

# IFIP General Assembly

February/March 2005 – Pohang, Korea

## Report from Technical Committee 6 (Communication Systems)

**Prof. Dr. Otto Spaniol (TC6 chairman)**

**Date: February 15, 2005**

**TC6 Web page – <http://www.ifip.tu-graz.ac.at/TC6/>**

### 1. TC6 meetings held since last report for General Assembly 2004 in Toulouse

Meeting 2004/2 – Bangkok, Thailand – November 21<sup>th</sup> and 22<sup>th</sup>, 2004

### 2. TC6 meetings scheduled

Meeting 2005/1 – Toronto, Canada – May 7+8, 2005

Meeting 2005/2 – Wroclaw, Poland – October 29 +30, 2005

Meeting 2006/1 – Coimbra, Portugal (in conjunction with Networking 2006) – May 2006

Meeting 2006/2 – Santiago de Chile (in conjunction with WCC 2006) – August 2006

### 3. Changes in Membership and Officers

Prof. HU Dao Yuan resigned as delegate from People's Republic of China. His successor is prof. LIN Chuang, also from Tsinghua University. Prof. S V Raghavan has been reestablished as delegate from India. New delegates have been nominated from Australia (Prof. DOAN Hoang) and from Singapore (Dr. YEO Boon Sain). None of these delegates - with the exception of Prof. Raghavan - could make it for the meeting 2004/2 even if Thailand is in all cases "relatively near" from their respective home country. We hope to see them in the future but we are somewhat sceptical since all subsequent meetings are at a significantly larger distance (Canada, Poland, Portugal, Chile).

Several GA members have been contacted for a nomination of a new delegate (if there is no delegate from the respective country for TC6) or for a replacement of a delegate (if the delegate from that country has not shown any activity since a number of years). Only a few GA delegates responded with a more or less standard formulation such as "we are thinking about a nomination and will inform you about the outcome very soon". Most GA delegates didn't react at all. This is rather frustrating. The activity of some GA delegates has to be improved! We still miss delegates from Ireland, Israel, Korea (!),... to name just a few countries.

Chairmanship positions of two Working Groups have changed:

In WG 6.1 the second term of Guy Leduc (Belgium) came to its end. Since this working group is by far the largest and the most active one, it was decided to organise the chair position by a team of a chairperson and a vice-chair where one person will deal with the 6.1 events which are more on the aspects of formal methods such as FORTE, FMOODS,... The second person will arrange the other events such as Middleware, Testcom,... The result of the elections was a winning team consisting of:

- Prof. Elie Najm (chairperson); ENST Paris
- Prof. John Derrick, (vice-chair); university of Sheffield, UK.

Prof. Ramon Puigjaner was unable to continue his leadership in WG 6.9 (communication systems in developing countries) due to the fact that he is the national delegate of Spain in IFIP and, even more, since he took over the chair of the programme committee for IFIP WCC 2006 in Santiago de Chile. The winner of the election for his successor was Prof. Ana Pont from university of Valencia (Spain). This ensures a smooth continuation of Ramons

steady engagement towards Central and Latin America. She will try to enforce the visibility and the presence of the working group in other parts of the world.

André Danthine has been proposed and elected as honorary member of IFIP TC6. TC6 has already two such members, namely Louis Pouzin (France) and Tibor Szentivanyi (Hungary). Honorary members are on the email exploder of TC6, they are therefore informed about ongoing activities at the earliest convenience. Moreover, they are invited to attend the TC6 meetings (and of course the TC6 and other IFIP events). In TC6 meetings, they have full discussion rights but they are not allowed to vote.

#### 4. WG meetings since last report

Regularly held in conjunction with WG events; see section 6.

#### 5. WG meetings scheduled

Regularly held in conjunction with WG events; see section 7.

#### 6. Events held since last report

Remark: Only events since last General Assembly meeting (August 2004) are mentioned.

