

TC14: Entertainment Computing

Report to General Assembly and Technical Assembly

Poznan, Poland, September 12 - 14, 2013

Matthias Rauterberg, TC14 Chair

Part 1: General Assembly (Poznan, Poland)

TC14 Entertainment Computing

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

1. TC14 meetings held since last report

1.1 Thirteenth meeting

The thirteenth TC14 business meeting took place on September 29, 2012 at Bremen in Germany. Below are the list of the participants and the agenda.

TC officers:

Ryohei NAKATSU	(National University of Singapore, SG, Chair)
Matthias RAUTERBERG	(Eindhoven University of Technology, NL, Vice-chair)
Tim MARSH	(James Cook University, AU, Secretary)

National Representatives:

Austria	AT	Helmut HLAVACS (Univ. of Vienna)
Belgium	BE	David GEERTS (KU Leuven)
Brazil	BR	Esteban CLUA (Universidade Federal Fluminense)
Bulgaria	BU	Zlatogor MINCHEV (Bulgarian Academy of Sciences)
Czech Republic	CZ	David OBDRZALEK (Charles Univ.)
France	FR	Stephane NATKIN (Conservatoire National des Arts et Metiers)*
Germany	DE	Rainer MALAKA (Univ. of Bremen)
Greece	GR	Nikitas SGOUROS (Univ. of Piraeus)
Ireland	IE	Mads HAAHR (Trinity College)*
Italy	IT	Paolo CIANCARINI (Univ. of Bologna)
Japan	JP	Junichi HOSHINO (Univ. of Tsukuba)
Korea	KR	Hyun YANG (KAIST)
Netherlands	NL	Matthias RAUTERBERG (Eindhoven Univ. of Technology)
Poland	PL	Piotr GAWRYSIAK (Warsaw Univ. of Technology)
Portugal	PT	Nuno CORREIA (New Univ. of Lisbon)
Singapore	SG	Henry DUH (National Univ. of Singapore)*

WG chairs:

- WG14.2 Chair: David OBDRZALEK (Charles Univ., CZ)
 WG14.3 Chair: Matthias RAUTERBERG (Eindhoven Univ. of Technology, NL)
 WG14.4 Chair: Stephane NATKIN (CNAM, FR)*

Observers:

Erik VAN DER SPEK (Eindhoven Univ. of Technology, The Netherlands)
 Jannicke BAALSRUD HAUGE (Univ. of Bremen)

*: Attendance by teleconference

Agenda:

1. Approval of the minutes of the last TC14 meeting
2. Report on ICEC 2012
3. Working Group Activities
4. Changes of Officers and Members
5. Host for ICEC 2013
6. Proposal for ICEC 2014
7. Handbook of TC14
8. Any Other Business - AOB

1.2 Fourteenth meeting

The fourteenth TC14 business meeting took place on May 3, 2013 at Paris in France. Below are the list of the participants and the agenda.

TC officers:

Matthias RAUTERBERG (Eindhoven University of Technology, NL, Chair)
 Hyun YANG (KAIST, KR, Vice-chair)*
 Erik VAN DER SPEK (Eindhoven University of Technology, NL, Secretary)

National Representatives:

Austria	AT	Helmut HLAVACS (Univ. of Vienna)
Belgium	BE	David GEERTS (KU Leuven)
Brazil	BR	Esteban CLUA (Universidade Federal Fluminense)
Bulgaria	BU	Zlatogor MINCHEV (Bulgarian Academy of Sciences)
Canada	CA	Sidney FELS (Univ. of British Columbia)
Finland	FI	Artur LUGMAYR (Tampere Univ. of Technology)
France	FR	Stephane NATKIN (Conservatoire National des Arts et Metiers)
Germany	DE	Rainer MALAKA (Univ. of Bremen)
Greece	GR	Nikitas SGOUROS (Univ. of Piraeus)
Ireland	IE	Mads HAAHR (Trinity College)
Italy	IT	Paolo CIANCARINI (Univ. of Bologna)
Japan	JP	Junichi HOSHINO (Univ. of Tsukuba)
Korea	KR	Hyun YANG (KAIST)*
Netherlands	NL	Matthias RAUTERBERG (Eindhoven Univ. of Technology)
Norway	NO	Marikken HOISETH (proxy for Maria Letizia JACCHERI)
Poland	PL	Piotr GAWRYSIAK (Warsaw Univ. of Technology)
Singapore	SG	Henry DUH (National Univ. of Singapore)
Spain	ES	Pedro GONZALEZ CALERO (Complutense Univ. of Madrid)
United States	US	Magy SEIF EL-NASR (Northeastern Univ.)

