

IFIP Council, London, UK
March 1 – 3, 2007
Report from TC 3: Education
From: Jan Wibe - TC3 chair

PART I: Council

1. TC3 meetings held since last report

No meetings held.

Minutes from the last meeting in 2006:

<http://www.plu.ntnu.no/ansatte/janwib/ifip/minutes-06/minutes.htm>

2. TC3 meetings scheduled until next IFIP GA meeting

No meetings scheduled.

Next meeting will be in Praque, Czech Republic, September 29 – 30, 2007.

This meeting will be connected to a working conference by WG 3.6

3. Changes in Membership

New members from:

India, Mr Pradeep H Pendse

Serbia, Miladin Stefanović

TC3 has no members from the following countries:

Argentina, Canada, Croatia, Cyprus, Czech Republic, Egypt, Ireland, Oman, Syria, Malaysia, New Zealand.

TC3 requests nomination of delegates from the Computer Societies of these countries.

4. WG Reports

WG 3.1 Informatics and ICT in Secondary Education

Website: <http://www.didaktik-der-informatik.de/tc3/wg31/>

Officers:

Chair: Pieter Hogenbirk, Netherlands

First term: 2007 - 2009

Vice-chair: Sigrid Schubert, Germany

Events:

2007:

Working Conference:

WG 3.1 Secondary Education and WG 3.5 Primary Education

New Modes of Teaching and Learning Informatics, Mathematics and ICT - a 'golden triangle'

June 27th - 29th, 2007, Boston, U.S.A.

Website: <http://www.ccs.neu.edu/imict2007/Home.html>

2008:

WCC 2008

Website: <http://www.wcc2008.org/>

Not yet decided upon: Working Conference in Malaysia on the new ICT environment of the youth.

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

Activities:

The working group 3.1 on ICT in secondary education has to meet several challenges.

1. It will be necessary to strengthen the professional network of the group by exchanging information and ideas on a more regular basis and making the network visible for other interested people. We will use the website for that purpose as a discussion forum.

2. The group will address and combine both the field of informatics in secondary education as well as the use of ICT for innovative educational practices. In some countries there is a shift from an emphasis on ICT as such to the integrated use of ICT in all disciplines. By this integration ICT can act as a catalyst for renewal and innovation of education. ICT will be more and more a "normal" phenomena, which is part of daily practice by young people and hopefully by the teachers as well. This approach includes that we should consider the cultural, social and ethical impact of ICT in education.

3 WG 3.1 will seek and elaborate on co-operation and collaboration with the other Working Groups in combined activities.

4 WG3.1 is involved in the Agora initiative. We will take the lead in the project on the question of "How to change an organisation into a learning organisation?"

WG 3.2 Informatics and ICT in Higher Education

Website: <http://www.ifiptc3.org/wg32>

Officers:

Chair: Raul Sidnei Wazlawick, Brazil

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

WG 3.3 Research on Education Applications of Information Technologies

Web site: To be updated.

Officers:

Chair: Paul Nicholson, Australia.

First term: 2005 – 2007

Vice-chair: Andrea Karpati, Hungary

Events:

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

WG 3.4 IT-Professional and Vocational Education in Information Technology

Website: <http://www.businessandlaw.vu.edu.au/ifip34/>

Officers:

Chair: Barrie Thompson, UK

First term: 2005 – 2007

Vice-chair: Arthur Tatnall, Australia

Events:

2007:

Working conference:

Theme: Education, Training and Life Long Learning for IT Professionals

Organised by IFIP Working Group 3.4 in collaboration with Special Interest Group 3.8

Venue: Dublin City University, Ireland

Dates: 9th to 13th July 2007

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

Activities:

Evaluative work has been undertaken in recent years relating to professional standards in the field of Software Engineering. This has shown that specific areas that need attention with regard to the competencies of professionals are: Best Practice and Proven Methodologies, and Maintenance of Competence. The group has highlighted the issues associated with “Best Practice” as a key area for its attention. Support for the Group’s work is being provided by a National Teaching Fellowship (NTF) from UK Higher Education Academy (this was awarded to the group’s chair in September 2005). The funding supported three workshops addressing the interface between industry and academia which were held in 2006 (one at WCC 2006) it is also sponsoring part of the WG3.4 Working Conference that will be held in Dublin in 2007 – this will address “Education, Training and Life Long Learning for IT Professionals”. The Group had the opportunity to present a summary of its work at the IFIP Workshop on Improving IT Practitioner Skills last August in Santiago (a part WCC 2006). The range of presentations at the workshop showed that there is a need for a Framework to aid the understanding of the situations in different countries and the production of such could provide a focus for the group in the future.

