

# **IFIP COUNCIL**

**March 2002 – Bled, Slovenia**

## **Report from Technical Committee 6 (Communication Systems)**

**Author: Prof. Augusto Casaca (TC6 chairman)**

**Date: 15<sup>th</sup> February, 2002**

### **PART I**

#### **1. TC6 meetings held since last report**

Meeting 2001/2 – Zurich, Switzerland – October 6<sup>th</sup> and 7<sup>th</sup>, 2001.

#### **2. TC6 meetings scheduled for 2002**

Meeting 2002/1 – Saariselka, Finland – April 6<sup>th</sup> and 7<sup>th</sup>, 2002.

Meeting 2002/2 – Lisboa, Portugal – October 5<sup>th</sup> and 6<sup>th</sup>, 2002.

#### **3. WG meetings held since last report**

WG 6.7 – Philadelphia, USA – October 1<sup>st</sup>, 2001.

WG 6.11 – Zurich, Switzerland – October 5<sup>th</sup>, 2001.

WG 6.6 – Nancy, France - October 16<sup>th</sup>, 2001.

WG 6.1 – Heidelberg, Germany – November 15<sup>th</sup>, 2001.

#### **4. WG meetings scheduled for 2002**

WG 6.7 – Saariselka, Finland – April 8<sup>th</sup>, 2002.

WG 6.6 – Florence, Italy – April 17<sup>th</sup>, 2002.

WG 6.4 – Hawaii, USA – May 7 – 11<sup>th</sup>, 2002.

WG 6.2 – Pisa, Italy – May 19 – 25<sup>th</sup>, 2002.

WG 6.2 – Pisa, Italy – May 19 – 25<sup>th</sup>, 2002.

WG 6.11 – Lisboa, Portugal – October, 9<sup>th</sup>, 2002.

WG 6.8 – Singapore – October 24<sup>th</sup>, 2002.

WG 6.1 – Houston, USA – November 11 – 14<sup>th</sup>, 2002.

#### **5. Membership and Officers**

The following new delegates have been nominated for TC6:

Prof. Giancarlo Prati, CNIT, Italy.

Prof. I. Niemegeers, Univ. Twente, The Netherlands.

Dr. Ahmed Al-Naamany, Sultan Qaboos University, Oman.

## 6. Events held since last report

Working Conference; 6<sup>th</sup> Conference on Personal Wireless Communications (PWC'2001);  
WG 6.8;  
8-10 August, 2001;Lappeenranta, Finland;  
Email contact: [olli.martikainen@hut.fi](mailto:olli.martikainen@hut.fi)  
URL: <http://www.kareltek.fi/sem/pwc2001/cfp.htm>  
(1512)

Open Conference; Joint 6<sup>th</sup> Conference on Formal Description Techniques for Distributed Systems and Communication Protocols/ Protocol Specification, Testing and Verification (FORTE/PSTV'2001);  
WG 6.1;  
28-31 August 2001; Cheju Island, Korea;  
Email contact: Myungchul Kim [mckim@icu.ac.kr](mailto:mckim@icu.ac.kr)  
URL: <http://nalab.icu.ac.kr/fortepstv2001/>  
(1494)

Open Conference; International Symposium on Telecommunications (IST'2001)  
In cooperation with TC6;  
1-3 September, 2001; Tehran, Iran;  
Email contact: [marvasti@itre.ac.ir](mailto:marvasti@itre.ac.ir)  
URL: <http://www.itrc.ac.ir/ist2001>  
(1523)

Workshop; IFIP Workshop on IP and ATM Traffic Management (WATM'2001);  
WG 6.2;  
3-5 September, 2001; Paris, France;  
Email contact: [samir.tohme@enst.fr](mailto:samir.tohme@enst.fr)  
(1567)