Working Conference; Conference on IT and Sports; IFIP (with responsibility of TC6);  
15-17 September, 2004; Cologne, Germany;  
Email contact: Mester@dshs-koeln.de  
URL: <http://www.it-and-sport.de>

Open Conference; 8<sup>th</sup> Conference on Communication and Multimedia Security; TC6+TC11;  
15-19 September, 2004; Windermere, U.K.  
Email contact: D.W.Chadwick@salford.ac.uk

Working Conference; 9<sup>th</sup> Conference on Personal Wireless Communications; WG 6.8;  
21-23 September, 2004; Delft, The Netherlands;  
Email contact: I.Niemegeers@ITS.tudelft.nl

Open Conference; 9<sup>th</sup> Conference on Formal Description Techniques for Distributed Systems and Communication Protocols (FORTE2004); WG 6.1; 27-30 September, 2004; Madrid, Spain;  
Email contact: defrutos@sip.ucm.es

Working Conference; 7<sup>th</sup> Conference on Management of Multimedia Networks and Services (MMNS'2004); WG 6.6 + WG 6.2 + IEEE; 3-6 October, 2004; San Diego, USA;

Working Conference on Autonomic Communication Principles (WAC 2004); WG 6.6+6.7;  
18+19 October, 2004; Berlin (Germany);  
Email contact: zeletin@fraunhofer.fokus.de; [smirnov@fraunhofer.fokus.de](mailto:smirnov@fraunhofer.fokus.de)  
URL: <http://www.autonomic-communication.org/wac/>

Open Conference; Conference on Optical Networks and Technologies; WG 6.10;  
18-20 October, 2004; Pisa, Italy;  
Email contact: [Giancarlo.Prati@cnit.it](mailto:Giancarlo.Prati@cnit.it);

Open Conference; 6<sup>th</sup> Conference on Mobile and Wireless Communications Networks (MWCN'04); WG6.2+WG6.8+IEEE;  
25-27 October, 2004; Paris, France;  
Email contact: Guy.Pujolle@lip6.fr  
URL: <http://mwc2004.lri.fr/>

Workshop; 15<sup>th</sup> Workshop on Distributed Systems and Operation Management (DSOM' 2004); WG 6.6 + IEEE;  
15-17 November, 2004; UC Davis (California, US);

Open Conference; 5<sup>th</sup> International Conference on Middleware (Middleware'2004); WG 6.1 + ACM;  
18-22 October, 2004; Toronto, Canada;

Working Conference; 3rd Conference on Network Control and Engineering for QoS, Security and Mobility (Netcon); WG 6.2 + WG 6.6 + WG 6.7 + WG 6.8;  
1-5 November, 2004; Palma de Mallorca, Spain;  
Email contact: putxi@uib.es  
URL: <http://netcon04.uib.es/>

Meeting; TC-6 meeting 2004/2; TC-6; 21-22 November, 2004; Bangkok, Thailand.

Working Conference; International Conference on Intelligence in Communication Systems (Intellcomm 04);  
WG 6.7; 23-26 November, 2004; Bangkok, Thailand;  
Email contact: vw@cs.ait.ac.th  
URL: <http://cs.shinawatra.ac.th/intellcomm04/>

Working Conference; 6<sup>th</sup> International Conference on Active Networks; WG 6.7;  
27-29 October, 2004; Kansas, US

International Conference on Optical Computer Networks (ICOCN 2004); WG 6.8+WG 6.10;  
End of November 2004; Hongkong  
Contact : Guy Omidyar

2<sup>nd</sup> Working Conference on Wireless On-Demand Networking Systems (WONS 2004);  
WG 6.3; 19-21 January 2005; Sankt Moritz (Switzerland)  
Contact: Sylvia Giordano, SUPSI-DTL  
Email contact: [raffaele.bruno@iit.cnr.it](mailto:raffaele.bruno@iit.cnr.it)  
URL: <http://www.dit.unitn.it/wons/>

Working Conference; 9th Optical Network Design and Modelling Conference  
(ONDM'2005 or - new proposed name - Optical Networks 2005); WG 6.10;  
9-11 February 2005; Milano; Prof. Dr. Achille Pattavina  
Phone:+39-02-2399.3580; Fax: +39-02-2399.3413  
Email contact: [pattavina@elet.polimi.it](mailto:pattavina@elet.polimi.it)  
URL: <http://www.elet.polimi.it/conferences/ondm2005/>

## 7. Events scheduled

[2005]

Tridentcom'05; Testbeds and Research Infrastructures for the Development  
of Networks and Communities; WG 6.3;  
February 23-25, 2005; Trento (Italy).  
Email contact: Roberto Battiti  
URL: <http://www.tridentcom.org/>