WG 3.5 Informatics in Elementary Education

Web site: <http://ifip35.inf.elte.hu/>

Officers:

Chair: Márta Turcsanyi-Szabo, Hungary

First term: 2007 – 2009

Vice-chair: David Benzie, UK

Events:

2007:

Working conference in Boston 27.-29.06.07 at Northeastern University of Boston, in co-operation with WG 3.1: "New Modes of Teaching and Learning: Informatics, Mathematics and ICT - a golden triangle"

Website: <http://www.ccs.neu.edu/imict2007/Home.html>

2008: WG 3.5 conference/workshop in Prague at end of June (not fixed yet)

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

Activities:

In the future WG 3.5 should concentrate more on issues of its own aims and scope in relation to the role we wish to play in the educational society and in preparing the younger generation to become life long learners. We plan to establish task forces to handle the most relevant issues, like how we can seek ways to integrate activities in view of the Agora initiative and to look for activities leading to a final event in WCCE 2009. Our virtual environment is suitable for initiating such discussions; however an actual event always proves to be a more concentrated occasion to discuss matters more thoroughly. This year's planned conference in Boston seems to attract a fewer number of our members (probably due to the distance, required budget and visa difficulties), thus next year's conference in Prague should aim more at pulling together the members into a real community of practice within our scope. The location is also suitable to attract researchers and practitioners from new European member states. We should also build on experiences of Eurologo 2007 conference in Bratislava (www.EuroLogo2007.org), organised by some of our members, which attempts to attract a high number of practitioners from surrounding countries and try to convert "lessons learned" for the benefit of our workgroup.

WG 3.6 Distance Learning

Web site: <http://education.deakin.edu.au/ifipwg3.6/Default.htm>

Officers:

Chair: Elizabeth Stacey, Australia

First term: 2006 – 2008

Vice-chair: Zdena Lustigova, Czech Republic

Change of name of 3.6:

From "Distance Learning" to "Distance Education".

Decided at GA 2006

Events:

2007: Working conference: Prague, Czech Republic, 26 – 28 September

<http://itet2007.eu/>

2009:

WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

Activities:

Working Group 3.6, Distance Education draws together a diverse group of people from many educational sectors and disciplines. Our common expertise and interest is in using

technologies in distance education and we regularly contribute to IFIP conferences as we discuss our research and practice. We plan to use the next meetings to develop a collective study of online/web-based education, its benefits, challenges and disadvantages, and a discussion of constructive ways to counter difficulties as we draw on our international experience in this area.

WG 3.6 Distance Education's event for 2007 is to be held on 26-28 September 2007. Topics include various aspects of technology based learning and training. The iTET WG 3.6 Joint Working Conference will provide a presentation and a discussion platform for basic and advanced educational, technological, social and methodological issues. Its objective is to give an overview of innovations and upcoming trends, and to promote discussion about the potential as well as the limitations of the new learning and training technologies in both the academic and the corporate sector. The Conference and all connected activities will take place in the medieval palaces of Charles University in Prague, called Karolinum. This will be followed by TC3 meetings. All details are at <http://itet2007.eu/>

We have several possibilities being proposed for meeting in 2008 including Austria and Sweden as well as our involvement in the World Computer Congress in Milan.

WG 3.7 Information Technology in Educational Management

Website: <http://item.wceruw.org/>

Chair: Adrie Visscher, Netherlands

First term: 2005 – 2007

Vice-chair: Ian Selwood, UK

Events:

2007: none

2008: WG conference in Australia (Darwin)

2009: WCCE 2009

Florianópolis, SC, Brazil, from July 27 to 31, in 2009.