Working Conference; 3<sup>rd</sup> Conference on Distributed Applications and Interoperable Systems(DAIS'2001)  
WG 6.1;  
17-19 September, 2001; Krakow, Poland;  
E-mail contact: Krzysztof Zielinski <[kz@cs.agh.edu.pl](mailto:kz@cs.agh.edu.pl)>  
<http://www.cs.agh.edu.pl/DAIS01>  
(1442)

Seminar; CLEI'2001 Tutorials;  
TG 6.9;  
24-28 September, 2001; Merida, Venezuela;  
Email contact: Ramon Puigjaner <[putxi@uib.es](mailto:putxi@uib.es)>

Working Conference; 3<sup>rd</sup> International Conference on Active Networks;  
WG6.7;  
30 September - 2 October, 2001; Philadelphia, USA;  
Email contact: Jessica Kornblum <[jkornblu@dsl.cis.upenn.edu](mailto:jkornblu@dsl.cis.upenn.edu)>  
<http://www.cis.upenn.edu/iwan01>  
(1533)

Open Conference; 1<sup>st</sup> IFIP Conference on e-commerce, e-business and e-government;  
WG 6.11+TC8+TC11;

3-5 October 2001; Zurich, Switzerland;  
Email contact: [bauknecht@ifi.unizh.ch](mailto:bauknecht@ifi.unizh.ch)  
(1514)

Workshop; Distributed Systems and Operation Management (DSOM' 2001);  
WG 6.6 + IEEE  
15-17 October, 2001; Nancy, France;  
Email contact:  
URL: <http://www.loria.fr/~festor/DSOM2001/>  
(1537)

Open Conference; International Conferences-Exhibition on Info-Tech and  
Info-Net;  
IEEE + IFIP + ICCG;  
29 October - 1 November, 2001; Beijing, China;  
Email contact: [zyx@bupt.edu.cn](mailto:zyx@bupt.edu.cn)  
URL: <http://www.cie-china.org>  
(1499)

Working Conference; 4<sup>th</sup> Conference on Management of Multimedia Networks  
and Services (MMNS'2001)  
WG6.6 + WG6.2 + IEEE;  
29 October - 1 November 2001; Chicago, USA;  
Email contact: [mmns2001@cs.depaul.edu](mailto:mmns2001@cs.depaul.edu)  
URL: <http://www.mnlab.cs.depaul.edu/mmns2001>  
(1534)

Open Conference; 3<sup>rd</sup> International Conference on Middleware  
(Middleware'2001)  
WG 6.1 in cooperation with ACM;  
12-16 November, 2001; Heidelberg; Germany;  
Email contact: Joe Sventek [joe\\_sventek@agilent.com](mailto:joe_sventek@agilent.com)  
URL :  
(1554)

Working Conference; 6th Optical Network Design and Modelling  
Conference;  
WG 6.10;  
4-6 February, 2002; Torino, Italy;  
Email contact: [NERI@polito.it](mailto:NERI@polito.it) (Fabio Neri)  
URL: <http://www.tlc-networks.polito.it/ONDM02/>  
(1572)

## 8. Events scheduled for 2002

Working Conference; 14th Intern. Working Conference on  
Testing of Communication Systems (Testcom'2002);  
WG 6.1;  
19-22 March 2002; Berlin, Germany;  
Email contact: Ina Schieferdecker [schieferdecker@fokus.gmd.de](mailto:schieferdecker@fokus.gmd.de)  
URL: <http://www.fokus.gmd.de/events/testcom2002>  
(1535)

Working Conference; 5<sup>th</sup> Conference on Formal Methods for Open Object -  
based Distributed Systems (FMOODS'2002)  
WG 6.1;

20-22 March, 2002; Enschede, The Netherlands;  
Email contact: Arend Rensink [rensink@cs.utwente.nl](mailto:rensink@cs.utwente.nl)  
URL: <http://trese.cs.utwente.nl/fmoods2002>  
(1538)

