

TC14: Entertainment Computing

Report to General Assembly and Technical Assembly

Hanoi, Vietnam, August 29 - 31, 2009

Ryohei Nakatsu, TC14 Chair

Part 1: General Assembly (Hanoi, Vietnam)

TC14 Entertainment Computing

[<http://www.org.id.tue.nl/IFIP-TC14/>]

1. TC14 meetings held since last report

1.1 Fifth meeting

The fifth TC14 meeting took place during ICEC2008 (International Conference on Entertainment Computing) on September 26th, 2008 in Pittsburgh, USA. Below are the list of the participants and the agenda.

TC officers:

Ryohei Nakatsu	(National University of Singapore, Chair)
Matthias Rauterberg	(Technical University of Eindhoven, Vice-chair)
Ben Salem	(Technical University of Eindhoven, Secretary)
Claudio Pinhanez	(IBM Brazil, Industrial Liaison)

National Representatives:

Australia	Steve Hansen (University of Western Sidney)
China	Hyun Yang (proxy for Zhigeng Pan)
France	Stephane Natkin (CNAM)
Japan	Ryohei Nakatsu (National University of Singapore)
Korea	Hyun Yang (KAIST)
The Netherlands	Matthias Rauterberg (Technical University of Eindhoven)
USA-ACM	Charles Palmer (proxy for Prof. Don Marinelli)

Absent Excused:

Bulgaria:	Galia Angelova
Czech	David Ovdzalek
USA-IEE	Nahum Gershon

WG chairs:

WG14.1 chair:	Anton Nijholt (proxy for Marc Cavazza)
WG14.2 chair:	Ryohei Nakatsu (proxy for Hitoshi Matsubara)
WG14.3 chair:	Matthias Rauterberg (Technical University of Eindhoven, Netherland)
WG14.4 chair:	Anton Nijholt (proxy for Jaap van den Herik)
WG14.7 chair:	Naoko Tosa (Kyoto University, Japan)

Guests:

Keiji Yamada (NEC, Japan)
Steve Watson (Elsevier, The Netherlands)
Cecile le Prado (CNAM, France)
Andre Melzer (University of Luxembourg, Luxembourg)
Steven Dow (Georgia Tech, US)
Gino Yu (Hon Kong Polytechniq University, Hong Kong)

Agenda:

Approval of the minutes of the previous TC14 meeting
Brief report on ICEC2008 - Pittsburgh
Current preparations for ICEC 2009 - Paris
Preparation for ICEC2010 (Asia candidates)
 Procedure for the selection of candidates and successful bids of ICEC hosts.
Working Groups activities reports
Journal on Entertainment Computing
AOB

1.2 Sixth Meeting

The sixth TC14 meeting took place on April 27th, 2009 at CNAM, Paris, France. Below are the list of the participants and the agenda.

TC officers:

Ryohei Nakatsu (National University of Eindhoven, Chair)
Matthias Rauterberg (Technical University of Eindhoven, Vice-chair)

National Representatives:

Czech	David Obdrzalek (Charles University)
France	Stephane Natkin (CNAM)
Germany	Rainer Malaka (University of Bremen)
Italy	Paolo Ciancarini (University of Bologna)
Japan	Ryohei Nakatsu (National University of Singapore)
The Netherlands	Matthias Rauterberg (Technical University of Eindhoven)
United Kingdom	Marc Cavazza (University of Teesside)
USA-ACM	Donald Marinelli (Carnegie Melon University)
USA-IEEE	Nahum Gershon (The Mitre Corp.)

WG chairs:

WG14.1 chair: Marc Cavazza (University of Teesside, UK)
WG14.2 chair: Ryohei Nakatsu (proxy for Hitoshi Matsubara)
WG14.3 chair: Matthias Rauterberg (Technical University of Eindhoven, Netherland)
WG14.5 chair: Andy Sloane (Univ. of Wolverhampton, UK)
WG14.6 chair: Lyn Pemberton (University of Brighton)
WG14.7 chair: Ryohei Nakatsu (proxy for Naoko Tosa)

Guests

Nocolas Gaume (ENJMIN, France)
D. Lejais (CNAM, France)
Jerome Dupire (CNAM, France)

Agenda

- Approval of the minutes of the previous TC14 meeting
- Current preparation for ICEC2009
- Preparation of ICEC2010
- WG report of activities
- TC14 membership

2. TC14 meetings scheduled until next IFIP General Assembly

The 7th TC14 meeting will be held at the time of ICEC2009 (International Conference on Entertainment Computing) that will be held on September 03 - 05, 2009 in Paris, France. Also the 8th TC14 meeting will be held in the spring of 2010.