Honorary members:

United States US Nahum GERSHON (MITRE Corp., US)

WG chairs:

WG14.3 Chair: Ryohei NAKATSU (National Univ. of Singapore, SG)
WG14.4 Chair: Stephane NATKIN (CNAM, FR)
WG14.6 Chair: Lyn PEMBERTON (Univ. of Brighton, UK)
WG14.7 Chair: Jun HU (proxy for Naoko TOSA)
WG14.8 Chair: Tim MARSH (James Cook Univ., AU)*

Observers:

Jerome DUPIRE (CNAM, FR)
Junio ANACLETO (Federal Univ. of Sao Carlos, BR)
Yusuf PISAN (Univ. of Technology Sydney, AU)*
Boril MINCHEV (no aff.)

*: Attendance by teleconference

Agenda:

1. Approval of agenda
2. Approval of minutes
3. Report from ICEC2012
4. Report for ICEC2013
5. Proposal for ICEC2014
6. Handbook project
7. Financial support for networking
8. Reports from working groups
9. Any other business

2. TC14 meetings scheduled until next IFIP General Assembly

The 15th TC14 meeting will be held at the time of ICEC2013 (International Conference on Entertainment Computing) that will be held on October 16 - 18, 2013 in Sao Paulo, Brazil. In addition, the 16th TC14 meeting will be held in the spring of 2014.

3. Changes in membership and officers**3.1 TC14 officers and members**

There have been a few changes since the last report to the General Assembly 2012.

New officers

Following Ryohei Nakatsu's departure last year, due to having served two terms and in accordance with IFIP's statutes and bylaws, new officers were appointed. Last year, Matthias

Rauterberg was recommended by the TC14 as new Chairman, and was subsequently appointed by the President of IFIP. Matthias Rauterberg then, in the course of the thirteenth TC14 meeting, appointed Hyun S. Yang (KAIST, South Korea) and Erik van der Spek (Eindhoven University of Technology, Netherlands) as Vice Chair and Secretary respectively.

Retirement:

Just before writing this report, Marc CAVAZZA stepped down as the UK representative, as well as the Chair of Working Group 14.1 Digital Storytelling, following a period of inactivity. A replacement is being sought. Stepping down as Chair, Ryohei NAKATSU became an honorary member.

Replacement and new nomination:

2011-2012 We saw eleven new national representatives join us (see TC14-Report-2012-GA). This year was more stable. One representative left (UK), for which a new TC14 member is being sought actively, and one representative was added. We remain committed to finding TC14 representatives for the unfilled member countries.

AT Helmut HLAVACS (Prof. University of Vienna, Austria)

AU pending (proposed: Dr. Kevin WONG, Murdoch Univ., Australia)

MA pending (proposed: Prof. Shafry Mohd RAHIM, Malaysia)

CH pending (proposed: Prof. Jean-Henry MORIN, Switzerland)

3.2 TC members

The TC members as of 31st August 2012 are shown below.