Title: Education and Technology for a better world

Website: <http://www.wcce2009.org/>

Activities:

We have our WG conferences (and Springer book) every 2 years; the last one was held in 2006 in Hamamatsu in Japan. There were several new delegates attending the conference; six of them are requesting to become a WG member. The Working Group is active and it looks like its future is bright in terms of events and participants who like to exchange information on how IT can/should support the managements of education.

SIG 3.8 Special Interest Group on Lifelong Learning:

Website: Not established yet.

Chair: Brian Samways, UK

First term: 2005 – 2007

Vice-chair: Mike Kendall, UK

Events:

2007:

Working conference:

Theme: Education, Training and Life Long Learning for IT Professionals

Organised by IFIP Working Group 3.4 in collaboration with Special Interest Group 3.8
Venue: Dublin City University, Ireland
Dates: 9th to 13th July 2007
2009:
WCCE 2009
Florianópolis, SC, Brazil, from July 27 to 31, in 2009.
Title: Education and Technology for a better world
Website: <http://www.wcce2009.org/>

5. Events Report

For 2007. See working group reports.

6. TC3 Strategy Document

The Strategy Plan deals with the question of how TC3 and its working groups may deal with the changes in our society. TC3 and its working groups provide an international forum for educators to discuss research and practice through a network of Communities of Practice working together.

The five year Action Plan specifies the concrete actions that will be undertaken by TC3 and its working groups.

To produce a Strategy Document was decided in the TC3-meeting in 2003.

A first draft was produced by Tom van Weert in October 2003 and discussed in the TC3-meeting 2004.

The Strategy Plan was finalised in the TC3-meeting in 2005. The associated Action Plan contains all activities within TC3 and is continually updated.

The TC3 Strategy Plan and the Action Plan are available on the TC3 web site:

<http://www.ifip-tc3.net/>

TC3 Documents – Resources

The following resources have been produced and are currently available for TC3 officers and TC3 members:

- Formats for TC3 Member Annual Reports
- Briefing Working Group Event Organisation (version 1.1)
- Briefing for Editors (1.2)
- Working Group Officers Pack

This Pack has been put together to help IFIP TC3 Working Group Chairs and Vice-Chairs in performing their role. The Pack addresses the following questions:

- 2.1 What is an IFIP TC3 Working Group?
 - 2.2 What about membership of an IFIP TC3 Working Group?
 - 2.3 How to organise an IFIP TC3 Working Group?
 - 2.4 How to organise Working Group Meetings and Conferences?
 - 2.5 How to prepare a publication?
3. The role of the Working Group Chair

It contains the following documents:

- IFIP TC3 Sample Working Group Rules (Annex A)
- IFIP TC3 Role of Working Group Chair (Annex B)
- Sample Working Group Chair report to TC3 (Annex C)
- Sample Working Group Annual Meeting Agenda (Annex D)
- Sample Working Group Annual Meeting Minutes (Annex E)

The Pack also refers to the two IFIP TC3 Briefings:
TC3 Briefing Working Group event organisation
TC3 Briefing for editors

7. TC3 Newsletter

Editor: Mikko Ruhonen, Finland (TC3-elected member and former chair of WG 3.4)
After a trial period for one year, TC3 has decided to establish the Newsletter with Mikko R as editor.

8. TC 3 Conference Management System (Icms)

The first version of Icms (IFIP Conference Management System) was made in the late nineties and it has been used in TC3-events since then.

The system contains the following main functions:

- information on paper handling for authors
- upload of abstracts and papers
- administration of and communication with reviewers
- online abstract and paper reviewing
- communication with presenters
- support for IPC meeting (lists, statistics,...)
- compilation of conference programme

The system is developed by Anton Knierzinger, Austria. It may be used by all TC3 events and will now be offered to all TC's for a modest prize which may be negotiated.

Report by Anton Knierzinger:

Main items:

1. Improvement of Icms
2. Use of Icms for the following conferences:
WCCE 2005.
Working conference (3.1, 3.3 and 3.5) in Aalesund, June 2006.
WCC 2006, TC 3 conference.
3. Icms users guide
Outlook for 2007:

Within the next version 1 of Icms should finalized. This needs some improvement of the system based on the experiences made in the last conferences and the user guide. In parallel I plan a conference guide book in addition to Icms. Both can be offered to other IFIP bodies or external conferences.