3. Changes in membership and officers

There have been several changes since the last report to the General Assembly 2008.

3.1 TC14 officers and members

Ben Salem, TC14 secretary would resign at the end of August 2009. Tim Marsh, National University of Singapore, Singapore would take over the position of the TC14 secretary.

Hitoshi Matsubara, WG14.2 chair will resign at the end of August 2009 when his three year term as WG14.2 chair would expire. David Odjrzelek would take over the position of WG14.2 chair. Also he will stay at a position of TC14 Czech representative.

Also Jaap van den Herik, WG14.4 chair will resign at the end of August 2009 when his three year term as WG14.4 chair would expire. Stephane Natkin would take over the position of WG14.4 chair. Also he will stay at a position of TC14 French representative.

Unfortunately Steven Hansen A/Prof of University of Western Sydney, TC14 Australian representative expressed his intention of resigning the position as well as his position at the university. As we are going to organize 2nd Entertainment Computing Symposium (ECS2009) in conjunction with WCC2010 and Steven Hansen has been expected a key person for organizing the symposium, we have asked IFIP Australian representative to nominate a person who would take over Steven Hansen as soon as possible.

We keep in contact with IFIP Denmark representative and ask to nominate TC14 Denmark representative.

3.2 TC members

The TC members as of 29th August 2009 are shown below.

TC officers

Chair	Ryohei Nakatsu (Prof., National University of Singapore)
Vice-chair	Matthias Rauterberg (Prof., Technical University of Eindhoven)
Secretary	Ben Salem (Dr., Technical University of Eindhoven)
Industrial liaison	Claudio Pinhanez (Dr., IBM)

National Representative

1	Australia	Steven Hansen (A/Prof., University of Western Sydney)
2	Austria	Peter Purgathofer (Prof., Vienna University of Technology)
3	Bulgaria	Galia Angelova (Prof., Bulgarian Academy of Sciences)
4	Canada	Sidney Fels (Prof., University of British Columbia)
5	China	Zhigeng Pan (Prof., Zhejiang University)
6	Czech	David Obdrzalek (Prof., Charles University)
7	Finland	Ville-Veikko Mattila (Dr., Nokia Research Center)
8	France	Stephane Natkin (Prof., CNAM)
9	Germany	Rainer Malaka (Prof. University of Bremen)
10	Hungary	Barnabas Takacs (Dr., Hungarian Academy of Sciences)
11	Ireland	Richard Reilly (Dr., University College of Dublin)
12	Italy	Paolo Ciancarini (Prof., University of Bologna)
13	Japan	Ryohei Nakatsu (Prof., Kwansei Gakuin University)
14	Korea	Hyun S. Yang (Prof., KAIST)
15	Netherlands	Matthias Rauterberg (Prof., Technical University of Eindhoven)
16	Norway	Geir Egil Myhre (Dr., University of Troms)
17	Portugal	Nuno Correia (Prof., New University of Lisbon)
18	Singapore	Adrian David Cheok (A/Prof., National University of Singapore)
19	Spain	Pedro Gonzalez Calero (Prof., Complutense University of Madrid)
20	Thailand	Natanicha Chorpothong (Dr., Assumption University)
21	United Kingdom	Marc Cavazza (Prof., University of Teesside)
22	USA-ACM	Donald Marinelli (Prof., Carnegie Mellon University)
23	USA-IEEE	Nahum Gershon (Dr, The MITRE Corporation)
24	Zambia	Milner Makuni (Mr., Afriswitch PVT Limited)

WG Officers

WG14.1 chair:	Marc Cavazza (Prof., University of Teesside)
WG14.2 chair:	Hitoshi Matsubara (Prof. Hakodate Future University)
WG14.3 chair:	Matthias Rauterbeg (Prof., Technical University of Eindhoven)
WG14.4 chair:	Jaap van den Herik (Prof., Tilburg University)
WG14.5 chair:	Andy Sloane (Prof., University of Wolverhampton)
WG14.6 chair:	Lyn Pemberton (Reader, University of Brighton)
WG14.7 chair:	Naoko Tosa (Prof., Kyoto University)

Observers

European Commission Liaison:	Leonie Schaeffer
IEEE Computer Science	Miguel Encarnacao (Dr., Imedia Inc.)
DiGRA:	Tony Manninen (Prof. University of Oulu)

