief Bio: VIJAY JAIN (vijay.jain@sterlite.com) is CTO of Sterlite Technologies, Network Infrastructure business, where he is responsible for end to end roll out of India's first mass scale FTTH network. Prior to joining Sterlite, he was General Manager for Access Network Planning and Economics, India and South Asia at Bharti Airtel Limited, India. Before Airtel, he was program manager for FTTP and CO active and passive fiber optic components where he served as technical leader for risk analysis of FOC and CO components deployment into Verizon's network. He was involved in product identification, procurement, network planning, and field remediation. He has over 15 years of experience in the telecom industry and has worked in three countries (India, United States, and Canada). Prior to Verizon, he worked as vice president and in management positions for telecom equipment manufacturer and test laboratories, which provided him 360-degree exposure to the overall telecom business and technologies. In the last 15 years he has worked in engineering, R&D, planning, strategic, and business development roles. Achievements include designing and testing of GSM/CDMA-based wireless antenna, DSP-based VLSI chips, NMS for optical and wireless technologies, fiber optic components, and transport systems with up to OC-768 transmission rates. He holds two Master's degrees in telecom engineering, specializing in wireless technology from the Indian Institute of Technology, India and in DSP technology from Concordia University, Canada.

Deepak Saxena,

Vice President, Idea Cellular,

Mr. Saxena has worked now for around 20 years in telecom industry, I started my carrier with BSNL erstwhile DOT, and worked as switch technology, MW and transmission over my 14 years of stint in BSNL. Later for a small period he worked in RCom in planning and after that for last 6 in Idea as planning, project and operations head PAN INDIA OFC based transmission.

Shri Saxena was awarded as "Sanchar Sarathi" in BSNL and wrote two books " transmission for non transmission official" having very small - small details of terminology and technology know how required for maintaining OFC based transmission. In Idea he is responsible for end to end planning, project and operations for OFC based TX, in same role has launched first 100G long distance DWDM NW, also built a NNOC with fault and inventory are integrated for the first time.

Vikas Arora

CTO, EXFO



Vikas Arora was nominated EXFO's Chief Technology Officer in July 2008. As such, he is responsible for the company's technological direction; more specifically, strategic technology and business initiatives covering next-generation fixed mobile converged networks, mobile backhaul, optical networks, Carrier Ethernet/IP, IMS and services like VoIP, video and data.

Prior to joining EXFO, Mr. Arora was Co-Founder and Chief Technology Officer of iPine Networks (acquired by Nakina Systems), which offered IP service assurance products for voice, video and data. Mr. Arora served as CTO of Nakina Systems and also spent 10 years at Nortel in Ottawa and Harlow (UK), where he held senior management and architect positions with the OpenIP and Optical business units. Overall, Mr. Arora has 20 years' technical and business leadership experience spanning IP voice, video, data, Ethernet, optical, wireless and service/network management.

Mr. Arora personifies management and integration of technology, strategy, creativity and leadership, and in 2004 was named by the editors of the Ottawa Business Journal to its annual "Forty Under 40" list as one of the region's 40 best and brightest business and civic leaders under 40 years old. Mr. Arora also serves on the advisory board of Information and Communications Technologies (ICT) Sector of Department of Foreign Affairs, Trade and Development Canada (DFATD).

Vikas Arora holds a Bachelor of Technology from G.B. Pant University in India and a Master of Science (Computer Science) from the University of Saskatchewan in Canada.



Kumar Sivarajan Chief Technology Officer Tejas Networks

Brief Bio: Kumar is responsible for setting the technology and product direction for Tejas Networks. Prior to Tejas Networks, Kumar was an Associate Professor in the Electrical Communication Engineering Department, at the Indian

Institute of Science, Bangalore. Prior to that he has also worked with the IBM Thomas J. Watson Research Center, Yorktown Heights, New York. Kumar is co-author of the textbook 'Optical Networks: A Practical Perspective' published in February 1998. He is a Fellow of the Indian National Academy of Engineering, an Associate of the Indian Academy of Sciences, and a recipient of the Swarnajayanti Fellowship from the Department of Science and Technology, and the 2004 Global Indus Technovator Award from the India Business Club at the Massachusetts Institute of Technology. He is also a recipient of the Institute of Electrical and Electronics Engineers, Inc Fortescue Fellowship and Institute of Electrical and Electronics Engineers, Inc. BakerPrizePaper Award. Kumar holds a Bachelor's Degree in Technology in Electrical Engineering from the Indian Institute of Technology, Madras and a Doctorate from the California Institute of Technology.