If Icms should be used in conferences of TC3 and it's WGs, Anton K. offers his assistance.

9. Liason with UNESCO

Responsible from TC 3: Bernard Cornu (TC3 Secretary).

- UNESCO Institute for Information Technologies in Education (IITE): A Memorandum of Understanding has been signed between TC3 and IITE (signed by Professor Kinelev on behalf of IITE and Jan Wibe on behalf of TC3).

Contact from TC3: Bernard Cornu who is also vice-chairman of the IITE Governing Board.

- UNESCO Institute in Hamburg: The previous UNESCO Institute for Education has been renamed as the UNESCO Institute for Lifelong Learning. It would be useful to develop

contacts with this Institute, especially in the framework of the AGORA initiative. Contacts to be established with the director: Mr Adama Ouane.

- Meeting with UNESCO in Paris, December 14, 2006.

Present: From UNESCO: Mr Peter Smith, Assistant Director General for Education, assisted by his experts Mariana Patru and Cedric Wachholz.

From IFIP: The president, Klaus Brunnstein and TC3 secretary Bernard Cornu.

This meeting aimed at developing a better reciprocal knowledge and understanding between UNESCO and IFIP. Indeed, we share many common aims and values, and some collaboration already exists (UNESCO uses many experts who are also OIFIP members, but most of the time on an individual basis; the “provision of experts” should be done in a more systematic and institutional way). Priorities for UNESCO are sustainable development, ICTs in Education, Lifelong Learning, and UNESCO is ready to consider IFIP as a “global intellectual backstaff for UNESCO”. WITFOR, WCC, WCCE are also occasions for a better collaboration.

IFIP TC3 is invited to provide UNESCO with a list of main issues and trends in a changing knowledge society and a list of the fields in which expertise can be provided by TC3.

Cedric Wachholz will participate in the next AGORA meeting.

Bernard Cornu and Cedric Wachholz met again in January 2007, and could discuss more concretely some issues for a better co-operation.

10. Liason with EU

Members of TC3 and the working groups have been very active in EU-projects as experts on ICT and Education. We will try to strengthen this cooperation by setting up meetings with key persons in EU to discuss further cooperation. Particularly with the Commissioners and Directors of Information Society and Media, Education and Culture, and Research.

Another contact:

EENET: Enabling Education Network.

<http://www.eenet.org.uk/>

A Memorandum of Understanding has been signed between TC3 and EENET.

11. Liason with United Nations Institute for Training and Research (UNITAR)

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

Bernard Cornu and Raymond Morel have established contact with UNITAR through Louise Lassonde. They have had several meetings in Geneva.

A Memorandum of Understanding will be signed between TC3 and UNITAR..

12. Co-operation with TC 13

A planning document has been produced by the chairs of the two TC's. It contains suggestions for activities which can be followed-up.

This co-operation was discussed in the last TC3-meeting in June 2006. It was decided that this should be followed-up on the working group level.

13. The AGORA Initiative

The first AGORA meeting was arranged in Poitiers, France, October 26 – 27, 2006.

A report from the meeting was distributed to TC-chairs with invitation to join the initiative.

Participants:

Klaus Brunnstein, IFIP President
 Bernard Cornu, Secretary of TC3 (organiser)
 Dong Yoon Kim, IFIP Vice-President
 Mike Kendall, Vice-chair SIG 3.8
 Zdena Lustigova, Vice-Chair WG 3.6
 Johannes Magenheimer, WG 3.1
 Raymond Morel, special consultant to TC3 (moderator)
 Vittorio Miduro, Programme Chair WCC 2008
 Sindre Røsvik, Chair WG 3.5 and Programme Chair WCCE 2009
 Sigrid Schubert, Vice-chair elect WG 3.1
 Marta Turcsanyi-Szabo, Vice-chair WG 3.5
 Tom van Weert, Vice-chair of TC3 (moderator)
 Jan Wibe, Chair IFIP Technical Committee 3.

A core committee has been established for the AGORA initiative:

Bernard Cornu, Raymond Morel, Tom van Weert and Jan Wibe.