Honorary Members

Japan: Takehiko Kamae (Dr., National Institute of Technology)

4. TC14 conferences held since last report**4.1 Sponsored events****4.1.1 ICEC 2008**

The 6th International Conference on Entertainment Computing
September 25 – 27, 2008

Carnegie Mellon University, Pittsburgh, USA

General Conference Chair: Don Marinelli (Carnegie Mellon University, USA)

Program Co-Chairs: Sara Diamond (Ontario College of Art and Design, Canada)
Sidney Fels (University of British Columbia, Canada)
Scott Fisher (University of Southern California, USA)
Barnabas Takacs (Hungarian Academy of Sciences, Hungary)
Hyun S. Yang (KAIST, Korea)

4.1.2 ECS2008 (in conjunction with WCC2008)

First IFIP Entertainment Computing Symposium: “New Frontiers for Entertainment Computing”

September 09 – 10, 2008

Milan, Italy

Symposium Co-chairs: Paolo Ciancarini (University of Bologna, Italy)
Ryohei Nakatsu (National University of Singapore, Singapore)
Marco Rocchetti (Italy)

Program Co-chairs: Lyn Pemberton (University of Brighton, UK)
Matthias Rauterberg (TU/e, The Netherlands)
Jaap van den Herik (Tilburg University, The Netherlands)

4.2 Co-Sponsored events

4.2.1 UXTV 2008

The 1st International Conference on Designing User Experiences for TV and video

October 22 - 24, 2008

Mountain View, California, US

General Chair: Michael J. Damell (Microsoft TV, US)

Program Chairs: Judith Masthoff (University of Aberdeen, UK)
Sheri Panabaker (Windows Media Center, US)

4.2.2 Fun and Games 2008

The 2nd International Conference on Fun and Games

October 20 - 21, 2008

Eindhoven, The Netherlands

General Chair: Panos Markopoulos (TU/e, The Netherlands)

Program Co-chairs: Wijnand IJsselsteijn (TU/e, The Netherlands)
Boris De Ruyter (Philips Research, The Netherlands)
Duncan Rowland (University of Lincoln, UK)

4.2.3 EuroITV2009

European Interactive TV Conference

June 03 - 05, 2009

Leuven, Belgium

General Chair: Dirk De Grooff (K. U. Leuven, Belgium)

Program Co-chairs: David Geerts (K. U. Leuven, Belgium)

4.2.4 FIRA2009

FIRA Robo World Congress 2009

August 16 – 18, 2009

Incheon, Korea

Honorary Chair: Jon Hwan Kin (KAIST, Korea)

General Chair: Shuzi Sam Ge (National University of Singapore, Singapore)

Program Chair: Prahlaad Vadakkepat (National University of Singapore, Singapore)

Finance Chair: Hyun Myung (KAIST, Korea)

5. TC14 conferences to be held

5.1 Sponsored events

5.1.1 ICEC2009

The 7th International Conference on Entertainment Computing

September 03 – 05, 2009

CNAM, Paris, France

General Conference Chair: Stephane Natkin (CNAM/ENJMIN, France)

Program Committee Co-Chairs:

Stephane Natkin (CNAM/ENJMIN, France)

Masayuki Nakajima (Tokyo Institute of Technology, Japan)

Bras Bushman (University of Michigan, USA)

International Steering Committee:

Ryohei Nakatsu (National University of Singapore, Singapore)

Marc Cavazza (University of Teesside, UK)

Zhigeng Pan (Zhejiang University, China)

Stephane Natkin (CNAM/ENJMIN, France)

Don Marinelli (Carnegie Mellon University, USA)

Hyun S. Yang (KAIST, Korea)

Roy Ascott (University of Plymouth, UK)

Sara Diamond (Ontario College of Art and Design, Canada)

Scott Fischer (University of Southern California, USA)

Organization Committee Chair:

Jerome Dupire (CNAM, France)

5.1.2 ICEC2010

The 8th International Conference on Entertainment Computing

September 08 – 10, 2010

Digital Media City, Seoul, Korea

General Conference Chairs: Hyun S. Yang (KAIST, Korea)

Don Marinelli (Carnegie Mellon University, USA)

Ryohei Nakatsu (National University of Singapore, Singapore)

5.1.3 ECS2010

The second Entertainment Computing Symposium (in conjunction with WCC2010)

September 20 – 23, 2010

Brisbane, Australia

Symposium Co-chairs: Matthias Rauterberg (TU/e, The Netherlands)

Ryohei Nakatsu (National University of Singapore, Singapore)

Fazel Naghdy (Australia)

Program Co-chairs: Kevin Wong (Murdoch University, Australia)

Paolo Ciancarini (University of Bologna, Italy)

Naoko Tosa (Kyoto University, Japan)

5.2 Co-sponsored Events

The following conferences will be held as IFP TC14 co-sponsored events. The details of the conference will be decided soon and appear on their web site.