TC officers

Chair	Matthias RAUTERBERG (Prof., Eindhoven Univ. of Technology)
Vice-chair	Hyun Seung YANG (Prof., KAIST)
Secretary	Erik VAN DER SPEK (Dr., Eindhoven Univ. of Technology)

National Representative

- | | |
|------------|---|
| 1 Austria | Helmut HLAVACS (Prof., Univ. of Vienna) |
| 2 Belgium | David GEERTS (Dr., K.U. Leuven) |
| 3 Brazil | Esteban CLUA (Assoc Prof., Universidade Federal Fluminense) |
| 4 Bulgaria | Zlatogor MINCHEV (Assoc Prof., Bulgarian Academy of Sciences) |
| 5 Canada | Sidney FELS (Prof., University of British Columbia) |
| 6 China | Zhigeng PAN (Prof., Zhejiang University) |
| 7 Czech | David OBDZALEK (Dr., Charles University) |
| 8 Finland | Artur LUGMAYR (Prof., Tampere Univ. of Technology) |
| 9 France | Stephane NATKIN (Prof., CNAM/ENJMIN) |
| 10 Germany | Rainer MALAKA (Prof., University of Bremen) |
| 11 Greece | Nikitas SGOUROS (Prof., University of Piraeus) |
| 12 Hungary | Barnabas TAKACS (Dr., Hungarian Academy of Sciences) |
| 13 Ireland | Mads HAAHR (Dr. Trinity College Dublin) |
| 14 Italy | Paolo CIANCARINI (Prof., University of Bologna) |
| 15 Japan | Junichi HOSHINO (Assoc Prof., Tsukuba University) |

16 Korea	Hyun S. YANG (Prof., KAIST)
17 Netherlands	Matthias RAUTERBERG (Prof., Technical University of Eindhoven)
18 Norway	Letizia JACCHERI (Prof., Norwegian Univ. of Science & Technology)
19 Poland	Piotr GAWRYSIAK (Prof., Warsaw Univ. of Technology)
20 Portugal	Nuno CORREIA (Prof., New University of Lisbon)
21 Singapore	Henry DUH (Assoc Prof., National University of Singapore)
22 Spain	Pedro GONZALEZ CALERO (Prof., Complutense Univ. of Madrid)
23 Thailand	Natanicha CHORPOTHONG (Dr., Assumption University)
24 Zambia	Milner MAKUNI (Mr., Afriswitch PVT Limited)

WG Officers

WG14.1 chair:	Vacant
WG14.2 chair:	David OBDRZALEK (Prof., Charles University)
WG14.3 chair:	Ryohei NAKATSU (Prof., National University of Singapore)
WG14.4 chair:	Stephane NATKIN (Prof., CNAM)
WG14.5 chair:	Lynne BAILLE (A/Prof., Glasgow Caledonian University)
WG14.6 chair;	Lyn PEMBERTON (Reader, University of Brighton)
WG14.7 chair;	Naoko TOSA (Prof., Kyoto University)
WG14.8 chair;	Tim MARSH (Dr., James Cook University)

Observers

IEEE Computer Science	Miguel ENCARNACAO (Dr., Imedia Inc.)
DiGRA:	Tony MANNINEN (Prof., University of Oulu)

Honorary Members

JP	Takehiko KAMAE (Dr., National Institute of Technology)
SG	Ryohei NAKATSU (Prof., National University of Singapore)
US	Don MARINELLI (Dr., Prof Emeritus, Carnegie Mellon University)
US	Nahum GERSHON (Dr., MITRE)

4. TC14 conferences held since last report**4.1 Sponsored events****4.1.1 ICEC 2012**

The 11th International Conference on Entertainment Computing (ICEC2012)

September 26 - 29, 2012

University of Bremen, Bremen, Germany

General Chair: Rainer Malaka (University of Bremen, Germany)

Conference Advisory Committee:

Ryohei Nakatsu, National University of Singapore

Matthias Rauterberg, Technical University of Eindhoven

Paper Chair: Maic Masuch, University of Duisburg-Essen

Workshop Chairs:

Lynne Baillie, Glasgow Caledonian University

Rod McCall, Universitat du Luxembourg

Social Media Chair: Lennart Nacke, University of Ontario Institute of Technology

Organization Committee:

Michael Boronowsky
Marc Herrlich
Markus Krause
Jan Smeddinck
Gerald Volkmann
David Wewetzer
Tanja Woronowicz

4.2 Co-Sponsored events

EuroITV2013
Edutainment 2013
ACE 2012
Culture and Computing 2013

5. TC14 conferences to be held

5.1 Sponsored events

5.1.1 ICEC2013

The 12th International Conference on Entertainment Computing (ICEC2013).
October 16-18 2013.
Mackenzie University, Sao Paulo, Brazil.