Workshop; Protocols for High Speed Networks;  
WG 6.2;  
22-24 April, 2002; Berlin, Germany;  
Email contact: [carle@fokus.gmd.de](mailto:carle@fokus.gmd.de) (Georg Carle)  
URL: <http://www.fokus.gmd.de/research/cc/glone/projectonly/pfhsn2002/>  
(1588)

Working Conference; 7<sup>th</sup> Conference on Intelligence in Networks  
(Smartnet'2002);  
WG 6.7;  
8-10 April, 2002; Saariselka, Finland;  
Email contact: [jenni.hyvarinen@lut.fi](mailto:jenni.hyvarinen@lut.fi) URL :  
<http://www.lut.fi/~jhyvarin/Smartnet'2002.htm>  
(1550)

Open Conference; Network Operations and Management Symposium  
(NOMS'2002);  
IEEE + WG6.6;  
15 - 19 April, 2001; Florence, Italy;  
Email contact: [enrico.bagnasco@cselt.it](mailto:enrico.bagnasco@cselt.it)  
URL: <http://www.noms.org/2002/>  
(1573)

Open Conference; 11<sup>th</sup> International World Wide Web Conference;  
WG 6.4;  
7-11 May, 2002; Hawaii, USA;  
Email contact: david@hawaii.edu  
URL: <http://www2002.org>  
(1568)

Open Conference; Second International Conference on Networking  
(Networking'2002);  
WG 6.2+6.3+6.8;  
19-25 May, 2002; Pisa, Italy;  
Email contact: marco.conti@cnuce.cnr.it  
URL: <http://www.cnuce.pi.cnr.i/Networking2002>  
(1539)

Working Conference; 10<sup>th</sup> International Workshop on Quality of Service  
(IWQOS'2002)  
WG6.1 + IEEE ComSoc;  
15-17 May, 2002; Miami Beach, USA;  
Email contact: [Jorg@cs.virginia.edu](mailto:Jorg@cs.virginia.edu) <Jorg Liebeherr>  
URL: <http://www.cs.virginia.edu/iwqos>  
( )

Open Conference; Networks 2002;  
CSI + TC6;  
14-15 June, 2002; Mumbai, India;  
Email contact: [dr\\_chakra@yahoo.com](mailto:dr_chakra@yahoo.com);  
URL:  
( )

Congress; 17<sup>th</sup> World Computer Congress;  
IFIP;  
25-30 August, 2002; Montreal, Canada;  
Email contact: [lyman@bbn.com](mailto:lyman@bbn.com)  
URL: <http://www.wcc2002.org>  
(1399)

Open Conference; Latin America Networking Conference;  
TG 6.9+ACM;  
9-13 September, 2002; Santa Fé, Argentina;  
Email contact: [aroman@uyr.com.ar](mailto:aroman@uyr.com.ar) (Alejandro Román)  
URL:  
( )

Open Conference; World Telecommunications Congress 2002;  
SEE + WG 6.2;  
22 - 27 September, 2002; Paris, France  
Email contact: [dominique.delisle@francetelecom.com](mailto:dominique.delisle@francetelecom.com)  
URL:<http://www.wtc2002.org/>  
(1544)

Open Conference; Communications and Multimedia Security'2002;  
TC6 + TC11;  
26-27 September,2002; Portoroz, Slovenia;  
Email contact: [borka@e5.ijs.si](mailto:borka@e5.ijs.si) (Borka Jerman Blazic)  
URL:<http://www.setcce.org/cms2002/>  
(1580)

Open Conference; 2<sup>nd</sup> Conference on E-commerce, E-business and E-government;  
WG 6.11+TC8+TC11;  
7-9 October 2002; Lisboa, Portugal;  
Email contact: [joao.monteiro@dei.uminho.pt](mailto:joao.monteiro@dei.uminho.pt)  
URL: <http://www.siweb.info/ifip>  
(1592)

