

**IEEE Communications Society
TECHNICAL COMMITTEE
ON
Communications Quality & Reliability**

CQR

<http://committees.comsoc.org/cqr/>

***Committee Meeting
Hiromi Ueda, CQR Chair***

***Wednesday, December 7, 2011
GLOBECOM 2011, Houston, TX, USA***



Agenda

- Welcome and Introduction
- CQR Overview
 - CQR Officers
 - Background
 - Charter
 - Chairman's Awards
- CQR Workshops
 - Overview of CQR 2011
 - Introduction of CQR 2012
- CQRM Symposium in ICCs and GLOBECOMs
 - Symposia Representatives and Statistics
- Today's TAC meeting report
- Other Activities
- Adjourn

CQR Officers (2010-2011)

Chair	Hiromi Ueda, Tokyo Univ. of Technology, JP
Chair Elect	Kelly Krick, Ericsson, US
Vice-Chair-Operations	Hideaki Yoshino, NTT , JP
Vice-Chair-Programs	Peter Hoath, Independent Consultant, UK
Vice-Chair-Publications	Weider Yu, San Jose State Univ., US
Secretary	Tetsuya Yokotani, Mitsubishi Electric, JP
Treasurer	Kevin Krantz, Ericsson, US

Advisory Board

Chi-Ming Chen (Advisory Board Chair), AT&T, US
Kenichi Mase, Niigata Univ., JP
Karl Rauscher, EastWest Institute, US
Koichi Asatani, Kogakuin Univ., JP
Kelly Krick, Ericsson, US
Raymond Bonelli, Consultant, US

Next Term CQR Officer Candidates (2012-2013)

Chair	Kelly Krick, Ericsson, US
Chair Elect	Hideaki Yoshino, NTT, JP
Vice-Chair-Operations	Tetsuya Yokotani, Mitsubishi Electric Co., JP
Vice-Chair-Programs	Carol Davids, Illinois Institute of Technology, US
Vice-Chair-Publications	Weider Yu, San Jose State Univ., US
Secretary	Jim Runyon, Alcatel Lucent, US
Treasurer	Kevin Krantz, Ericsson, US

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Raymond Bonelli, Consultant, US

CQR Background

- **CQR**: Technical Committee on **C**ommunications **Q**uality & **R**eliability
- Established in 1986 as **QAMC** (**Q**uality **A**ssurance **M**anagement **C**ommittee)
- One of the **24** Technical Committees of IEEE Communications Society (**ComSoc**)

<http://www.comsoc.org/about/committees/Technical>

CQR Charter

- Revised August 2006
- Focuses on and advocates worldwide communications quality and reliability on behalf of, and within, the Communications Society.
- Serves as the catalyst for global awareness and the exchange of information relative to technical and management-related aspects of communications quality and reliability. This also extends to security of the telecommunications network.
- CQR technical subject matter includes:
 - I. **Service** Quality and Reliability
 - II. **Network** Quality and Reliability
 - III. **Product and System** Quality and Reliability

CQR Chairman's Awards

- Established in 2004
- Criteria upon which recipients were selected include:
 - sustained contributions in the field of Quality, Reliability & Security of communications services, networks or systems;
 - a demonstration of the core value of a professional society- adding value to others; and
 - integrity consistent with that of a role model
- Nominated by CQR Officers and Members of the Advisory Board with nomination material
- The awards ceremony is held at the CQR workshop every year.
- Number of recipients 2004-2011:

2004	2005	2006	2007	2008	2009	2010	2011
5	5	3	4	2	3	3	0

- In 2011 **No nomination.**

CQR Strategic and Technical Programs

- Strategic programs:
 - Special Hot Topic Workshops
 - Industry side interested issues

- Technical programs:
 - Workshop Tech. Program
 - CQRM Symposium in ICC and GLOBECOM