> Arvind Mathur Office of CTO Cisco Systems, USA



Brief Bio: Arvind Mathur is Strategic Technology Officer, India and South Asia with the Cisco Corporate CTO Office, based in Bangalore, India. Arvind's professional career spans over 21 years in the telecommunications & ICT industry and he brings in extensive service provider experience from India as well as internationally. Prior to joining Cisco, Arvind was CTO and President, Global Services with Sify, one of India's leading ISP and a major provider of converged ICT services for the Enterprise; Vice President and Head of Global Product Management for Enterprise Network Services at Tata Communications; and was as well the CTO for Enterprise Services at Bharti-Airtel.

Arvind has spent several years in Japan, USA and Canada working in different roles and capacities with the Research Institute of Electrical Communications, Teleglobe International, and JDS Uniphase respectively. He is an alumnus of the Indian Institute of Science, Bangalore and the Indian Institute of Technology, Delhi and holds dual Masters degrees in Electrical Communication Engineering and Physics. He is a familiar industry speaker on next generation converged ICT networks, enterprise solutions, innovation strategies, cloud computing, data centers and managed services.

At Cisco, he is working on several initiatives for Smart Connected Communities, contributing to thought leadership in technology, service architectures, solutions, standards and policy.

Shriprakash Pandey Chief Executive Officer (CEO), Commtel Networks India/USA



Brief Bio: A business leader and an entrepreneur with more than 19 years of experience in leading international technology and engineering companies serving the utilities market, Shriprakash R. Pandey is founder, promoter and Managing Director of Commtel Networks. Being an expert in all aspects of business including sales and business development, global alliances and operations, has only helped him maintain that proven track record of building highly

motivated teams which have consistently surpassed customers commitments. Shriprakash commenced his professional journey as Systems Engineer in the year 1991 at Olex Cables, an Australian multinational firm and within 7 years went on to head Olex's Indian Operations. He established Commtel Networks in July, 1998 and has built the business from scratch to make it one of the most admired companies in its work domain. His journey from being a Systems Engineer to a successful entrepreneur has been a transformational one, at the heart of which lies an abundant source of unfading energy and enthusiasm. An engineer by profession and a learner for life, his continual search to learn new things took him to the shores of accomplishing an Advanced Management Program from Indian School of Business, Hyderabad and Kellogg School of Management at Chicago, IL. Shriprakash also serves on the board of United Commtel, a Texas based NexGen communication Innovation Company. Firmly believing in 'preach only what you can do and do the best in what you preach'. He is an individual who balances professional and social commitments to reach the next level in what we call life with a higher purpose.

Mohamed Shajahan bin Mohd. Iqbal Three-Opp (M) Sdn. Bhd.



Malaysia

Brief Bio: Shajahan Mohamed Iqbal has over 25 years experience in the field of accounting and financial consulting having worked with firms such as Peat Marwick Mitchell & Company and Arthur Andersen & Co. His vast and varied experience is a result of having worked as a Group Financial Controller, Management Consultant, Corporate Planning Manager, Liquidator, Receiver & Manager and Tax Advisor with international and Malaysian companies such as Agate Duty Free Sdn. Bhd., Arthur Andersen & Co., Peat Marwick Mitchell & Company and Harry Bell & Company based in Australia. Shajahan's expertise and hands-on knowledge in Oil & Gas is a result of leading audits of Production Sharing Contracts in his capacity as external auditors to PETRONAS and Malaysian Liquefied Natural Gas Sdn. Bhd. Over the last two decades, he has conducted audits, liquidations, financial analysis and reviews of companies ranging from retail to financial institutions. He holds a Bachelors' Degree in Business Administration (Finance & Accounting) from University of Wisconsin. He is also an Associate member of the Australian Society of Certified Practicing Accountants and Malaysia Management Institute (MIM). He, too, is a Trustee and Director of Yayasan Pendidikan Islam, a charitable organization. Besides conducting training and providing consultancy, Shajahan owns and operates his own R & D and manufacturing company for the Telecommunications and Power industry. For the past 20 years, he created a local industry for telecommunications products under the brand name 30PP. The first and only manufacturer of Fiber Optic accessories products in Malaysia.