Working Conference; 5<sup>th</sup> Conference on management of Multimedia Networks and Services (MMNS'2002)  
WG 6.6 + WG 6.2 + IEEE;  
6-9 October, 2002; Santa Barbara, USA;  
Email contact: [almeroth@cs.ucsb.edu](mailto:almeroth@cs.ucsb.edu);  
URL: <http://www.cs.ucsb.edu/conferences/MMNS02/>  
(1595)

Workshop; Workshop on Internet Technologies, Applications and Societal Impact  
WG 6.4 +WG 6.11;  
10-11 October 2002; Wroclaw, Poland;  
Email contact: [grzech@ists.pwr.wroc.pl](mailto:grzech@ists.pwr.wroc.pl)  
URL:  
(1596)

Open Conference; Interworking'2002;  
WG 6.2;  
13-16 October, 2002; Perth, Australia;

Email contact: [zig@ee.uwa.edu.au](mailto:zig@ee.uwa.edu.au) (Zigmas Budrikis)  
URL:  
( )

Working Conference; 1<sup>st</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;  
21-25 October, 2002; Paris, France;  
Email contact: [guy.pujolle@lip6.fr](mailto:guy.pujolle@lip6.fr)  
URL:  
( )

Workshop; 13<sup>th</sup> Distributed Systems and Operation Management Workshop  
(DSOM' 2002);  
WG 6.6 + IEEE  
21-23 October, 2002; Montreal, Canada;  
Email contact: [kropf@iro.umontreal.ca](mailto:kropf@iro.umontreal.ca)  
URL: <http://www.iro.umontreal.ca/~dsom2002>  
( )

Working Conference; 7<sup>th</sup> Conference on Personal Wireless Communications  
(PWC'2002);  
WG 6.8;  
23-25 October, 2002; Singapore;  
Email contact: [gomidyar@cw.c.nus.edu.sg](mailto:gomidyar@cw.c.nus.edu.sg)  
URL: <http://www.cw.c.nus.edu.sg/pwc2002/>  
(1582)

Open Conference; 6<sup>th</sup> Conference on Electronic Publishing  
ICCC + TC6;  
6-9 November, 2002;Karlovy Vary, Czech Republic;  
Email contact: [arved.huebler@mbv.tu-chemnitz.de](mailto:arved.huebler@mbv.tu-chemnitz.de)  
<http://www.tu-chemnitz.de/elpub02/>  
( )

Open Conference; Joint 7<sup>th</sup> Conference on Formal Description Techniques  
for Distributed Systems and Communication Protocols/ Protocol  
Specification, Testing and Verification (FORTE/PSTV'2002);  
WG 6.1;  
11-14 November, 2002;Houston, USA;  
Email contact: [vardi@cs.rice.edu](mailto:vardi@cs.rice.edu), [doron@ece.utexas.edu](mailto:doron@ece.utexas.edu)  
URL: <http://www.ece.utexas.edu/FORTE>  
( )

Working Conference; 4<sup>th</sup> International Conference on Active Networks;  
WG6.7;  
4-6 December, 2002;Zurich, Switzerland;  
Email contact: [plattner@tik.ee.ethz.ch](mailto:plattner@tik.ee.ethz.ch)  
URL :  
( )

## **10. TC6 meeting attendance**

Since the last report there was only one TC6 meeting, which was held in Zurich, Switzerland. It was attended by 25 delegates.

TC6 requests nomination of delegates from the Computer Societies of the following countries: Andorra, Chile, Egypt, Ireland, Israel, Korea, Lithuania and Singapore. These are the only IFIP countries which are not represented in TC6.

The TC6 meeting attendance is in Annex A to this report.

## **PART II**

1. TC6 requests the approval of the Technical Assembly for a change in the name of WG 6.8 and on the respective aims and scope. The new title, aims and scope are the following:

### **Working Group 6.8 Mobile and Wireless Communications**

#### **AIMS**

To organise and promote the exchange of information on wireless communication systems and networks, fixed and mobile, terrestrial and space, local and global. To help in the research, development, design, standardisation and applications for mobile and wireless modules, equipment and systems. To examine technical operational capabilities of the future mobile and wireless networks for voice, data, text and image communications. The results of the work will be made available to individuals as well as organisations concerned, such as manufacturers, operators, common carriers, standardisation bodies, users.