- 1 EuroITV2010
- 2 Edutainment2010
- 3 ACE2010

6. Other TC14 activities

6.1 Conference Proceedings

The proceedings of ICEC2008 has been published from Springer as one of the LNCS series. Also the proceedings of EuroITV2009 has been published from Springer as one of the LNCS series.

The proceedings of ICEC2009 will be published from Springer as one of the LNCS series.

6.2 Publications

TC14 and Elsevier agreed to start a new journal “International Journal on Entertainment Computing.” Contracts have been signed and exchanged between IFIP, IFIP TC14 and Elsevier. Also we have composed a group of Editors-in-Chief, Co-Editors-in-Chief and Associate Editors. We are in the process of reviewing submitted papers for the first issue of the journal.

Working Groups

1. WG14.1 Digital Storytelling

Chair: Marc Cavazza (Prof., University of Teesside, UK)

(a) Meetings

WG14.1 meeting was held during First International Conference on Interactive Storytelling that was held in Erfurt, Germany on November 26-29, 2008. Next WG14.1 meeting will be held in Guimaraes, Portugal on December 09-11, 2009 during ICIDS2009 (2nd International Conference on Interactive and Digital Storytelling).

(b) Members

Stephane Natkin (FR), Stephane Donikian (FR), Ana Paiva (PT), Nuno Correia (PT), Michael Young (US), Ulrike Spierling (D), Nicolas Szilas (CH), Federico Peinado (ES)

(c) Events

2nd International Conference on Interactive Digital Storytelling

Date: Decemtper 09 - 11, 2009

Venue: Guimaraes, Portugal

Conference Co-chairs: Ido Iurgel

Neoson Zagalo

Paolo Petta

Local Co-chairs: Pedro Branco

Rogério Silva

2. WG14.2 Entertainment Robot

Chair: Hitoshi Matsubara (Prof. Hakodate Future University, Japan)

(a) Meetings

WG14.2 meeting was held in Graz, Austrial on June 29 – July 09, 2009 during Robocup2009. Next WG14.2 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2008.

(b) Events

Exhibition: RoboCup 2009

Date: June 29 – July 09, 2009

Place: Graz, Austria

<http://www.robocup2009.org/>

3. WG14.3 Theoretical Basis of Entertainment

Chair: Matthias Rauterberg (Prof., Technical University of Eindhoven, The Netherlands)

(a) Meetings

WG14.3 meeting was held in Paris, France on April 17th, 2009 in conjunction with TC14 meeting. Next WG14.3 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2009.

(b) Members

Matteo Bittanti (ITALY), Johanna Blakley (USA), Brad Bushman (USA), Suely Fragoso (BRAZIL), Jeanne B. Funk (USA), Susan Gold (USA), Haruhiro Katayose (JAPAN), Fátima

Lasay (PHILIPPINE), Noriko Nagata (JAPAN), Bary W. Pollack (USA), Matthias Rauterberg (NETHERLANDS), Bill Swartout (USA), Peter Vorderer (USA/GERMANY)
Observers: Jason Della Rocca (CANADA), Jeffrey Goldstein (NETHERLANDS)

(c) Events

ACG2009 (The twelfth conference on Advances in Computer Games)

Date: May 11-13, 2009

Venue: Pamplona, Spain

4. WG14.4 Games and Entertainment Computing

Chair: Jaap van den Herik (Prof., Tilburg University, The Netherlands)

(a) Meetings

WG14.4 meeting was held in Paris, France on April 17th, 2009 in conjunction with TC14 meeting. Next WG14.4 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2009.