- Combined:
 - Annual CQR Workshop including Industrial and academia people
 - ICC and GLOBECOM Business/Industry Forum
 - Publications



Strategic Programs



Technical Programs



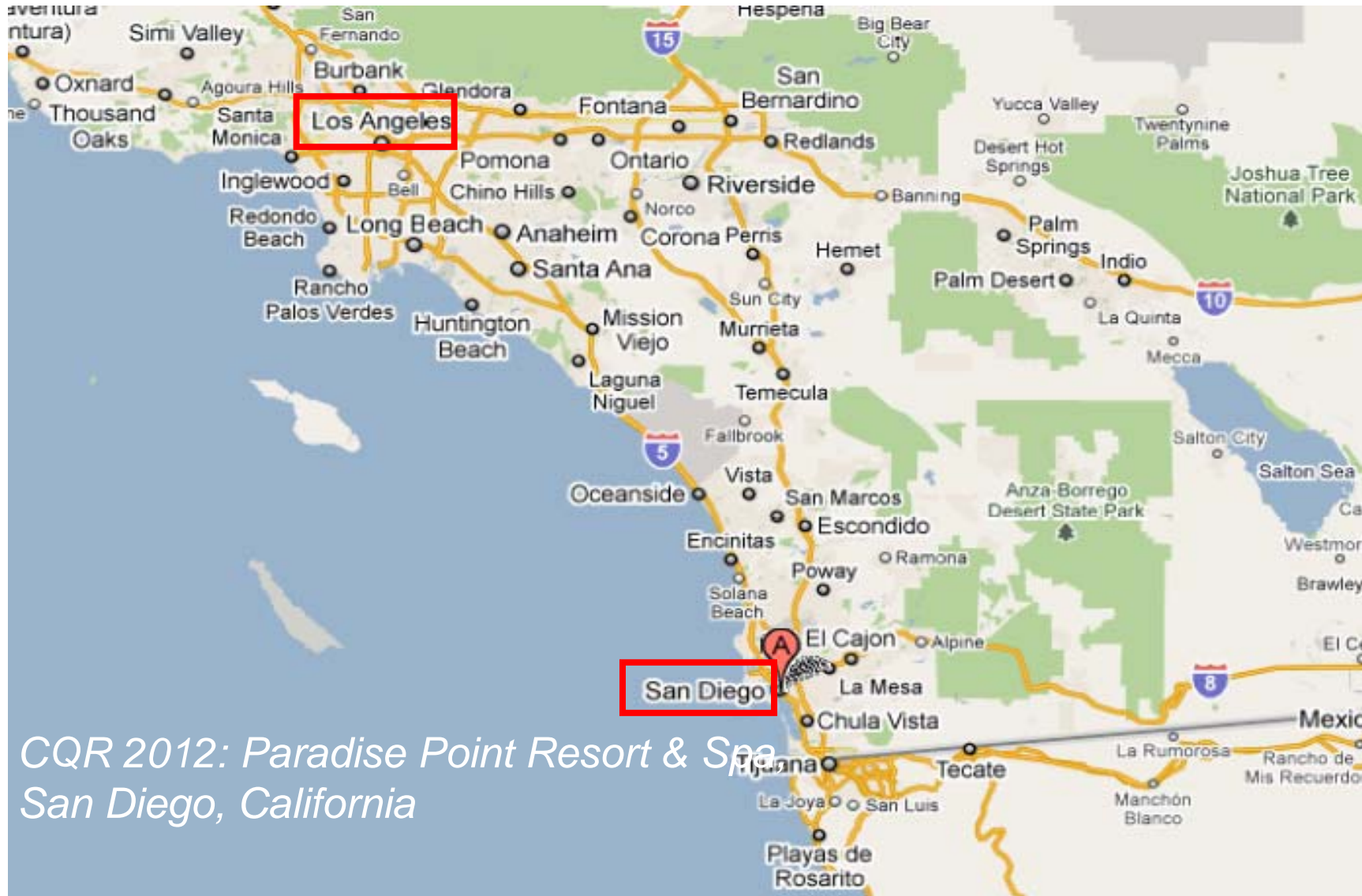
Outline of CQR2011 Workshop

- CQR2011 was held in Naples, Florida, May 10-12, 2011
- General Co-Chairs:
 - Scott Poretsky, Allot Communications
 - Mike Ryan, Verizon Wireless
- Technical Program Chair and Secretary :
 - Prof. Yutaka Ishibashi, Nagoya Institute of Tech.
 - Prof. Shinji Sugawara, Nagoya Institute of Tech.
- Industry-focused Strategic Track
 - Keynote Address 1: Hank Kafka, AT&T,
 - Keynote Address 2: Elisabeth Rainge, IDC
 - Keynote Address 3: Karl Rauscher, EWI
 - Segment 1: The Realities of Deploying LTE