R. S. Mani,

Project Director, NKN, NIC India

Mr. R.S Mani Sr. Technical Director & Project Director NKN Shri. RS Mani is a Senior Technical Director & Project Director at NIC. He completed his engineering graduation from BITS, Pilani. In the year 1986, he started his career with Microprocessor Application Engineering Program (UNDP & Gol initiative). MAEP's aim was to use the microprocessor and embedded technologies to increase the productivity in various key sectors like Railways/Roadways/ Water Treatment etc. He has been working in the area of Internet and Internet services for about two decades and had set up the international gateway in NIC in the year 1996. He is one of the technical brain working behind the design and infrastructure of NKN. He is one of the key members of Network Planning, Implementation and Data Centres in NIC-NET which is a Pan-India network. Under his leadership, NICNET and NKN have grown from strength to strength over the years. He has been a key member in the implementation of the some of the projects of Gol both national and international.



Rajesh Rao

Vice President, South Asia Pacific

Communications Test & Measurement, JDSU

Brief Bio: Rajesh Rao, Vice President, Communications Test, South Asia Pacific leads the regional team based and is based out of Singapore. JDSU has one of its largest wireless R&D centers in Asia Pacific and this is located in Singapore. In his role, Rajesh and his team serve Customers by understanding their needs and positioning appropriate solutions via JDSU's industry leading, broadest range of test and measurement solutions. Prior to his current position, Rajesh was the General Manager for Asia Pacific Sales organization at Agilent Technologies, leading their Communications Test & Measurement unit. And, prior to this led the Global Professional Services organization at Agilent. Rajesh has over 18 years of experience in direct sales, sales leadership, business development, regional & global professional services and support services. While pre-dominantly working in the telecommunications industry, he also had exposure in the defense and aerospace industries. His rich experience across various roles includes his hands on style of management bringing teams together, organization design, change management and business transformation.



Pranesh Babu K CTO, SIFY

Brief Bio: Pranesh Babu K currently holds the position of Chief Technology Officer for Sify Technologies Ltd and is responsible for the Technology strategy of the company. He Joined Sify Technologies in Oct 2000 and has worked in various capacities within the organization. Prior to becoming the CTO he has handled responsibilities in the area of network, data center and voice technology which includes engineering, operations and projects. He has been the architect of sify's network expansion, Data center and voice services. He started his Career with HCL Ltd and moved onto work with Hutchison Max Telecom as Chief Network Engineer, where he set up the first Radio paging network in India and Reliance Telecom Ltd as Project Manager, involved in Access network design before joining Sify Technologies. He holds an Engineering degree from university of Mysore in Electronics and Communications.



Shri. Gigi Joseph, Chief Information Security Officer, BARC

Educational Qualification: B.Tech (Electronics & Telecommunication), 1992 MG University Kerala Joined in BARC 1992 (36 th BARC Training School batch) Fields of expertise: Cyber Security, Networking, Telecommunication, IT security auditing, grid computing. Achievements:

- 1. Development of Secure Network Access system (SNAS), an indigenous integrated Intranet security system.
- 2. Received 'Homi Bhabha Science & Technology Award' for the year 2012



Dayavanti Kamath, Senior Technical Staff Member, IBM

Daya Kamath is a Senior Technical Staff Member in the Systems Networking Division of the Systems and Technology Group at IBM. She is currently focused on the strategy, architecture and implementation of SDN solutions.

Daya has 17 years of experience in the networking industry , and has been with IBM since 2007, where she has held successive development and architect roles in the organization focusing on Layer 2/Layer 3 switching, data center network architecture, standardization, and emerging technologies including virtualization and SDN. Prior to joining IBM she has worked on industry leading networking solutions from Riverstone Networks, Cabletron Systems and Fore Systems. Daya holds a Master of Science (Computer Science) degree from Iowa State University.