It was decided to work out three project proposals:

- A: digital solidarity (crossing the digital divide)
 Chair: Sigrid Schubert, vice-chair WG 3.1
- B: an IFIPWIKI as demonstration within IFIP
 Chair to be appointed.
- C: IFIP School on Lifelong Learning (in connection with WITFOR 2007)
 Chair: Mike Kendall, vice-chair SIG 3.8.

Further work with projects A and B.

- 1: Establish a project group.
 Responsible: Project chair.
- 2: Involving other TC's
 Responsible: TC3 chair.
- 3: Project plan with timeschedule
- 4: Budget and funding

Future AGORA events:

Event:	Place:	Year:	Dates:	Responsible:
TC 3 executive meeting	Paris, France	2007	April 18 - 20	Bernard Cornu and Jan Wibe
2 nd AGORA conference	Seoul, Korea	2007	June 4 - 6	Dong Yoon Kim and Jan Wibe
IFIP School	Addis Abeba, Ethiopia	2007	August 13 - 18	Mike Kendall
TC 3 meeting	Praha, Czech Republic	2007	September 29 – 30	Bernard Cornu and Jan Wibe
3 rd Third AGORA conference	Poitiers, France	2007	October 22 - 27	Core Committee
4 th AGORA Conference, WCC 2008	Milan, Italy	2008		Core Committee
5 th AGORA Conference, WCCE 2009	Florianapolis, Brazil.	2009		Core Committee
6 th AGORA Conference, IFIP 50 th anniversary event	London, UK	2010		Core Committee

14. EAIT Journal.

Deryn Watson has been editor for ten years. She is now ending her period as editor.
New editor: Ian Selwood, UK

15. TC3 Gallery – Jan Wibe

Website: <http://www.plu.ntnu.no/ansatte/janwib/ifip/ifip-tc3/>

This website contains pictures from TC3 events but also from recent Council and GA-meetings.

16. Web-pages

TC3 Home Page

<http://www.ifip-tc3.net/>

TC3 Journal Page

<http://www.wkap.nl/journalhome.htm/1360-2357>

TC3 National Policies

To be found at the TC3 Home Page.

TC 3 Picture Gallery:

<http://www.plu.ntnu.no/ansatte/janwib/ifip/ifip-tc3/>

PART 2: Technical Assembly

Nothing to report

ANNEX 1: National members

Country:	Name:
Argentina	
Australia	Anne McDougall
Austria	Gerald Futschek
Belgium	Willy Baute
Brazil	Raul Sidnei Wazlawick
Bulgaria	Roumen Nikolov
Canada	
Chile	Jaime Sanchez
China	LI Xiaoming
CLEI (Peru)	Ernesto Cuadros-Vargas
Czech Rep	
Denmark	
Egypt	
Finland	Jari Koivisto
France	Monique Grandbastien
Germany	Sigrid Schubert
Greece	Eleni Ntrenogianni
Hungary	Andrea Karpati
Iceland	Anna Kristjansdottir
India	Pradeep H Pendse
Ireland	
Italy	Vittorio Midoro
Japan	Hajime Ohiwa
Korea	Chan-Mo Park
Lithuania	Valentina Dagienė
Malaysia	
Mauritius	Alain Senteni
Netherlands	J.A. Frederik
New Zealand	
Norway	Jan Wibe
Poland	Maciej M. Syslo
Portugal	Fernando Ramos
Serbia	Miladin Stefanović
Singapore	Wong Lung Hsiang
Slovakia	Ivan Kalas
Slovenia	Vladislav Rajkovic
South Africa	Peter Waker
Spain	Carlos Delgado Kloos
Sweden	Lena Olsson
Switzerland	Raymond Morel
Thailand	Srisakdi Charmonman
UK	Mike Kendall
UNESCO	Mariana Patru
USA - ACM	Albert Joseph Turner

USA - IEEE	Willis King
TC3 elected members:	
France	Bernard Cornu
Netherlands	Tom van Weert
Austria	Anton Knierzinger
Finland	Mikko Ruhonen