 - Segment 2: Smartphone Impact on Mobile Data Networks
 - Segment 3: Supply Chain Integrity to Ensure Cyber Security
- Technical Paper Track
 - 21 papers out of about 40 has been presented.

Introduction of CQR2012 Workshop

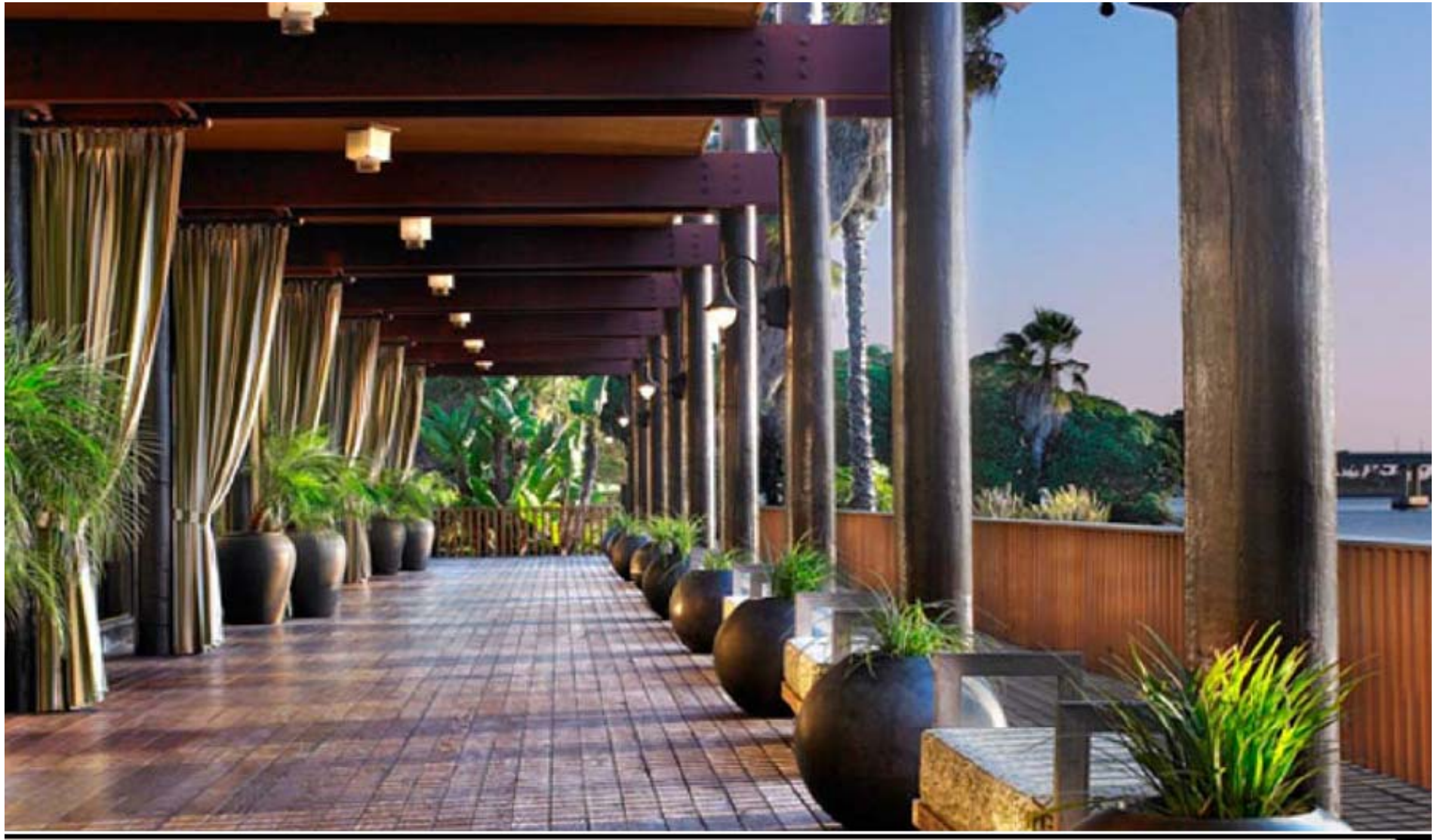
- Dates: May 15 (Tuesday) to May 17 (Thursday), 2012
- Place: the Paradise Point Resort, San Diego, California
1404 Vacation Road, San Diego, CA 92109
<http://www.paradisepoint.com/>
- General Co-Chairs:
 - Scott Poretsky, Allot Communications
 - Mike Ryan, Verizon Wireless
- Technical Program Chair and Secretary :
 - Prof. Katsunori Yamaoka, Tokyo Institute of Technology
 - Dr. Ken-Ichi Suzuki, NTT.
- Workshop URL <http://www.ieee-cqr.org/>