General Chairs: Esteban Walter Gonzalez Clua (Fluminense Federal University, Brazil)
Junia Coutinho Anacleto (Federal University of São Carlos, Brazil)

Conference Advisory Committee:
Matthias Rauterberg (Technical University of Eindhoven, Holland)
Ryohei Nakatsu (National University of Singapore, Singapore)

Workshop and Tutorials Chairs:
David Geerts (Katholieke Universiteit Leuven, Belgium)
Tim Marsh (James Cook University, Australia)

Industry Chair: Stephane Natkin (Conservatoire National des Arts et Metiers, France)

Doctoral Consortium Chair:
Nuno Correia (New University of Lisbon, Portugal)

Poster, Art and Demo Chair:
Letizia Jaccheri (Norwegian University of Science and Technology,
Norway)

Organization Committee:
Andre Bueno (Federal University of São Carlos, Brazil)

Marcelo Zamith (Fluminense Federal University, Brazil)
Janaina Abib (Federal University of São Carlos, Brazil)
Rener Baffa da Silva (Federal University of São Carlos, Brazil)
Vinícius Afonso Raimundo Ferreira (Federal University of São Carlos,
Brazil)

5.2 Co-sponsored Events

No Co-sponsored Events to be held.

6. Other TC14 activities

6.1 Conference Proceedings

The proceedings of ICEC2012 have been published from Springer as one of the LNCS series. The proceedings of ICEC2013 will be published from Springer as one of the LNCS series.

6.2 Publications

In 2009 TC14 and Elsevier started a new 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. Already several issues of the journal have been published.

Working Groups

1. WG14.1 Digital Storytelling

Chair: Vacant due to inactivity of previous Chair.

(a) Meetings

No known meetings

(b) Members

Chair Marc Cavazza stepped down, looking for replacement.

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

No known events

2. WG14.2 Entertainment Robot

Chair: David OBDRZALEK (Dr., Charles University, Czech)

(a) Meetings

IFIP TC14 Meeting at ICEC 2012, Bremen Germany.

Several skype meetings were held since the last TA.

(b) Members

Richard Balogh (SK), Jacques Baly (CH), Branislav Borovac (RS), Jean-Daniel Dessimoz (CH), Achim Gottscheber (DE), Grzegorz Granosik (PL), Michael Heeney (GB), Martin Locker (CZ), Giovanni Muscato (IT), Julio Pastor (ES), Corrado Santoro (IT), Richard Unger (AT), Anton Yudin (RU)

(b) Events

Robotic Day 2013 (Prague, CZ)

Visegrad Robotics Workshop (Bratislava, SK; Prague, CZ; Lodz, PL; Brest, BY)

3rd & 4th RiE (Robotics in Education) conference (2012 Prague, 2013 Lodz)

3. WG14.3 Theoretical Basis of Entertainment

Chair: Ryohei NAKATSU (Prof., National Univ. of Singapore, Singapore)

(a) Meetings

IFIP TC14 Meeting at ICEC 2012, Bremen Germany

IFIP TC14 Spring Business Meeting 2013, at Paris, France.

(b) Members

Matthias RAUTEBERG stepped down as Chair, Ryohei NAKATSU became the new Chair.