(b) Members

Jaap Van Den Herik (chair), Hiroyuki Iida (vice-chair), Jos Uiterwijk (secretary), Brad Bushman, Paolo Ciancarini, Pedro Conzalez-Calero, Wijnand IJsselsteijn, Graham Kendall, Jong Weon Lee, Andre Melzer, Anton Nijholt, Abdennour El Rhalibi, Timothy Roden, Jonathan Schaeffer, Pieter Spronck, Mark Winands, Woontak Woo, Hyun S. Yang

(c) Events

CG2008 (Conference on Computers and Games 2008)

Date: September 29 – October 1, 2008

Venue: Beijing, China

Organizer: The Beijing Longlife Group

Program Chair: H. J. van den Herik (The Netherlands)

Program Co-chairs: Xinhe Xu, Zongmin Ma, M.H.M. Winands

5. WG14.5 Social and Ethical Issues in Entertainment Computing

Chair: Andy Sloane (Prof., University of Wolverhampton, UK)

(a) Meetings

WG14.5 meeting was held in Paris, France on April 17th, 2009 in conjunction with TC14 meeting. Next WG14.5 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2009.

(b) Members

Claire Dormann (CA), Porfirio Barroso Asenjo (ES), Lynne Baillie (GB), Christopher Zielinski (GB), Suzana Stojakovic-Celustka (HR), Ryohei Nakatsu (SG), Brad Bushman (US), Jeanne Funk (US)

6. WG14.6 Interactive TV

Chair: Lyn Pemberton (Dr., University of Brighton, UK)

(a) Meetings

WG14.6 meeting was held in Paris, France on April 17th, 2009 in conjunction with TC14 meeting. Also another WG14.6 meeting was held in Leuven, Belgium on 03 – 05 June, 2009 during EuroITV2009. Next WG14.6 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2009.

(b) Members

Pablo Cesar (secretary, The Netherlands), Konstantinos Chorianopoulos (vice-chair, Germany), Owen Daly-Jones (UK), Mike Darnell (USA), Luis Fernando Gomes Soares (Brazil), David Geerts (Belgium), Shang Hsu (Taiwan), Jens F Jensen (Denmark), Tibor Kunert (Germany), Georgios Lekakos (Greece), Artur Lugmayr (Finland), Judith Masthoff (UK), Marianna Obrist (Austria), Lyn Pemberton (chair, UK), Célia Quico (Portugal), Mark Springett (UK), Zhang Liping (China)

(c) Events

uxTV 2008 (First International Conference on Designing Interactive User Experiences for TV and Video)

Date: October 22-24, 2008

Venue: Silicon Valley (San Francisco Bay Area) California, US

EuroITV2009 (European Interactive TV Conference)

Date: June 03 – 05, 2009

Venue: Leuven, Belgium

7. WG14.7 Art and Entertainment

Chair: Naoko Tosa (Prof., Kyoto University, Japan)

(a) Meetings

WG14.7 meeting was held in Paris, France on April 17th, 2009 in conjunction with TC14 meeting. Next WG14.7 meeting will be held in Paris, France on September 03 - 05, 2009 during ICEC2009.

(b) Members

Gerfried Stocker(Austria), Christian Warocquier (France), Gert van Tonder (Japan), Michihiko Mihoh (Japan), Soh Yeong Roh (Korea), Roy Ascott (UK), Bryan Loyall (USA), Claudio Pinhanez (USA), Erriki Hutamo (USA), Hisham M Bizri (USA), Jeffrey Huang (USA), Newton Lee (USA), Rod Brooks (USA), Scott Fischer (USA)

(c) Events

Art & Entertainment Workshop and Performance (held in conjunction with ISEA2008)

Date: February 21 – 22, 2009

Venue: Kyoto, Japan

General Chair: Naoko Tosa

Performance: Naoko Tosa (Computer Graphics)

Toshinori Kondo (Trumpet)

Part 2: Technical Assembly 2009 (Hanoi, Vietnam)**TC14 Members (2009)***Officers*

Chairman	
Japan/Singapore	Ryohei Nakatsu
Vice-Chair	
The Netherlands	Matthias Rauterberg
Secretary	
The Netherlands	Benjamin Salem
Industrial Liaison	
Brazil	Claudio Pinhanez