Upendra Manyam Chief Technology Officer Commtel Networks, India

Brief Bio: Head of Emerging technologies at Commtel Networks, Dr. Upendra has over the years become one of the mainstays of the company. His Doctorate and M.S in Fiber Optic Materials from Rutger University, USA are just a few feathers in his illustrious cap of life's achievement. After a B. Tech. in Ceramic Engineering from I.T.B.H.U, Varanasi and 15 years of experience in development and application of fiber optic technologies, his efforts are still concentrated to master the field of Optics through constant adoption of novel converged communications. Prior to Commtel he worked at Nufern, on optical fiber design and processing also developing a unique dispersion managed high-data-rate fibers while at Corning Incorporated. Not resting on the laurels of 12 US Patents, several Research Papers to his credit and serving on the Fiber Optics Panel of the US National Science Foundation's SBIR program, he at Commtel is deeply

involved in integrated network design and architecture related to DWDM, SDH/Sonet and Ethernet technologies over optical fibers. A thorough professional, he is a perfect mix of academic brilliance meeting real life application, an asset to any organization.

> Nitin Bhandari Associate Vice President, New Products & Partnerships Vodafone India Limited



Talk Title: Thinking outside the network

Abstract: Over past few years, the growth of telecom products and services in the India was primarily driven by (a) liberalization leading to the influx of capital and technology, and (b) adoption of innovative business models such as the "India Model". These drivers resulted in the lowering of telecom product prices and subsequently led to a high penetration amongst the masses. Telephony is no longer seen as a means to connect, rather it is seen as a means for wider inclusion. The recent successes have led to an exponential rise in the expectations from customers on the role that Telecoms can play in furthering the growth of the country. There has also been a rethink amongst the industry on the levers that could be pressed to further the growth witnessed by the industry in past. This talk will discuss the evolutionary and revolutionary innovation opportunities that Indian telecom operations can leverage on to sustain growth and to support government's initiatives of financial inclusion and improvement in urban and rural life. The talk will also discuss the technology and ecosystem advances that be successfully leveraged to reach the goal. The talk will focus on the opportunities in the area of M2M, mobility and cloud domains.

Brief Bio: Nitin Bhandari is Associate Vice President at Vodafone India Limited. In his current role, he is responsible for driving the conceptualization and development of new products & partnerships for the Enterprise segment. His current focus includes M2M, Cloud, mobility and hosted product ecosystems. Nitin specializes in new products conceptualization, operating models, technology trending and benchmarking paradigms. Nitin has spoken at a number of industry events across Asia, Europe and Americas. He is widely quoted in industry publications. He co-authored "GB924 - Service Model Framework" published by the TeleManagement Forum. He was also the contributing editor of "Telecom Billing Dictionary" published by the Althos Publishing. Prior to Vodafone, Nitin held the position of AVP at frog design where he was responsible for managing the innovation strategy practice for the APAC region. Earlier, he worked as Consulting Partner at Wipro Technologies where he was responsible for running the Business Advisory practice for the Telecoms & Media industry vertical. Nitin holds a B.Tech (Honours) in Computer Science and Engineering from the Institute of Technology-BHU.

Craig Cameron,

Director, Finisar, Australia

Craig Cameron manages a comprehensive portfolio of Wavelength Selective Switch product lines at Finisar Corporation; all supporting Flexgrid[™] technology to enable the deployment of flexible wavelength management networks. He has worked at a diverse range of high-tech engineering companies in both the USA and Australia, including Telstra Research Laboratories, Digital Fountain (acquired by Qualcomm), Sensory Networks (acquired by Intel) and PC Tools (acquired by Symantec). Craig holds a Master of Science from Caltech (Lee Center for Advanced Networking), a PhD from the University of Melbourne (Centre for Ultra-Broadband Information Networks) and a Master of Business Administration from the Australian Graduate School of Management.

Jayant Bhatnagar, Director, CDOT



Mr. Jayant Bhatnagar is working as Director (Technical Development) at C-DOT. He has been working with C-DOT since 1990 in various capacities in Research & Development of Telecom systems in areas of Rural Networking and Next Generation Networks including Routing and Switching systems for Cell and Packet technologies, Broadband systems and Wireless Access technologies.Prior to joining C-DOT, he has worked with Digital Equipment Corporation. He is B.E

(Electrical) and M.S (Computer Science).