Matteo Bittanti (IT), Johanna Blakley (US), Brad Bushman (US), Suely Fragoso (BR), Jeanne B. Funk (US), Susan Gold (US), Haruhiro Katayose (JP), Fátima Lasay (PH), Noriko Nagata (JP), Bary W. Pollack (US), Matthias Rauterberg (NL), Bill Swartout (US), Peter Vorderer (US/DE)

Observers: Jason Della Rocca (CA), Jeffrey Goldstein (NL)

(c) Events

The contract to publish Handbook of Digital Games and Entertainment Technologies has been exchanged between Springer and the Editors-in-Chief (Ryohei Nakatsu, Matthias Rauterberg). WG14.3 is going to start the editing process of the handbook.

4. WG14.4 Games and Entertainment Computing

Chair: Stephane NATKIN (Prof., CNAM, France)

(a) Meetings

WG14.4 meetings were held during ICEC 2012, Bremen, Germany and IFIP TC14 Spring Business Meeting, Paris, France.

(b) Members

Jonathan Schaeffer (CA), Andre Melzer (DE), Pedro Gonzalez-Calero (ES), Graham Kendall (GB), Abdennour El Rhalibi (GB), Paolo Cianciarini (IT), Hiroyuki Iida (JP), Jong Weon Lee (KR), Woontack Woo (KR), Hyun S. Yang (KR), Wijnand IJsselsteijn (NL), Anton Nijholt (NL), Pieter Spronck (NL), Jos Uiterwijk (NL), Jaap van den Herik (NL), Mark Winands (NL), Brad Bushman (US), Timothy Roden (US)

(c) Events

Games 4 Change Europe Festival 2013

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

Chair: Lynne BAILLIE (A/Prof., Glasgow Calendonian University, UK)

(a) Meetings

A meeting was held in May this year.

(b) Members

Claire Dormann (CA), Porfirio Barroso Asenjo (ES), David Benyon (GB), Linda Little (GB), Christopher Zielinski (GB), Suzana Stojakovic-Celustka (HR), Roderick McCall (LU), Ryohei Nakatsu (SG), Brad Bushman (US), Jeanne Funk (US), Joy Roberts (US), Heather Vaughn (US)

(c) Events

CHI SIG 2012

A workshop is planned in Luxembourg for early next year

6. WG14.6 Interactive TV

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

(a) Meetings

WG14.6 meeting was held during the IFIP TC14 Spring Business Meeting, Paris, France

(b) Members

Pablo Cesar (secretary, NL), Konstantinos Chorianopoulos (vice-chair, GR), Owen Daly-Jones (GB), Mike Darnell (US), Luis Fernando Gomes Soares (BR), David Geerts (BE), Shang Hsu (TW), Jens F Jensen (DK), Tibor Kunert (DE), Georgios Lekakos (GR), Artur Lugmayr (FI), Judith Masthoff (GB), Marianna Obrist (AT), Lyn Pemberton (chair, GB), Célia Quico (PT), Mark Springett (GB), Zhang Liping (CN)

(c) Events

The group's main activity is the EuroITV conference, the 11th edition of which was held in Como, Italy, from June 24 - 26, 2013, hosted by the Politecnico di Milano. In addition, the

group has organized a workshop entitled Living with Multiple Screens at the ICEC Conference, to be held in Sao Paulo in October 2013.

7. WG14.7 Art and Entertainment

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

(a) Meetings

WG14.7 meeting was held during the IFIP TC14 Spring Business Meeting, Paris, France

(b) Members

Gerfried Stocker (AT), Feng Wang (CN), Christian Warocquier (FR), Tomoki Yoshihisa (JP), Gert van Tonder (JP), Michihiko Mihoh (JP), Adrian David Cheok (JP), Soh Yeong Roh (Korea), Roy Ascott (GB), Jun Hu (NL), Bryan Loyall (US), Claudio Pinhanez (US), Erriki Hutamo (US), Hisham M Bizri (US), Jeffrey Huang (US), Newton Lee (US), Rod Brooks (US), Scott Fischer (US)

(c) Events

Members of WG14.7 have co-organized the Culture and Computing conference 2013

8. WG14.8 Serious Games

new WG

Chair: Tim MARSH (Dr., James Cook University, Australia)