National Representatives

Australia	Steve Hansen (Prof., University of Western Sydney)
Austria	Peter Purgathofer (Prof., Vienna University of Technology)
Brazil	(to be nominated)
Bulgaria	Galia Angelova (Prof., Burgalian Academy of Sciences)
Canada	Sidney Fels (Prof., University of British Columbia)
China	Zhigeng Pan (Prof., Zhejiang University)
Czech	David Obdrzalek (Prof., Charles University)
Denmark	(to be nominated)
Finland	Ville-Veikko Mattila (Dr., Nokia Research Center)
France	Stephane Natkin (Prof., CNAM)
Germany	Rainer Malaka (Prof., University of Bremen)
Hungary	Barnabas Takacs (Dr., Hungarian Academy of Sciences)
Ireland	Richard Reilly (Dr., University College of Dublin)
Italy	Paolo Ciancarini (Prof., University of Bologna)
Japan	Ryohei Nakatsu (V. Prof., Kwansei Gakuin University)
Korea	Hyun S. Yang (Prof., KAIST)
Netherlands	Matthias Rauterberg (Prof., Technical University of Eindhoven)
Norway	Geir Egil Myhr (Dr., University of Troms)
Portugal	Nuno Correia (Prof., New University of Lisbon)
Singapore	Adrian David Cheok (Prof., National University of Singapore)
Spain	Pedro Gonzalez Calero (Prof., Complutense University of Madrid)
Thailand	Natanicha Chorpothong (Dr., Internet Association)
United Kingdom	Marc Cavazza (Prof., University of Teesside)
USA-ACM	Donald Marinelli (Prof., Carnegie Mellon University)
USA-IEEE	Nahum Gershon (Dr., The MITRE Cooperation)
Zimbabwe	Miler Makuni (Mr., Afriswitch PVT Limited)

WG14.x Chair persons

WG14.1	Marc Cavazza
WG14.2	Hitoshi Matsubara
WG14.3	Matthias Rauterberg

WG14.4 Jaap van den Herik
WG14.5 Andy Sloane
WG14.6 Lyn Pemberton
WG14.7 Naoko Tosa

Observers

European Commission Liaison:	Leonie Schaeffer
IEEE Computer Science	Miguel Encarnacao (Dr., Imedia Inc.)
DiGRA:	Tony Manninen (Prof. University of Oulu)

Honorary Members

Japan: Takehiko Kamae (Dr., National Institute of Technology)

TC14 Meetings: Attendance

Nation	Year	02	03/ 1	03/ 2	04/ 1	05/ 1	06/ 1	06/ 2	07/ 1	07/ 2	08/ 1	08/ 2	09/ 1	Total
Australia											a	+	a	1
Austria					-	-	-	a	+	a	a	a	a	1
Bulgaria					a	a	a	a	a	-	-	-	-	0
Canada		-	-	-	a	+	a	a	a	a	+	a	A	2
China			-	-	a	+	a	+	a	p	+	p	a	5
Czech				-	-	-	-	+	+	+	a	a	+	4
Finland					+	+	a	a	a	-	-	-	-	2
France				-	+	a	a	a	a	a	p	+	+	4
Hungary					-	-	+	a	a	+	a	a	A	2
Ireland				-	a	a	a	a	a	-	-	-	-	0
Italy			-	-	+	a	a	+	a	a	a	a	+	3
Japan		+	+	+	+	+	+	+	+	+	+	+	+	12
Korea			-	-	+	+	a	+	a	+	+	+	a	6
Netherlands		+	+	+	+	+	+	+	+	+	+	+	+	12
Norway				-	+	a	a	a	a	-	-	-	-	1
Portugal					-	-	+	a	a	-	-	-	-	1
Singapore		-	-	-	+	+	+	+	a	a	+	a	a	5
Spain						-	+	a	a	-	-	a	A	1
Thailand					a	a	a	-	a	-	-	-	-	0
United Kingdom		+	+	+	+	a	+	+	+	a	+	a	+	9
USA-ACM		+	a	a	+	a	a	+	+	p	a	+	+	7
USA-IEEE									+	a	a	a	+	2
Zambia							-	-	a	a	a	-	-	0
WG14.1 Chair		+	+	+	+	a	+	+	a	a	+	p	+	9
WG14.2 Chair		+	a	a	+	+	+	+	+	+	+	a	A	8
WG14.3 Chair		+	+	+	+	+	+	+	+	+	+	+	+	12
WG14.4 Chair					+	+	a	+	a	p	a	p	a	5
WG14.5 Chair					+	+	a	+	+	a	a	a	+	5
WG14.6 Chair									+	p	a	a	+	3
WG14.7 Chair									+	+	p	+	+	5
		02	03/ 1	03/ 2	04/ 1	05/ 1	06/ 1	06/ 2	07/ 1	07/ 2	08/ 1	08/ 2		Total

— + representative attended — a apologies — p proxy— o observer