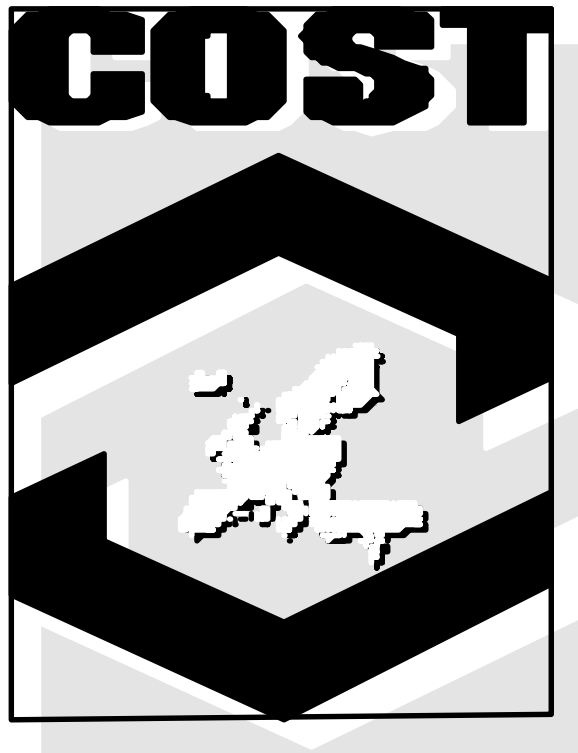


**European Co-operation in the Field of Scientific and Technical Research**



**COST 259**

**Wireless Flexible Personalised Communications**

Minutes of the 10th Meeting of the Management Committee,  
held in Valencia (E) on 19-21 January 2000

**COST 259**  
**Minutes of the 10th Meeting of the Management Committee,**  
**held at Polytech. Univ. Valencia, Valencia (E), on 19-21 Jan. 2000,**  
**organised by Polytech. Univ. Valencia**

**1. Opening Formalities**

The Chairman, Prof. Luis M. Correia formally opened the meeting. After that, Prof. Narcis Cardona, the Local Organiser, addressed the plenary for a welcome message and details on the way the meeting was organised.

The Chairman acknowledged the attendance of Dr. Robert Bultitude, from CRC, Canada.

**2. Adoption of the Agenda**

The Agenda, shown in Annex A, was approved by unanimity.

**3. Approval of the Minutes of the 9th Meeting**

The minutes were approved, without corrections, unanimously.

**4. Status of the Action**

The Chairman informed that the number of signatory countries (18) remains unchanged, as well as the numbers of participating institutions and delegates (80 and more than 200, respectively).

Following information from the COST Telecom Secretariat, the Chairman informed that the TCT has changed its designation to TC TIST (Technical Committee on Telecommunications and Information Society Technologies).

The Chairman gave an update on the evaluation of the Action, which will be performed after its final meeting next April. Prof. Kalman Fazekas was already invited to attend the final meeting; although it is not yet confirmed that he will attend it, he has expressed his interest in doing so. The composition of the evaluation team is already known, since Prof. Fazekas was kind enough to let us know of it: the external evaluators will be Prof. Laszlo Pap (Tech. Univ. Budapest, Hungary) and Prof. Ramjee Prasad (Aalborg Univ., Denmark).

It is not clear yet if the Chairman will attend the June meeting of the TC TIST, since the Action is finished by then. Hence the Final Report, at least a draft version of it, needs to be ready by the next meeting, to be given to Prof. Fazekas.

A formal request to participate in the Action has been received from CRC of Canada. Since it will end in a few months, it was suggested that the institution requests its participation in the follow on Action, assuming it will be approved by the TC TIST.

## **5. Action Final Report**

The Chairman reminded the schedule approved at the last meeting:

- Sep. 1999: \_\_ establish the detailed contents of each Chapter / Section  
\_\_ identify contributors to the various Sections
- Jan. 2000: \_\_ first draft of the report is distributed  
\_\_ last contributions are made available
- Apr. 2000: \_\_ final version of the report is distributed

Every Section Editor (except for Section 3.5) has distributed, via email, the list of Temporary Documents to be included in the respective Section. Since there is superposition in some cases, there is a need to check for that in the text of the respective sections. Section Editors need to update the list of temporary documents to be included, and send the updated list to the Chairman, with copy to the Chapter Editors, by 2000/Jan/31 (Action Point 19).

The template file and a set of guidelines have been distributed by the Chairman. It was agreed that they need some more definitions (on the style of sub-sub-sections, referencing on Temporary Documents, and other issues). The Chairman will update them immediately after this meeting. It was also agreed that the UK English Dictionary should be used for checking the spelling.

Each Chapter Editor presented the status of his Chapter: Chapter 2 is half ready, Chapter 3 is still in a very initial phase, while Chapter 4 is very close to its final version. Some small changes have been done in the contents and editors for various Sections.

Section Editors were asked to send List of Figures and of Tables, as well as of Acronyms, together with the text of their contributions to Chapter Editors, in order to facilitate the elaboration of the final ones; the deadline is 2000/Feb/29 (Action Point 20). Chapter Editors will have to prepare their contributions, together with the aforementioned list, and send them to the Chairman by 2000/Mar/31 (Action Point 21).