(a) Meetings

WG14.8 Meetings were held during ICEC 2013, Bremen, Germany, as well as IFIP TC14 Spring Business Meeting, Paris, France

(b) Members

Tim Marsh (AU), David Geerts (BE), Sidney Fels (CA), Jannicke Baalsrud Hauge (DE), Rainer Malaka (DE), Minhua Eunice Ma (GB), Erik van der Spek (NL), Manuel Fradinho Oliveira (NO), Albert “Skip” Rizzo (US)

(c) Events

WG14.8 has been preparing and running in October 2013 the workshop on Mechanics, Mechanisms and Devices: to Learn, Reflect and Change Behaviour at ICEC 2013, Sao Paulo. Other member activities include organizing committee (Chairs & Proceedings editors) for the Serious Games Development & Applications 2013 conference in Norway.

Part 2: Technical Assembly 2013 (Poznan, Poland)

TC14 Members (2013)

Officers

Chairman

The Netherlands Matthias RAUTERBERG (Prof., Eindhoven University of Technology)

Vice-Chair

South Korea Hyun S. YANG (Prof., KAIST)

Secretary

The Netherlands Erik VAN DER SPEK (Dr., Eindhoven University of Technology)

National Representatives

Australia	(to be nominated)
Austria	Helmut HLAVACS (Prof., University of Vienna)
Belgium	David GEERTS (Dr., KU Leuven)
Brazil	Esteban CLUA (A/Prof. Universidade Federal Fluminense)
Bulgaria	Zlatogor MINCHEV (Prof., Bulgarian Academy of Sciences)
Canada	Sidney FELS (Prof., University of British Columbia)
China	Zhigeng PAN (Prof., Zhejiang University)
Czech	David OBRZALEK (Dr., Charles University)
Denmark	(to be nominated)
Finland	Arthur LUGMAYR (Prof., Tampere University of Technology)
France	Stephane NATKIN (Prof., CNAM)
Germany	Rainer MALAKA (Prof., University of Bremen)
Greece	Nikitas SGOUROS (Prof., University of Piraeus)
Hungary	Barnabas TAKACS (Dr., Hungarian Academy of Sciences)
Ireland	Mads HAAHR (A/Prof., Trinity College Dublin)
Italy	Paolo CIANCARINI (Prof., University of Bologna)
Japan	Junichi HOSHINO (A/Prof., Tsukuba University)
Korea	Hyun S. YANG (Prof., KAIST)
Malaysia	(to be nominated)
Netherlands	Matthias RAUTERBERG (Prof., Technical University of Eindhoven)
New Zealand	(to be nominated)
Norway	Letizia JACCHERI (Prof., Norwegian Univ. of Science & Technology)
Poland	Pioty GAWRYSIAK (Prof., Warsaw University of Technology)
Portugal	Nuno CORREIA (Prof., New University of Lisbon)
Singapore	Henry DUH (A/Prof., National University of Singapore)
Spain	Pedro GONZALEZ CALERO (Prof., Complutense University of Madrid)
Switzerland	(to be nominated)
Thailand	Natanicha CHORPOTHONG (Dr., Internet Association)
United Kingdom	Marc CAVAZZA (Prof., University of Teesside)
US-ACM	Magy SEIF EL-NASR (A/Prof., Northeastern University)
Zimbabwe	Miler MAKUNI (Mr., Afriswitch PVT Limited)

WG14.x Chair persons

WG14.1	-	[removed]
WG14.2	David Obdrzalek	
WG14.3	Ryohei Nakatsu	[replaced]
WG14.4	Stephane Natkin	
WG14.5	Lynne Baillie	
WG14.6	Lyn Pemberton	
WG14.7	Naoko Tosa	

Observers

IEEE Computer Science
DiGRA:

Miguel Encarnacao (Dr., Imedia Inc.)
Tony Manninen (Prof. University of Oulu)