CQR 2012: Paradise Point Resort & Spa



*CQR 2012: Paradise Point Resort & Spa
San Diego, California*

CQR 2012: Paradise Point Resort & Spa



CQR 2012: Paradise Point Resort & Spa



IEEE CQR 2012: Keynotes & Industry Panels

■ **Keynotes:** (2 of 3 Committed)

- Day 1: Dr. Hossein Eslambolchi, 2020 Venture Partners, former CTO AT&T
- Day 2: Nicola Palmer, VP of Network Planning, VZW
- Day 3: TBD

■ **Industry Panels**

- Executive Panel: Chair, Kelly Krick, Ericsson
- Distinguished Experts Panel: Chair, Prof. Carol Davids, Illinois Institute of Technology
- Operations Panel: Operating Complex Networks that Satisfy Customers, Chair Chris Mayer, VP of Systems Integration and Testing, VZ

IEEE CQR 2012 Industry Track Themes

- Segment 1: **Quality, Reliability, and Security for Smart Networks**
Chair **Andy Rollins**, NSN
- Segment 2: **Data Visibility for Quality and Reliable Service Delivery**
Chair: **Mike Stewart**, Syniverse
- Segment 3: **The Rise of the Machines: Exploring Quality, Reliability, and Security in a Machine Driven World**
Chair: **Mark Adams**, Cox Communications

Segment 1: Quality, Reliability, and Security for Smart Networks

- Chair **Andy Rollins**, NSN
- The explosion of mobile applications is defining the network. Mobile browsing, mobile video, mobile gaming, and mobile VoIP are placing new demands on the network as users have high expectations of bandwidth, service quality, and reliability. The increased availability of these applications through the expanding penetration of smart devices served by carrier networks and the diverged characteristics of mobile applications introduce challenges to the operators for service delivery. The operator goal is to build the Smart Network that is able to dynamically adapt to the application for optimum service delivery. Quality, reliability, and security are essential components of the Smart Network. This segment will discuss the impact of smart devices on the networks, the importance of quality, reliability, and security, and innovative approaches to achieve optimum service delivery.