#### **SCOPE**

The scope of the Working Group includes:

- Wireless Access Networks.
- Wireless LANs.
- Mobile computing.
- Cellular networks.
- Mobile and wireless personal communications.
- Short range communications and applications.
- Digital microwave systems and networks.
- Digital radio and TV broadcasting.
- Satellite networks.

All topics should be examined from the viewpoint of architecture and protocols, modulation, coding and decoding, methods of communication functions (multiple access, error control, flow control, routing, etc.), security, implementation, user aspects, legal, economic, social and human related issues.

2. TC6 also requests the approval of the Technical Assembly for the establishment of the new WG 6.9. Its name, aims and scope are the following:

## **Working Group 6.9 Communication Systems in Developing Countries**

### **AIMS**

To identify and study issues and problems related to the access to, understanding of and application of network and telecommunications technology in developing countries or regions.

To encourage cross-fertilisation of concepts and techniques among developing countries, and between developing countries and developed countries.

To promote activities oriented to the diffusion of the methods and techniques for accessing computer networks in developing countries or regions.

To promote activities oriented to the diffusion of the methods and techniques for accessing network services in developing countries or regions.

### **SCOPE**

The areas of study include models and methods for transfer of concepts and methods in communication systems and establishment of new applications in developing regions for existing technologies.

The requirements of the users of those regions include cost-effective technologies for global access, rural access to services and social development in those regions through appropriate applications of communication systems.

The problems of human resources, sharing of experience and cost of technology are particularly acute, and are to be examined in detail.

Although not limited to, the following items are of particular significance in the scope of the Working Group:

- Satellite systems
- Applications for cellular technology
- Alternative network technologies
- Technologies for distance learning, e-business, tele-meeting and any other reducing the distance effect between partners
- Global access and interconnectivity technologies
- Internet services.

# ANNEX A

## 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	
Albania	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n		x									
Armenia	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n											
Argentina						x																							
Australia		x		x	x		x			x		x	x	x															
Austria			x	x							x	x	x	x	x	x		P	x		x		x		P	x			
Belarus																					x	x							
Belgium	x		x	x	x		x	x			x		x			x	x			x	x	x	x		x	x	x	x	
Brazil		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	
Canada																x	x		x		x		x		x	x	x	x	
China														x	x					x				x			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		
Denmark			x		x		x		x		x	x	x	x	x	x	x	x	x	x	x	x		x	x	x		x	
Finland	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			
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	
Greece	n	n	n	n	n	n	n	n	n	n	n	n	n								x	x		x	x				
Hungary	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	x	x				x	
Italy			x	x						x		x									x			x				x	
Japan	x												x	x			x	x	x		x	x			x			x	
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	
Norway	x	x	x		x				x		x		x	x	x			x			x		x	x	x	x	x	x	
Poland	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	
SEARCC	x	x								x																			
Slovakia	n	n	n	n	n	n	n	n	n	n					x		x		x				x		x		x		
South Africa				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	
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	
Switzerland	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			x	x																	
Tunisia			x	x			x						x			x						x	x			x			
United Kingdom	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			n	n			
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	x	x	x	
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	x	x	x	
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	
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	
WG 6.3	n	n	n	n	n	n	n	n	n	n	n	n	n	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		
WG 6.6		x	x	x	x			x			x	x				x				x		x						x	
WG 6.7	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n			x	x	x		x	x	x		x	
WG 6.8	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		
TG 6.9	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	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	x			x	x	x		x		x		x	
WG 6.11	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	
ICCC Represent.							x			x			x							P			x		P			P	

X = Attending

P = Proxy

n = not existing or not in IFIP

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	Caniço, 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