Honorary Members

Japan: Takehiko Kamae (Dr., National Institute of Technology)
Singapore: Ryohei Nakatsu (Prof., National University of Technology)
US: Don Marinelli (Prof. Emeritus, Carnegie Mellon University)
US: Nahum Gershon (Dr., MITRE Corp)

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	09/ 2	10/ 1	10/ 2	11/ 1	11/ 2	12/ 1	12/ 2	13/ 1	Tot al	
Australia											a	+	a	a	a	-	-	p	P	-	-	3	
Austria					-	-	-	a	+	a	a	a	a	a	a	-	-	-	-	+	+	3	
Belgium																			A	+	+	2	
Brazil																			+	+	+	3	
Bulgaria					a	a	a	a	a	-	-	-	-	-	-	-	-	-	-	+	+	2	
Canada		-	-	-	a	+	a	a	a	a	+	a	a	+	a	+	+	+	+	+	-	+	8
China			-	-	a	+	a	+	a	p	+	p	a	a	+	p	a	a	+	-	-	8	
Czech				-	-	-	-	+	+	+	a	a	+	+	a	+	a	-	-	+	-	6	
Finland					+	+	a	a	a	-	-	-	-	-	-	-	-	-	-	-	+	3	
France				-	+	a	a	a	a	a	p	+	+	+	a	+	p	+	+	+	+	11	
Germany													+	+	+	+	+	+	+	+	+	9	
Greece																				+	+	2	
Hungary				-	-	+	a	a	+	a	a	a	a	a	a	a	a	-	-	-	-	2	
Ireland				-	a	a	a	a	a	-	-	-	-	-	-	-	-	-	-	-	+	1	
Italy			-	-	+	a	a	+	a	a	a	a	+	+	a	a	p	a	+	+	+	8	
Japan		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	p	p	P	+	+	20	
Korea			-	-	+	+	a	+	a	+	+	+	a	a	+	+	+	+	+	+	+	13	
Netherlands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Norway				-	+	a	a	a	a	-	-	-	-	-	-	-	-	-	-	+	P	3	
Poland																			P	+	+	3	
Portugal					-	-	+	a	a	-	-	-	-	-	-	-	-	-	+	+	-	3	
Singapore		-	-	-	+	+	+	+	a	a	+	a	a	p	p	p	p	p	+	+	+	13	
Spain						-	+	a	a	-	-	-	a	a	+	a	a	a	A	a	-	+	3
Thailand					a	a	a	-	a	-	-	-	-	-	-	-	-	-	-	-	-	0	
United Kingdom		+	+	+	+	a	a	+	+	+	a	a	+	p	a	a	a	a	-	-	-	10	
USA-ACM		+	a	a	+	a	a	+	+	p	a	+	+	+	+	+	a	+	-	-	+	12	
USA-IEEE									+	a	a	a	+	a	+	a	+	+	-	-	-	5	
Zambia							-	-	a	a	a	-	-	-	-	-	-	-	-	-	-	0	
WG14.1 Chair		+	+	+	+	a	+	+	+	a	+	a	+	p	a	a	a	-	-	-	-	10	
WG14.2 Chair		+	a	a	+	+	+	+	+	+	+	a	a	+	p	p	p	-	+	+	-	13	
WG14.3 Chair		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
WG14.4 Chair					+	+	a	+	a	p	a	p	a	+	p	p	p	+	+	+	+	13	
WG14.5 Chair					+	+	a	+	+	a	a	a	+	+	a	a	a	-	-	-	-	6	
WG14.6 Chair									+	p	a	a	+	+	a	a	a	a	+	-	+	6	
WG14.7 Chair									+	+	p	+	+	+	+	+	+	+	+	-	P	12	
		02	03/ 1	03/ 2	04/ 1	05/ 1	06/ 1	06/ 2	07/ 1	07/ 2	08/ 1	08/ 2	09/ 1	09/ 2	10/ 1	10/ 2	11/ 1	11/ 2	12/ 1			Tot al	

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