A. Velmurugan, Vice President, Reliance Jio

Optical transport.

Ken Garett,

Director, JDSU, USA.

Mr. Garrett is the Director of Business Development for JDSU. In this role he supports strategic business and technology initiatives worldwide. He has been one of the initial technologists in developing ROADM products and strategies as well as high speed Transmission solutions that are implemented by Carriers and Systems Suppliers worldwide. Prior to joining JDSU, his career includes 10 years of experience with AT&T and US West (Century Link)) where he directed the development of their high speed digital and optical networks and product selection from 1983-1990. He then founded the first Optical Cross Connect Company (Astarte Fiber Networks) in 1990 where he became an industry expert in high speed optical switching applications. He was also VP of Sales and Marketing for this company In 1995, Mr. Garrett became the VP Sales and Marketing for Carrier Access Corporation where he grew the company from a start up to an

initial public stock offering in 1997. This company provided high speed digital networking products such as Digital Cross Connects, M3 channel banks and T1 networking equipment. JDSU then requested Mr. Garrett to join the company as Director of Business development to develop their optical switching and high speed products strategy and support JDSU strategic customers wherehe has been for the last 14 years. Mr. Garrett holds several patents in optical switching and has two Masters Degrees. (MS Computer Science/Engineering and Masters of Business Administration- MBA). Additionally, he has been a contributing author in several text books and publications in optical networking.

Nidhi Jain, DizitalBridge

Nidhi Jain has 13+ years of telecom experience in Product definition, Product Positioning, Pricing, Product Roadmaps for Telecom Products. Founded DizitalBridge in 2012, to provide product management and marketing consulting as well as Industry-valued Advance Telecom Online Courses. Prior experience as Head Product Management at Comviva and 8 Years of USA experience with Silicon Valley Startups- Transera Inc., Jetstream Communications& Silicon wireless Inc. in various roles of Product Management, Product Design and Development.

Nidhi has strong academic background with Executive Product Management and Marketing Program from Haas School of Business, Berkeley, USA. MBA from California State University, San Jose, USA. M.Tech (Computer Science) from Jawaharlal Nehru University, New Delhi and B. Tech. (Computer Science) from IIT Roorkee.

Jayasheet Shetty, Head, Technology, Nokia Solutions Networks, India



Jayasheel is currently serving as Technology Lead for India Region with Nokia Solutions & Networks from last 4 years based out of Mumbai. A Telecom consultant having professional expertise over 11 years in the field of Cellular & Wireless Broadband networks. Proactively driving for Mobile Broadband consulting activities in India region across all customers.

Jayasheel is currently responsible for customer engagement on wide areas of consultancy topics pertaining to spectrum refarming , technology road mapping towards HSPA + & LTE, mobile broadband monetization techniques , wifi adoption & business case for India market etc. Prior to NSN, Jayasheel was employed with Motorola India Pvt Ltd from 2004 to 2009 & TATA from 2002-2004. Jayasheel has holds B.E (Electronics) from Mumbai university.

Steering Committee



Ashwin Gumaste (Chair of the Steering Committee) Institute Chair Associate Professor, Dept of CSE, IIT Bombay

Brief Bio: Ashwin Gumaste is currently the Institute Chair Associate Professor in the Department of Computer Science and Engineering at the Indian Institute of Technology (IIT) Bombay. From 2008-2012 he was also the J. R. Isaac Chair Assistant Professor. He was a Visiting Scientist with the Massachusetts Institute of Technology (MIT), Cambridge, USA in the Research Laboratory for Electronics from 2008 to 2010. He was previously with Fujitsu Laboratories (USA) Inc in the Photonics Networking Laboratory (2001-05). He has also worked in Fujitsu Network Communications R&D (in Richardson TX) and prior to that with Cisco Systems in the Optical Networking Group (ONG) and has been a consultant to Nokia Siemens Networks, Munich working on Next Gen access standards. His work on light-trails has been widely referred, deployed and recognized by both industry and academia.