Working Conference; 2<sup>nd</sup> International Working Conference on  
Wireless and Optical Communication Networks (WOCN 2005)  
WG 6.8 + 6.10 + IEEE UAE Section; Dubai, United Arab Emirates;  
7+8 March, 2005;  
Email contact: [guy.omidyar@erols.com](mailto:guy.omidyar@erols.com)  
<http://www.wocn2005.org>

Workshop on Next Generation Computer Architectures; WG 6.2 + 6.3 + 6.10;  
11-12 March, 2005; Belize;  
Email contact: [Guy.Pujolle@lip6.fr](mailto:Guy.Pujolle@lip6.fr)  
URL:

WiOpt'05; Modeling and Optimization in Mobile, Ad-hoc and Wireless Networks;  
April 4-6, 2005; Trento (Italy).  
WG 6.3 + numerous others;  
Email contact: Eitan Altman  
URL: <http://www.wiopt.org/>

Working Conference on Networking for Metropolitan Area Networks;  
Working Conference on Electronic Government; WG 6.2 + 6.11;  
April 11 - 13, 2005; Ho-Chi-Minh City (Vietnam);  
Email contact: [information@dnac.org](mailto:information@dnac.org)  
URL: : <http://phare.lip6.fr/ifip2005/>

Conference; Traffic Engineering in Next Generation Networks;  
WG 6.2 + WG 6.10 + NoE Euro NGI;  
18 - 20 April, 2005; Rome, Italy;  
Email contact: [Roberto.Sabella@ericsson.com](mailto:Roberto.Sabella@ericsson.com)  
URL: [www.euro-ngi.org/ngi2005/](http://www.euro-ngi.org/ngi2005/)

Open Conference; Networking 2005; WG 6.3 + 6.2 +6.8;  
May 2 - 6, 2005; Waterloo, Canada;  
Contact: Jay Black [jpbblack@uwaterloo.ca](mailto:jpbblack@uwaterloo.ca)  
URL: <http://www.cs.uwaterloo.ca/~jpbblack/Networking2005/>  
( ) (Springer LNCS)

Meeting; TC-6 meeting 2005/1; TC-6; May 7 - 8, 2005; Toronto (Canada)

Open Conference; 14<sup>th</sup> International World Wide Web Conference (WWW2005); WG 6.4;  
May 10 - 14, 2005; Chiba (Japan)  
Email:  
URL: [www2005.org](http://www2005.org)

Open Conference; 9th Intern. Symposium on Integrated Network Management (IM'2003);  
WG 6.6 + IEEE CNOM;  
15 - 19 May, 2005; Nice, France;  
Email contact:  
URL:

Open Conference; 17th International Conference on  
Testing of Communication Systems (Testcom'2005); WG 6.1;  
May 30 - June 2, 2005; Montreal (Canada)  
Contact persons: Rachida Dssouli, Ferhat Khendek (Concordia Univ., Montreal, Canada)  
URL: <http://www.ece.concordia.ca/~dssouli/Testcom%20Folder/Testcom.html>

Working Conference; FMOODS'2005; WG 6.1;  
14-17 June 2005, Athens, Greece  
Contact person: Lazaros Merakos (Univ. of Athens, Greece)  
Event URL: <http://www.di.uoa.gr/dais-fmoods-2005/fmoods/index.htm>

Conference; DAIS'2005;  
14-17 June 2005, Athens, Greece  
Contact person: Lazaros Merakos (Univ. of Athens, Greece)  
URL: <http://www.di.uoa.gr/dais-fmoods-2005/dais/index.htm>

Working Conference: 13<sup>th</sup> International Workshop on Quality of Service (IWQOS'2005); WG 6.1 + IEEE ComSoc;  
21-23 June 2005, Passau, Germany  
Contact person: Hermann De Meer (Univ. Passau, Germany),  
Nina Bhatti (HP labs, Palo Alto, USA)  
URL: <http://www.fmi.uni-passau.de/lehrstuehle/demeer/iwqos/start.html>

Workshop; 4th Annual Mediterranean Ad Hoc Networking Workshop; WG 6.8;  
21 - 24 June, 2005; Ile de Porquerolles, France  
Email contact: Kaldoun Al Agha and Guy Pujolle  
URL: <http://med-hoc-net2005.iri.fr/>