Segment 2: Data Visibility for Quality and Reliable Service Delivery

- Chair: **Mike Stewart**, Syniverse
- The key to delivering an excellent subscriber experience is to have an understanding of the health of the services being delivered. Unseen issues or degradations are impossible to act upon and correct. Operators need visibility from the physical media (Layer 1) to the application layer (Layer 7) to be able to optimize service delivery, proactively detect issues and to correct them before the subscriber's service is impacted. This segment will examine implementations of data reporting architectures and methods to provide actionable intelligence that can be used to enhance the service delivery quality and customer experience.

Segment 3: Data Visibility for Quality and Reliable Service Delivery

- Chair: **Mark Adams**, Cox Communications
- Machine to machine (M2M) allows networked machines to exchange information and perform actions without the manual assistance of humans. M2M is expected to add >50B devices to the network this decade. Satellite Navigation, Smart Grid, Meters, Remote Cameras, and Point of Sale Systems are some examples of M2M applications now being rolled-out. Today's subscriber-centric networks are built to support a global

CQR2012: Technical Program Important Dates

- January 13, 2012
 - Paper submission deadline (No extension)
- February 17, 2012
 - Notification of acceptance mailed to authors
- March 14, 2012
 - Camera-ready paper submission deadline
- May 15 (Tuesday) to May 17 (Thursday), 2012
 - CQR 2012 Workshop, Paradise Point Resort & Spa, San Diego, CA

IEEE ICC and GC Activities: CQRM Symposia

Year	ICC	GLOBECOM
2002	4/28-5/2, New York Koichi Asatani	11/17-21, Taipei, Taiwan Koichi Asatani
2003	5/11-15, Anchorage Koichi Asatani	12/01-05, San Francisco -
2004	6/20-24, Paris, France Koichi Asatani	11/29-12/3, Dallas -
2005	5/16-20, Seoul, Korea Hiromi Ueda	11/28 – 12/2, St. Louis -
2006	6/11-15, Istanbul, Turkey Hiromi Ueda	11/27 – 12/1, San Francisco Hiromi Ueda
2007	6/24-28, Glasgow, UK Hiromi Ueda	11/26 – 11/30, Washington, DC -
2008	5/19-23, Beijing, China Hiromi Ueda	11/30 – 12/4, New Orleans Toshinori Tsuboi
2009	6/14-18, Dresden, Germany Hiromi Ueda	11/30 – 12/4, Honolulu Hajime Nakamura

IEEE ICC and GC Activities: CQRM Symposia

Year	ICC	GLOBECOM
2010	5/23-27, Cape Town, South Africa Toshinori Tsuboi	12/06-10, Miami Hideaki Yoshino
2011	6/05-09, Kyoto, Japan Toshinori Tsuboi, Piotr Cholda	12/05-09, Houston Tetsuya Yokotani
2012	6/10-15, Ottawa, Canada Hideaki Yoshino	12/03-07, Anaheim Tetsuya Yokotani
2013	6/09-13, Budapest, Hungary Tetsuya Yokotani	12/09-13, Atlanta Hideaki Yoshino
2014	TBD, Sydney, Australia TBD	11/16-21, Austin TBD
2015		
2016		

Statistics of ICC and GLOBECOM Papers

Year	ICC			GLOBECOM		
	Submitted	Accepted	A/S Rate	Submitted	Accepted	A/S Rate
2005	222	76	34.2 %	-	-	-
2006*	247	101	40.0 %	140	54	38.6 %
2007	255	102	40.0 %	-	-	-
2008	221	74	33.5 %	198	71	35.8 %
2009	178	63	35.4 %	211	78	37.0 %
2010	178	79	44.4 %	293	100	34.1 %
2011	153	59	38.4 %	210	67	31.9 %
2012	182	65	35.7 %	-	-	- %

* Poster sessions commenced

Other Activities (I)