His recent work on Omnipresent Ethernet has been adopted by tier-1 service providers and also resulted in the largest ever acquisition between any IIT and the industry. This has led to a family of transport products. Ashwin has 20 granted US patents and over 30 pending patent applications.

Ashwin has published about 150 papers in referred conferences and journals. He has also authored three books in broadband networks called DWDM Network Designs and Engineering Solutions (a networking bestseller), First-Mile Access Networks and Enabling Technologies and Broadband Services: User Needs, Business Models and Technologies for John Wiley. Owing to his many research achievements and contributions, Ashwin was awarded the Government of India's DAE-SRC Outstanding Research Investigator Award in 2010 as well as the Indian National Academy of Engineering's (INAE) Young Engineer Award (2010). He was also the recipient of the Vikram Sarabhai Research Award in 2012. Ashwin was the IBM Faculty Award winner for the year 2012.

He has served Program Chair, Co-chair, Publicity chair and workshop chair for IEEE conferences and as Program Committee member for IEEE ICC, Globecom, OFC, ICCCN, Gridnets etc. Ashwin is also a guest editor for IEEE Communications Magazine, IEEE Network and the founding Editor of the IEEE ComSoc ONTC's newsletter Prism. He is the Chair of the IEEE Communication Society's Technical Committee on High Speed Networks (TCHSN) 2011-2013. He has been with IIT Bombay since 2005 where he convenes the Gigabit Networking Laboratory (GNL): www.cse.iitb.ac.in/gnl. The Gigabit Networking Laboratory has secured over 11 million USD in funding since its inception and has been involved in 4 major technology transfers to the industry. Ashwin can be reached through www.ashwin.name.

Helmut Schink

Head of Standards Wireline, Service Delivery and Media Nokia Siemens Networks (NSN), Germany



Brief Bio: Helmut Schink is the Head of Standards Wireline, Service Delivery and Media, responsible for standardization and regulation. He is also vice-chair of ITU-T SG 15. His previous engagements include Vice-chair of ITU-T SG 13, VC of the open IPTV Forum, member of the board of the IPSphere Forum, member of the Board of the Telemanagement Forum, Member of the board of directors of ICANN and chair of ETSI project TIPHON on IP Telephony. Over 25 years in business, especially public communication networks, holding various technical and management functions marketing, like strategic product planning, business development and standardization, Corporate management and in strategic business development, development of semiconductor processes for GaAs high speed and low noise devices and basic research in micro-analytics. Studied Physics at Technical University of München and holds a Doctor degree in the area of micro-analytics and semiconductor physics.

P. S. Dhekne

Raja Ramanna Fellow, BARC Consultant to PSA Office, Government of India

Brief Bio: P. S. Dhekne is Raja Ramanna Fellow; in Bhabha Atomic Research Center (BARC), Associate Director and a Scientific Consultant to Principal Scientific Adviser to the Government of India. He is a member of technical advisory committee for setting up National Knowledge Network (NKN). NKN is an initiative of Government of India to bring together all the stakeholders in Science, Technology, Higher Education, Research and Development, GRID Computing, e-governance with speeds scalable eventually up to the order of 10s of gigabits per second.



Upendra Manyam Chief Technology Officer Commtel Networks, India

Brief Bio: Head of Emerging technologies at Commtel Networks, Dr. Upendra has over the years become one of the mainstays of the company. His Doctorate and M.S in Fiber Optic Materials from Rutger University, USA are just a few feathers in his illustrious cap of life's achievement. After a B. Tech. in Ceramic Engineering from I.T.B.H.U, Varanasi and 15 years of experience in development and application of fiber optic technologies, his efforts are still concentrated to

master the field of Optics through constant adoption of novel converged communications. Prior to Commtel he worked at Nufern, on optical fiber design and processing also developing a unique dispersion managed high-data-rate fibers while at Corning Incorporated. Not resting on the laurels of 12 US Patents, several Research Papers to his credit and serving on the Fiber Optics Panel of the US National Science Foundation's SBIR program, he at Commtel is deeply involved in integrated network design and architecture related to DWDM, SDH/Sonet and Ethernet technologies over optical fibers. A thorough professional, he is a perfect mix of academic brilliance meeting real life application, an asset to any organization.

Conference Venue

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