EUNICE 2005: 11th Open European Summer School Summer School and IFIP Workshop, Colmenarejo, Spain, July  
6-8, 2005, University Carlos III of Madrid  
11th Open European Summer School and IFIP Workshop on Networked Applications, URL:  
<http://www.it.uc3m.es/eunice2005/>

Working Conference; 10<sup>th</sup> Conference on  
Personal Wireless Communications (PWC'05); WG 6.8;  
25 - 27 August, 2005; Colmar, France;  
Contact: Pascal LORENZ <lorenz@ieee.org>  
URL: <http://conf.uha.fr/PWC05.html>

Open Conference; 2<sup>nd</sup> World Information Technology Forum (WITFOR); IFIP;  
31 August - 2 September, 2005; Gaborone, Botswana;  
Email contact:  
URL: [www.witfor.com](http://www.witfor.com)

2005 IFIP WG 6.3 Workshop, Sept. 2005, Tunisia  
Contact: Farouk Kamoun ([f.kamoun@ensi.rnrt.tn](mailto:f.kamoun@ensi.rnrt.tn)).  
URL:

Open Conference; 9<sup>th</sup> Conference on Communication and Multimedia Security (CMS 2005);  
TC6+TC11;  
19 - 21 September, 2005; Salzburg (Austria);  
Email contact: [dengel@cosy.sbg.ac.at](mailto:dengel@cosy.sbg.ac.at) (Dominik Engel). [rnorcen@cosy.sbg.ac.at](mailto:rnorcen@cosy.sbg.ac.at)  
(Roland Norcen) [andreas.uhl@sbg.ac.at](mailto:andreas.uhl@sbg.ac.at) (Andreas Uhl)  
URL: <http://cms2005.sbg.ac.at>

Conference; First international conference on Internet, wireless and  
Optical communications and networks; ICI2005  
WG 6.8 (+ WG 6.10?)  
September 26 - 29, 2005; Bishkek, Kyrgyzstan  
Contact: Guy Omidyar, [guy.omidyar@IEEE.org](mailto:guy.omidyar@IEEE.org)  
URL: [www.ici2005.org](http://www.ici2005.org)

SMARTNET 2005; WG 6.7;  
September 2005; Paris or Troyes (France);  
Email contact: Dominique Gaiti: <[Dominique.gaiti@utt.fr](mailto:Dominique.gaiti@utt.fr)>  
URL:

Open Conference; 7<sup>th</sup> Conference on Mobile and Wireless Communications Networks (MWCN'05); WG6.2 + WG6.8 +  
IEEE  
September 19-21, 2005; Marrakesh (Morocco);  
Email contact: Hamid Aghvami [hamid.aghvami@kcl.ac.uk](mailto:hamid.aghvami@kcl.ac.uk) or Hakima CHAOUCHI <[hakima.chaouchi@kcl.ac.uk](mailto:hakima.chaouchi@kcl.ac.uk)>  
URL: <http://www.ctr.kcl.ac.uk/mwcn2005/>

Open Conference; 10<sup>th</sup> Conference on Formal Description Techniques for Distributed Systems and Communication  
Protocols (FORTE2005); WG 6.1;  
2-5 Oct. 2005, Taipei, Taiwan, ROC  
Contact person: Farn Wang (National Taiwan University)

Working Conference; 8<sup>th</sup> Conference on Management of Multimedia Networks and Services (MMNS'2005);  
WG 6.6 + WG 6.2 + IEEE; October, 2005;  
Email contact:  
URL:

Workshop; 16<sup>th</sup> Workshop on Distributed Systems and Operation Management (DSOM' 2005);  
WG 6.6 + IEEE;  
October, 2005; Barcelona (Spain);  
Email contact:  
URL:

Open Conference; 2<sup>nd</sup> IFIP/ACM Latin America Networking Conference; WG 6.9 + ACM;  
10 - 14 October, 2005; Cali (Colombia);  
Email contact: Ramon Puigjaner lanc05@hotmail.com  
URL:

Workshop; MATA'2005;  
2<sup>nd</sup> International Workshop on Mobility Aware Technologies and Applications  
(Service Delivery Platforms for Next Generation Networks); IFIP + IEEE;  
October 17-19, Montreal (Canada);  
Email contact: magedanz@fokus.fraunhofer.de  
URL: <http://www.congresbcu.com/mata2005/>

