

IEEE Network

Start Date of Review/Analysis: Jan. 2004; Analyst: Abu (Sayeem) Reaz

2010

January/February: Special Issue on “Advances in Vehicular Communication Networks” (Nothing related/interesting)

2009

November/December:

- “Enabling layered video coding for IMS-based IPTV home services” by I. Vidal, J. Garcia-Reinoso, F. Valera, and A. Bikfalvi: reports the advantages of layered video coding for IPTV solution using dynamic video quality control and effective channel and bandwidth usage; **may be of interest to Sayeem.**
- “Enabling applicability of energy saving applications on the appliances of the home environment” by S. Tompros, N. Mouratidis, M. Draaijer, A. Foglar, and H. Hrasnica: reports an architecture that enables real-time estimation of energy consumption of domestic appliances, control their energy usage, and autonomous identification of standby devices; **maybe of interest to Pulak.**

September/October: Topics in “Network Security” (Nothing related/interesting)

July/August: Special Issue on “Networking over Multi-Hop Cognitive Networks” (Nothing related/interesting)

May/June: Special Issue on “Protocols and Algorithms for Future Cross-Layer and Hybrid Optical Networks”

- “A multilayer fault localization framework for IP over all-optical multilayer networks” by C. Pinart: reports a framework for efficient fault localization of wavelength-routed, IP over all optical multi-layer network; **may be of interest to Chaitanya.**
- **“Carrier-grade ethernet: etherpath protection vs. ethertunnel protection” by M. Batayneh, B. Mukherjee, D. Schupke, M. Hoffmann, and A. Kirstaedter:** reports a protection algorithm for Ethertunnel and Etherpath protection and their trade-offs in their impact on network cost and implementation complexity.
- “Traffic engineering for Ethernet over SONET/SDH: advances and frontiers” by C. Xie, N. Ghani, Q. Liu, R. Kouatang, W. Shu, Y. Qiao, M. Wu and S. Peng: reports traffic engineering for Ethernet-over-SONET/SDH (EoS) and a scheme for multi-point service provisioning for EoS.
- “GMPLS-controlled dynamic translucent optical networks” by N. Sambo, N. Andriolli, A. Giorgetti, L. Valcarengi, I. Cerutti, P. Castoldi, and F. Cugini: reports the enhancement required by GMPLS to manage dynamic translucent optical networks with quality of transmission guarantee; **may be of interest to Avishek.**

- “Hybrid wireless-optical broadband access network(woban) : prototype development and research challenges” by P. Chowdhury, B. Mukherjee, S. Sarkar, G. Kramer, and S. Dixit: reports the architecture and functional characteristics of a WOBAN prototype.

March/April:

- “Dimensioning network links: a new look at equivalent bandwidth” by A. Pras, L. Nieuwenhuis, R. van de Meent, and M. Mandjes: reports a mathematical formulation to represent minimum amount of capacity needed to meet SLA requirement in terms of traffic rate, burstiness, and performance level; **may be of interest to Ananya, Massimo.**
- “Quality of resilience as a network reliability characterization tool” by P. Cholda, J. Tapolcai, T. Cinkler, K. Wajda, and A. Jajszczyk: reports a metric called Quality of Resilience that can be used to measure reliability and comparison and selection of recovery methods to meet SLA requirements; **may be of interest to Ananya, Massimo.**

January/February: Special Issue on “Recent Developments in Network Intrusion Detection” (Nothing related/interesting)

2008

November/December: (Missing Issue)

- “Trends in Optical Switching Techniques: A Short Survey” by M. Maier, and M. Reisslein: reports the current trends in optical switching to improve the bandwidth efficiency, and decrease the cost and power consumption; **may be of interest to All.**

September/October: Special Issue on “Implications and Control of Middleboxes in the Internet” (Nothing related/interesting)

July/August: Special Issue on “Composable Context Aware Services” (Nothing related/interesting)

May/June:

- “A novel delay-aware routing algorithm (DARA) for a hybrid wireless-optical broadband access network (WOBAN)” by S. Sarkar, H. Yen, S. Dixit, and B. Mukherjee: reports the characteristics of the delay-aware routing algorithm (DARA) that minimizes the average packet delay in the wireless front-end of a WOBAN.
- “WiMAX networks: from access to service platform” by K. Lu, Y. Qian, H. Chen, and S. Fu: reports the design of a new network layer that can support multihop communications efficiently in WiMAX networks; **may be of interest to Sayeem, Shraboni, Eiman.**

March/April: Special Issue on “Internet Scalability: Properties and Evolution” (Nothing related/interesting)

January/February: Special Issue on “Wireless Mesh Networks: Applications, Architectures, and Protocols” (Missing Issue)