ANNEX: 2 Attendance at TC3 Meetings

Y = attended P = apology

Country	91	92	93	94	95	95	96	97	98	99	00	01	02	03	04	05	06	Total
Argentina														P	P	P	P	0
Australia	Y	Y	Y	Y	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	16
Austria	Y	Y	Y	P	Y	P	P	P	Y	Y		Y	Y	Y	Y	Y	P	11
Belgium	Y	Y	Y	Y	P	Y	P	Y	P	P	P	P	Y		P	Y	P	8
Brazil										Y	Y	Y	P	Y	P	P	P	4
Bulgaria		Y	P	P	P	Y	P	P	Y		P	Y		Y		P	P	5
Canada										P	P							0
Chile																	P	0
China		P	P	P	P	P						P	Y	P	P	P	P	1
CLEI (Peru)																	P	0
Czech Rep					P			P		P								0
Denmark	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	P	Y			14
Egypt																		0
Finland	Y	Y	P	Y	P	P	Y	Y	Y	Y	Y	Y	P	Y	P	P	Y	11
France	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	P	Y	Y	P	P	P	Y	13
Germany	Y	Y	Y	Y	Y	Y	P	Y	Y	P		Y	Y	P	Y	Y	Y	13
Greece														P			Y	1
Hungary	Y	P	P	Y								P	Y		Y	Y	Y	6
Iceland	P	P	P	P	P	Y	P	P		P		Y	P	P	P		P	2
India	P	P	P															0
Ireland																		0
Israel	Y	Y	Y	P	P	Y	P	P	Y	P	P	Y	P					6
Italy	Y	P	P	P	Y	Y			Y	Y	P	Y	P		Y	Y	Y	9
Japan	Y	P	P	P	P						Y	Y	P	P	Y	P	Y	5
Korea				P		P		P	Y	Y	P	P	Y			P	P	3
Lithuania														Y	Y	P	P	2
Malaysia																		0
Mauritius																	P	0
Netherlands	Y	Y	Y	Y	P	Y	P	Y	Y	P	Y	Y	Y	Y	P	Y	P	12
New Zealand			P	Y	P			Y	Y	Y								4
Norway	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	17
Poland	Y	Y	P	Y		P			Y		Y	Y	P	P	Y	P	P	7
Portugal												P	P		P		P	0
Russia																		0
Serbia																		0
Singapore											P	Y	P		P	P	P	1
Slovak Republic				P	P	P	P	P	P		P	Y	P		Y		Y	3
Slovenia															P	Y	P	1
South Africa	Y	Y	Y	Y	P	P	P	P	Y	Y	Y	Y	P	Y	Y	Y	Y	12
Spain	Y	Y	P	Y	P	Y	P	P				Y	P	P			Y	6
Sweden						P	Y	Y	Y	Y	Y					Y	Y	7
Switzerland	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	17
Syria																		0
Thailand								P			P	P		P			P	0
Tunisia	Y				Y													2
United Kingdom	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	P	Y	Y	Y	16
USA - FOCUS	Y	Y	Y	Y	Y	Y	Y	Y	Y									9
USA - ACM										Y	Y	Y	Y	Y	Y	Y	Y	8
USA IEEE-CS											P	Y	Y	Y	Y		Y	5
Zimbabwe		P	P	P	-	Y	Y	Y				P		P				3
UNESCO			P	P	P	P								P			Y	1

TC3 elected members																		
Bernard Cornu																	Y	5
Tom van Weert																	Y	4
Anton Knierzinger																	P	3
Mikko Ruhonen																		1
Total	13	15	16	19	18	13	16	9	17	14	15	13	15	15	16	18	21	

Attendance of working group chairs and / or vice-chairs:

WG:	91	92	93	94	95	95	96	97	98	99	00	01	02	03	04	05	06	Total
WG 3.1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	17
WG 3.2	Y	Y	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	P	15
WG 3.3	P	Y	P	Y	P	Y	Y	Y	Y	P	P	Y	P	Y	Y	Y	Y	11
WG 3.4	Y	P	Y	Y	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	15
WG 3.5	Y	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	16
WG 3.6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	P	Y	P	Y	15
WG 3.7								Y	P	P	P	Y	P	P	P	Y	Y	4
SIG 3.8																	Y	1
Total:	5	4	4	6	4	6	6	7	6	5	5	7	5	5	6	6	7	