Open Conference; 5<sup>th</sup> Conference on E-commerce, E-business and E-government; WG 6.11+6.4+TC8+TC11;  
October 26 - 28, 2005; Poznan (Poland)  
Email contact: Prof. Cellary: cellary@kti.ae.poznan.pl  
Adam Grzech: Adam.Grzech@ists.pwr.wroc.pl  
URL: <http://www.kti.ae.poznan.pl/>

Meeting; TC-6 meeting 2005/2; TC-6;  
October 29+30, 2005; Wroclaw (Poland)

Working Conference; 4<sup>th</sup> Conference on Network Control and Engineering for QoS, Security and Mobility  
(Netcon); WG 6.2 + WG 6.6 + WG 6.7 + WG 6.8;  
November, 2005; Rio de Janeiro, Brazil;  
Contact Person: Otto Duarte UFRJ  
URL:

Open Conference; 6<sup>th</sup> International Conference on Middleware (Middleware'2005)  
WG 6.1 + ACM;  
21-25 Nov. 2005, Grenoble  
Contact person: Jean-Bernard Stefani (INRIA Rhône-Alpes, France),  
Gustavo Alonso (ETH Zurich, Switzerland)

International Conference on Optical Computer Networks (ICO CN 2005);  
WG 6.8 + WG 6.10 ;  
End of November 2005 ; Singapore ?  
Contact : Guy Omidyar  
URL :

[2006]

Open Conference; 15<sup>th</sup> International World Wide Web Conference (WWW2006); WG 6.4;  
Spring, 2006; Edinburgh (UK)  
Email:  
URL:

Open Conference; 10<sup>th</sup> Network Operations and Management Symposium (NOMS'2006);  
IEEE + WG6.6;  
Spring, 2006; Hawaii (US)  
Email contact:  
URL:

Open Conference; Networking 2006; WG 6.3 + 6.2 + 6.8;  
15-19 May, 2006; Coimbra, Portugal;  
Contact: Edmundo Monteiro <edmundoldei.uc.pt>  
URL:

Meeting; TC-6 meeting 2006/1; TC-6;  
May 2006, before or after Networking 2005; Coimbra, Portugal;

Open Conference;  
11th Conference on Personal Wireless Communications (PWC2006); WG 6.8  
20 - 22 September, 2006; Albacete, Spain;  
Email contact: Pedro CUENCA, [pedro.cuenca@uclm.es](mailto:pedro.cuenca@uclm.es)  
URL:

Working Conference; 2<sup>nd</sup> Workshop on Internet Technologies and Applications;  
WG 6.4;  
Fall, 2006; Wroclaw (Poland)  
Email contact: Adam Grzech  
URL:

Congress; 19<sup>th</sup> World Computer Congress; IFIP;

20 - 25 August, 2006; Santiago de Chile, Chile;  
Email contact:

Meeting; TC-6 meeting 2006/2; TC-6;  
August 2006; Santiago de Chile, Chile;

## 8. TC6 meeting attendance

The TC6 meeting attendance list is attached to this report. Delegates from many IFIP member countries attend meetings quite regularly whereas for some others we haven't seen the corresponding delegates since a number of years (i.e. at least four consecutive meetings).

## 9. Request for nomination or substitution of delegates

TC6 requests nomination of delegates from the Computer Societies of the following countries:  
Botswana, Croatia, Cyprus, Egypt, Ireland, Israel, Korea, Malaysia, and Lithuania.

## 10. New initiatives

TC6 observes a raising interest in the areas of sensor networks, actor networks, ubiquitous networks, pervasive computing,... Those topics are only partly covered by our existing working groups and by our established conferences. Thus we think about creating a new working group which would deal with corresponding research questions. No conclusion has been reached until now.