- “Routing Metrics and Protocols for Wireless Mesh Networks” by M. Campista, P. Esposito, I. Moraes, L. Costa, O. Duarte, D. Passos, C. Albuquerque, D. Saade, and M. Rubinstein: reports the state of the art in WMN metrics and propose a taxonomy for WMN routing protocols; **may be of interest to Eiman, Sayeem.**
- “Wireless Mesh Networks for In-Home IPTV Distribution” by E. Shihab, L. Cai, F. Wan, A. Gulliver, and N. Tin: reports a survey and comparison of the emerging wired and wireless communication technologies for broadband access networks and proposes three wireless mesh network architectures to provide anywhere, anytime IPTV services without rewiring any home; **may be of interest to Sayeem.**

2007

November/December: Topics in Networking (Nothing related/interesting)

September/October: Special Issue on “Advances in Broadband Access Networks”

- “Long-Reach Optical Access Technologies” by D. Shea and J. Mitchell: reports a summary of the economic arguments behind long-reach access and examines a number of leading long-reach optical access technologies; **may be of interest to Lei Shi.**
- “Toward Quality of Service Protection in Ethernet Passive Optical Networks: Challenges and Solutions” by C. Assi, M. Maier, and A. Shami: reports an admission control framework that is capable of supporting and protecting the QoS of real-time traffic while guaranteeing a minimum bandwidth for best effort traffic, and presents an appropriate dynamic bandwidth allocation algorithm; **may be of interest to Rajesh, Lei Shi.**
- “Resource Management for Broadband Access over Time-Division Multiplexed Passive Optical Networks” by Y. Luo, S. Yin, N. Anson, and T. Wang: reports an overview of the resource management issues along with the state-of-the-art schemes over time-division multiplexed PONs (TDM-PONs); **may be of interest to Rajesh, Lei Shi.**

July/August: Special Issue on “Network System Architecture” (Nothing related/interesting)

May/June:

- “Integration of IEEE 802.11 WLANs with IEEE 802.16-based multihop infrastructure mesh/relay networks: A game-theoretic approach to radio resource management” by D. Niyato and E. Hossain: reports an architecture for integrating IEEE 802.11 WLANs with IEEE 802.16-based multihop wireless mesh infrastructure to relay WLAN traffic to the Internet; **may be of interest to Sayeem, Pulak.**

March/April: Special Issue on “Convergence of Internet and Broadcast Systems” (Missing)

- “Video-on-Demand Networks: Design Approaches and Future Challenges” by F. Thouin and M. Coates: reports the components of VoD architectures and survey the current approaches to their design.

January/February: Topics in “Evolution towards 4G wireless networking”

- “Dynamic resource allocation in OFDM systems: an overview of cross-layer optimization principles and techniques” by M. Bohge, J. Gross, A. Wolisz and M. Meyer: reports different aspects of cross-layer system optimization regarding wireless OFDM systems to provide basic knowledge for future investigation of OFDM cross-layer-optimization issues; **may be of interest to Shraboni.**

2006

November/December: (Nothing related/interesting)

September/October: Topics in “Securing Voice over IP” (Nothing related/interesting)

July/August:

- “Technoeconomic evaluation of the major telecommunication investment options for European players” by B. Olsen, D. Katsianis, D. Varoutas, K. Stordahl, J. Harno, N. Elnegaard, I. Welling, F. Loizillon, T. Monath, and P. Cadro: reports a summary of the major results from European projects and recommendations from the technoeconomic evaluation of three telecommunications market studies; **may be of interest to All.**
- “A study of Internet instant messaging and chat protocols” by R. Jennings, E. Nahum, D. Olshefski, D. Saha, Z. Shae, and C. Waters: reports an overview of the available features, functions, system architectures, and protocol specifications of the three most popular network IM protocols: AOL Instant Messenger, Yahoo! Messenger, and Microsoft Messenger.

May/June: Topics in “Wireless Sensor Networking” (Nothing related/interesting)

March/April: Topics in “Multimedia over Broadband Wireless Networks”

- “Quality of service support in IEEE 802.16 networks” by C. Cicconetti, L. Lenzini, E. Mingozzi, and C. Eklund: reports the mechanisms that are available in an 802.16 system to support quality of service (QoS); **may be of interest to Sayeem, Shraboni, Eiman.**

January/February:

- “Recovery of the control plane after failures in ASON/GMPLS networks” by A. Jajszczyk and P. Rozycki: reports different approaches to control-plane survivability based on protection and restoration mechanisms, and discusses procedures for the control plane state recovery, including link and node failure; **may be of interest to Chaitanya, Ferhat, Menglin.**
- “Web cache replacement policies: a pragmatic approach” by K. Wong: reports different existing cache-update policies and their effectiveness; **may be of interest to Adam.**
- “Defining 4G technology from the users’ perspective” by S. Frattasi, H. Fathi, F. Fitzek, R. Prasad, and M. Katz: reports a definition of 4G network derived from a user-centric methodology that considers the user as the center of the design; **may be of interest to Sayeem, Eiman, Shraboni.**