- IEEE ComSoc Technically Co-sponsorship Endorsed by CQR-TC
 - **WCS 2011** (the EWI Second Worldwide Cybersecurity Summit, London June 2011), **Karl**
 - **ITU-WT-2011** (ITU Telecom World, Geneva, Oct 2011), **Chi-Ming**
 - **WTS 2012** (the world Telecommunications Congress, Miyazaki, July 2012), **Shiomoto-san**

- Membership upgrade (Member to Senior Member; SM to Fellow)
 - **Koichi: IEEE Fellow (2005)**
 - **Kenichi: IEEE Fellow (2005)**
 - **Hiromi: IEEE Fellow (2008)**

Other Activities (II)

- IEEE Distinguished Lecturers
 - Koichi (2009, 2011)
- Standards
 - Hideaki: Liaison to the standard body
- Publication (ComMag Feature Topic issue)
 - Chi-Ming, Anil, Jason (Network Disaster Recovery)

Communications Magazine Feature Topic Issue

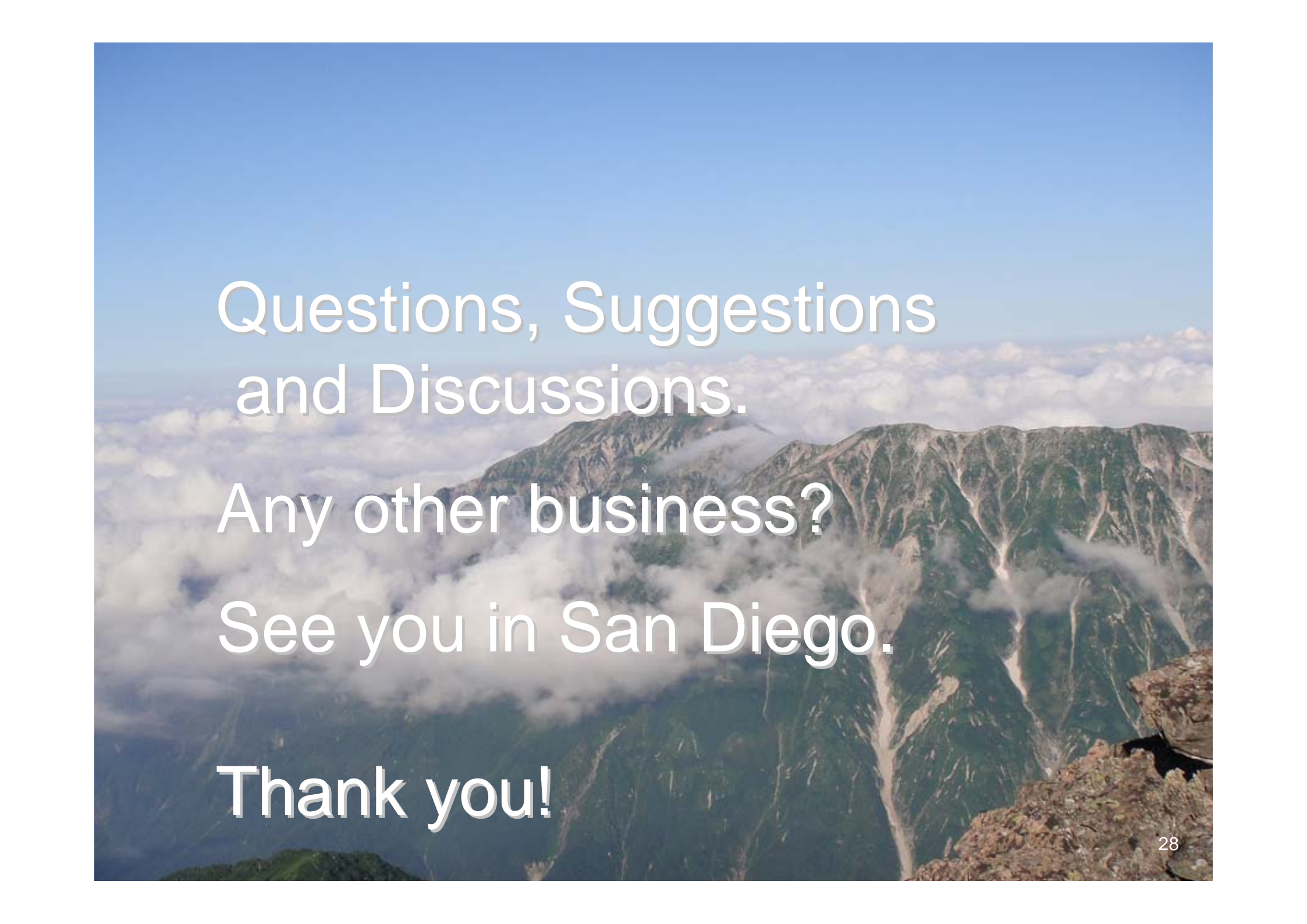
- **Feature Topic:** Network Disaster Recovery
- **Publication Date:** January 2011
- **Guest Editors:** Chi-Ming Chen, Anil Macwan and Jason Rupe
- **Papers Accepted:**
 - “Rapidly Recovering from the Catastrophic Loss of a Major Telecommunications Office,” Kelly Morrison, AT&T
 - “Disasters will happen - are you ready?” Chris Oberg, Verizon Wireless, Andrew Whitt and Robert Mills, Verizon
 - “Considerations and Suggestions on Improvement of Communication Network Disaster Countermeasures After Wenchuan Earthquake,” Ran Yang, China Academy of Telecom Research (CATR)
 - “Lack of Emergency Recovery Planning Is a Disaster Waiting to Happen,” Rick Krock, Alcatel-Lucent
 - “How to Deliver Your Message From/To Disaster Area,” Kenichi Mase, Niigata Univ., Japan