## 11. Specific problems (fate of ICCC, publications and copyright questions, "threats" by IEEE and others)

A well-known institution (ICCC; International Council for Computation Communication) has been forced to dissolve itself for financial reasons. ICCC has been a major competitor to IFIP TC6 (sometimes in a friendly competition, but sometimes also with a certain threat to take over the TC6 initiatives). The reason for the dissolution was that – besides the very costly secretariat in Washington, D.C., ICCC suffered tremendously from decreasing participation for its conferences and, correspondingly, reduced income from book sales, event surpluses etc. To my opinion, TC6 (and even IFIP as a whole) could suffer the same fate in a relatively short times. My arguments for such a pessimistic estimation are given in the following. They are due to copyright and publication questions - and with the fact that all our contributors are volunteers who locally seek the best for their events but aren't interested (or rarely interested) in the welfare of IFIP as a whole. Moreover, our event organisers feel very often that the support provided to them is negligible and not at all worth the sponsorship fee (see the notes written by Jacques Berleur in the minutes of the Toulouse GA meeting). The existence of the IFIP logo and the "good name of IFIP" is just not sufficient.

The threat is produced like a domino effect and proceeds as follows:

1. A conference (e.g. IM, Integrated Network Management) is established by IFIP TC6. Everything is ok: Publications, copyright, surplus,... IFIP TC6 is "full sponsor".
2. The organiser of the next event starts complaining about the missing support by IFIP (very limited help during the preparation, no loss guarantee, a part of the surplus has to be given to IFIP, relatively high cost per proceedings volume, limited visibility of papers in digital libraries,...). He seeks support from other societies (e.g. from IEEE); this wish is accepted by IEEE, from now on, IFIP is "main sponsor".  
Copyright and everything else remain in the hand of IFIP but IEEE provides a certain deficit guarantee and gives much more professional service.
3. At the next occasion, IEEE requires a symmetrical role, the conference is organised "by IFIP in cooperation with IEEE". However, the copyright is still in the hand of IFIP and so are the book royalties.
4. IEEE requests the copyright of the proceedings but agrees that book royalties will be paid to IFIP at the conditions of the old contract between IFIP and a former IFIP publisher. Thus the paid royalties are still really attractive for IFIP and, therefore, the publication committee accepts that move. No chance for another decision since the manuscript authors (and in particular the conference organisers and even in some cases the working group chairmen who may have some good connection to IEEE) insist that the articles will be accessible via the IEEE Digital Library which is only possible if IEEE holds the copyright.

The publication cannot be done by an IFIP publisher any more since the copyrights have been given away. Trials to negotiate better conditions with IEEE are not really strict enforced by the organisers and/or the WG chairpersons and the outcome is negative.

5. The conference is taken over by IEEE. Formally, it is still held by IEEE in cooperation with IFIP TC6 but TC6 has no responsibility any more. Thus: no surplus, no royalties from books sold,... No income at all for TC6.
6. IFIP TC6 will be fully forgotten in the next event of the conference series.

This process happens more and more often. At least steps 1-4 have happened already several times for established events. It appears to be impossible to stop that from happening since all our organisers (and the TC6 officers, too) are volunteers and since they all of them seek for their seemingly best alternative.

Nothing against a cooperation with IEEE (and others, but IEEE is particularly “dangerous”). However, the continuation of this domino effect for the most successful (both scientifically and financially) events is a disaster. Of course, the competitors are only interested in the most successful events but the unsuccessful events are no basis for a relevant income. It is foreseeable that the TC6 funds will be eaten up in a few years and no new sources of funding are in line of sight. Thus, TC6 and IFIP risk to suffer the same fate as ICC, namely bankruptcy.