2005

January/February: Topics in “Interdomain Routing and the Border Gateway Protocol”

September/October: Topics in “4G Network Technologies for Mobile Telecommunications”

- “What a Mesh! An architecture for next-generation radio access network” by S. Ghosh, K. Basu, and S. Das: reports an IP-based radio access network architectures for next-generation mobile systems; **may be of interest to Eiman.**
- “An overview of scheduling algorithms in MIMO-based fourth-generation wireless systems” by W. Ajib and D. Haccoun: reports an overview of the scheduling algorithms proposed for fourth-generation multiuser wireless networks based on multiple-input multiple-output technology; **may be of interest to Eiman.**

July/August: Topics in “Wireless Local Area Networking: QoS Provisioning and Resource Management”

- “Improving QoS and throughput in single- and multi-hop WLANs through dynamic traffic prioritization” by A. Iera, A. Molinaro, G. Ruggieri, and D. Tripodi: reports the effects of augmenting the contention-based channel access mechanism of IEEE 802.11e through the assignment of dynamic traffic priorities; **may be of interest to Eiman.**

May/June: (Nothing related/interesting)

March/April:

- “The Network Processing Forum switch fabric benchmark specifications: an overview” by I. Elhanany, D. Chiou, V. Tabatabaee, R. Noro, and A. Poursepanj: reports an overview of the Network Processing Forum switching fabric benchmark specifications and their potential impact; **may be of interest to All.**
- “Traffic engineering in metro Ethernet” by M. Ali, G. Chiruvolu, and A. Ge: reports algorithms for multipoint traffic engineering in the metro Ethernet.

January/February: (Nothing related/interesting)

2004

November/December:

- “An econometric model for resource management in competitive wireless data networks” by S. Das, H. Lin, and M. Chatterjee: reports the role and importance of the economic aspects for the success of wireless services deployment and provider selection by users in a competitive environment; **may be of interest to Sayeem, Eiman.**

September/October:

- “Performance evaluation of constraint-based path selection algorithms” by F. Kuipers, T. Korkmaz, M. Krunz, and P. Van Mieghem: reports a comparison of heuristics of constraint-based path selection algorithms; **may be of interest to All.**
- **“Exploiting user profiles to support differentiated services in next-generation wireless networks” by V. Pandey, D. Ghosal, and B. Mukherjee:** reports design of a wireless network architecture that exploits user profiles to maximize network efficiency and provide better quality-of-service (QoS) to different classes of users.

July/August: Topics in “Ad Hoc Networking: Data Communications and Topology Control” (Nothing related/interesting)

May/June: Mixed Topics

- “The IEEE 802.17 media access protocol for high-speed metropolitan-area resilient packet rings” by P. Yuan, V. Gambiroza, and E. Knightly: reports an overview of the IEEE 802.17 resilient packet ring (RPR) protocol with a focus on medium access and fairness; **may be of interest to Chaitanya**.
- “A classification of reliable multicast protocols” by J. Atwood: reports a set of multicast protocols and their classification using the user requirements, and the architectures, mechanisms, communications patterns, and policies used to satisfy these requirements; **may be of interest to Ferhat, Chaitanya, Menglin**.
- “Failure protection in layered networks with shared risk link groups” by D. Xu, Y. Xiong, C. Qiao, and G. Li: reports the significance of the trap problem in layered networks with shared risk link group (SRLG) and evaluates the performance of several existing SRLG protection schemes; **may be of interest to Ferhat, Chaitanya, Menglin**.

March/April: Topics on “Finding Survivable Networks”

- “Feasibility of IP restoration in a tier 1 backbone” by G. Iannaccone, C. Chuah, S. Bhattacharyya, and C. Diot: reports the design principles of Sprint's network that uses IP-based restoration approach for building a highly available tier 1 IP backbone; **may be of interest to Chaitanya**.
- “SONET/SDH-like resilience for IP networks: a survey of traffic protection mechanisms” by G. Suwala and G. Swallow: reports mechanisms where a link failure can be protected locally, SONET/SDH-like, at sub-50-ms protection times; **may be of interest to Chaitanya**.
- “An architecture for scalable, efficient, and fast fault-tolerant multicast provisioning” by J. Cui, M. Faloutsos, and M. Gerla: reports an overview of the current multicast fault tolerance method and proposes a architecture for fault-tolerant multicast provisioning; **may be of interest to Menglin, Chaitanya, Ferhat**.
- **“A review of fault management in WDM mesh networks: basic concepts and research challenges”** by J. Zhang and B. Mukherjee: reports various protection and restoration schemes, primary and back-up route computation methods, shareability optimization, and dynamic restoration and describes different parameters that can measure the quality of service provided by a WDM mesh network to upper protocol layers.

January/February: Topics on “Middleware technologies for Future Communication Networks” (Nothing related/interesting)