TAC Meeting Report 1

- Date: Wednesday, 7 December 2011
- Time: 7:30 - 9:30 am
- Location: Grand Ballroom C (Level 4), Hilton Americas Hotel
- Welcome and Introduction (5 min, Mark Karol)
- TAC Overview, Updates, and Misc. Issues (20 min, Mark Karol)
 - We currently have 24 Technical Committees (TCs), including comparatively young TCs such as those on Cognitive Networks and Power-Line Communications, and the most recent addition, e-Health, created in 2009.
 - At the beginning of 2010, we created an ad hoc committee on Smart Grid Communications. Stefano Galli was appointed Chair of the new committee. We invited all TCs to appoint, if appropriate, a member of the new ad hoc committee.
 - This year, we created a new ad hoc committee on “Cloud Communications and Networking,” chaired by Marcus Brunner. Many conference and publication activities are already underway across ComSoc. This ad hoc committee should help coordinate ComSoc’s efforts (across multiple TCs) in this important topic.
 - 2012 IEEE Fellow: 33 are selected out of 83 candidates in IEEE ComSoc (321 out of 813 in IEEE)

TAC Meeting Report 2

- Standards (10 min, Curtis Siller)
 - Standards projects of interest to ComSoc include issues related to power-line communications, broadband over power-line networks, smart grid technologies, Ethernet passive optical networks, and fundamental aspects of telephony.
- Conference Issues, including "Conference Portfolio Analysis" (20 min, Heiner Stuttgen and Merrily Hartmann)
 - the CQR workshop remains a ComSoc portfolio conference/workshop for the next term 2012-2013.
- Distinguished Lecturer Selection Committee (5 min, Mehmet Ulema)
 - New 14 Distinguished Lecturers are selected (Dec 31, 2013)
- Green Communications Subcommittee proposal (10 min, Jinsong Wu)
- Other Business
- Adjourn



Questions, Suggestions
and Discussions.

Any other business?

See you in San Diego.

Thank you!