**Aachen, February 15, 2005**

**Prof. Dr. Otto Spaniol  
(TC 6 chairman)**

## IFIP TC6 Meeting Attendance

Meeting No.	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66			
Albania	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n		X																				
Andorra	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n		X									
Argentina						X																																		
Australia		X		X	X		X			X		X	X	X																								X		
Austria			X	X							X	X	X	X	X	X	X	P	X		X		X			P	X										X	X	X	
Belarus																					X	X																		
Belgium	X		X	X	X		X		X		X		X			X	X		X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X		
Botswana																																								
Brazil		X		X		X																			X	X												X		
Bulgaria	X		X	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X		
Canada																X	X		X		X		X		X	X	X	X							X		X	X		
Chile																																								
China														X	X				X				X			X												P		
Croatia																																								
Cyprus																																							(X)	
Czech Republic	n	n	n	n	n	n	n	n	n	n		X	X	X	X	X	X		X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
Denmark			X		X		X	X			X	X	X	X		X	X	X	X	X	X	X		X	X	X		X		X	X	X	X	X	X	X	X	X		
Egypt																																								
Finland	X		X		X			X	X		X	X	X	X	X	X	X		X	X	X		X	X		X	X		X									X		
France	X	X	X	X	X		X		X	X	X	X	X	X	X		X			X	X	X		X	X				X	X										
Germany	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Greece	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
Hungary	X	X	X	X	X		X	X	X		X	X	X						X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
India		X	X	X	X			X	X	X				X	X	X																							X	
Ireland																																								
Israel																																								
Italy			X	X				X			X										X			X					X		X							X		
Japan	X												X	X			X	X	X		X	X			X			X	X	X	X	X	X	X	X	X	X	X	X	
Korea																																								
Lithuania																																								
Malaysia	n	n	n	n	n	n	n	n	n	n		X	X	X		X	X					X																		
Netherlands			X	X	X		X				X						X												X	X	X	X	X	X	X	X	X	X	X	
Norway	X	X	X	X	X		X			X		X	X	X				X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Oman	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
Poland	X		X		X		X	X	X	X	X	X	X	X	X	X	X				X						X	X	X									X	X	
Portugal		X	X	X	X	X	X	X	X	X		X	X		X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Russia																																								
SEARCC	X	X								X																													X	
Singapore																																								
Slovakia	n	n	n	n	n	n	n	n	n	n				X		X						X			X															
Slovenia	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	P	
South Africa				X	X		X	X			X	X		X	X	X		X		X		X		X		X		X										X		
Spain	X	X		X	X	X	X		X	P	X		X				P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sweden	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Switzerland	X		X	X	X		X	X			X	X		X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Syria	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
Thailand	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
Tunisia			X	X			X						X			X						X	X			X														
UK	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
USA	X	X	X	X	X	X	X		X					X	X	X		X				X																		
USA/ACM	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
USA/IEEE CS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
Zimbabwe				X		X									X			X										X												
WG 6.1	X		X	X	X			X			X		X			X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WG 6.2	n	n	n	n	n	n	n	n	n	n	n	n	n	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WG 6.3	n	n	n	n	n	n	n	n	n	n	n	n	n	X	X	X		X		X		X		X		X		X		X		X		X		X		X		
WG 6.4			X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WG 6.6		X	X	X	X			X			X	X				X				X		X						X	X	X	X	X	X	X	X	X	X	X	(P)	
WG 6.7	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
WG 6.8	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	
WG 6.9	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WG 6.10	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	X		X	X	X		X		X		X		X		X		X		X		X	(P)	
WG 6.11	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	
ICCC Repres. (ICCC dissolved in 12/2004)						X			X			X						P					X		P			P				</								

30	1/88	Sofia, Bulgaria	31	2/88	Singapore
32	1/89	Aachen, Germany	33	2/89	Lake Tahoe, USA
34	1/90	Budapest, Hungary	35	2/90	Iguaçu Falls, Brazil
36	1/91	Hammamet, Tunisia	37	2/91	Prague, Czechoslovakia
38	1/92	Saariselkä, Finland	39	2/92	Trivandrum, India
40	1/93	Versailles, France	41	2/93	Sofia, Bulgaria
42	1/94	Canico, Portugal	43	2/94	Kuala Lumpur, Malaysia
44	1/95	Sun City, South Africa	45	2/95	Palma, Spain
46	1/96	Montreal, Canada	47	2/96	Nyanga, Zimbabwe
48	1/97	White Plains, NY; USA	49	2/97	Sofia, Bulgaria
50	1/98	Ladenburg, Germany	51	2/98	Tozeur, Tunisia
52	1/99	Copenhagen, Denmark	53	2/99	Szentendre, Hungary
54	1/2000	Paris, France	55	2/2000	Beijing, China
56	1/2001	Cape Town, South Africa	57	2/2001	Zurich, Switzerland
58	1/2002	Saariselka, Finland	59	2/2002	Lisboa, Portugal
60	1/2003	Budapest, Hungary	61	2/2003	Muscat, Oman
62	1/2004	Athens, Greece	63	2/2004	Bangkok, Thailand
64	1/2005	Waterloo, Canada	65	2/2005	Wroclaw, Poland
66	1/2006	Coimbra, Portugal	67	2/2006	Santiago de Chile, Chile