Everyone should send to the Chairman, with copy to Section Editors, the list of correspondence between their Temporary Documents and papers in the open literature, like conferences and journals, until 2000/Feb/15 (Action Point 22). All delegates are also asked to send to the Chairman the acronym of their institution until 2000/Jan/31 (Action Point 23).

Following the changes and uncertainties presently existing in COST, it is not clear at this moment who will take care of printing the Final Report, i.e., either the Action Secretariat or the COST Telecom one.

As a final remark on this item, everyone was asked to keep within schedule, so that a draft version (very close to the final one) is available by the next meeting in April.

There is a need to issue an Administrative Final Report as well, which will be done by the Chairman. Nevertheless, all delegates continue to be requested to send information on examples of joint collaborations with colleagues of other institutions/countries coming from this Action, so that they can be shown in the this report; the deadline is 2000/Feb/14 (Action Point 14)

## 6. Budget and reimbursements

The Chairman reported on the budget for 1999: it has been decreased by 7 kEuro, since the COST Telecom Secretariat has informed that it considers that costs concerning publications (namely the Final Report) are no longer illegible for funding. This way, the present situation on the budget for 1999 is as follows:

- Initial budget for 1999 114 kEuro
- Specific for AP2000 15 kEuro
- Withdrawn for publications -7 kEuro
- Total 122 kEuro

Although some values are not yet final, expenses have been as follows:

- 7<sup>th</sup> MCM 4 339 Euro
- 8<sup>th</sup> MCM 29 308 Euro
- 9<sup>th</sup> MCM 13 265 Euro
- TCT 1 268 Euro
- STMs 2 515 Euro
- Workshop 14 000 Euro
- Secretariat 25 000 Euro
- AP2000 15 000 Euro
- Total 104 695 Euro

These values are provisional ones since the Action Secretariat did not receive yet some documents concerning reimbursements. Nevertheless, there will be a small surplus, basically due to the fact that the expenses of 9<sup>th</sup> MCM were about half of the usual value, because it was held in a very central place in Europe, thus many delegates took the train instead of the airplane. Hence, there will be a short budget for some more STMs, which has to be spent until the end of March.

It is expected that 80 % of the 92 kEuro of the budget (the 2<sup>nd</sup> Grant of 1999) will be transferred soon. Once it is received, reimbursements will be performed.

As far as the specific budget for the AP2000 conference, 15 kEuro, the Chairman reminded that half will be transferred to the Conference Secretariat, from which 3 registration and banquet fees of persons from the Action will be paid (Profs. Luis M. Correia and Ernst Bonek, and the winner of the Student Best Paper Award within the Action), while the other half is to pay for travel expenses of people from the Action. After some discussion it was decided that this budget is to pay for the travel expenses of the aforementioned 3 persons, plus other students from the Action that have papers accepted at the conference. Students should send the files of the accepted papers to the Chairman until 2000/Jan/31 (Action Point 18), so that the Best Paper is awarded; the committee that will judge this award will be composed by the WGs Chairmen, plus the Action Chairman and Vice-Chairman. The corresponding tickets need to be bought until 2000/Feb/29, so that the expenses are still illegible for the 1999 budget.

The COST Telecom Secretariat has informed that, since the end of 1999, all COST countries, except Croatia, Malta, Turkey and Switzerland, are entitled to reimbursement of travel expenses, according to the usual rules.

As for this meeting, reimbursements will be done directly by the COST Telecom Secretariat. The Action Secretariat will collect all forms and documents, and send the whole package to Brussels.

Still no news have been received concerning the budget for 2000.

## **7. Short-Term Missions**

Reports from the remaining persons that went on STMs were presented to the plenary.

Since there will be still a short budget for some more STMs, but that needs to be spent until 2000/Mar/31, applications should be sent to the Chairman until 2000/Jan/31 (Action Point 7).

## **8. Proposal of a Follow-on Action**

The Chairman informed that the MoU and its Technical Annex of the proposal for a new Action was submitted in time to the TC TIST meeting on 1999/Oct/28-29. No decision on the approval of the proposal was taken at this meeting. However, the Chairman has been formally invited to present the proposal at the next TC TIST meeting, to be held in Brussels on 2000/Mar/01.

The rules concerning the approval of new Actions state that a decision is taken only after the previous one has been evaluated, hence this reinforces the need to finish the Final

Report in due time, i.e., until the next meeting, so that the new Action can start in a few months from now, without a major discontinuity between the present and the new Action.

## **9. Presentation and Discussion of Documents**

A total of 35 Temporary Documents, which are listed in Annex B, were distributed, being discussed at the Plenary and at the three WGs, Annex C.

## **10. Liaisons with other International Bodies**

Reports from the following liaisons were given:

- SMT/METAMORP – Mr. Per Lehne  
The project will finish in the next month.
- ACTS/MEDIAN – Mr. Jörg Pamp  
The project has finished.

## **11. Future Meeting and Workshop**

The next meetings will be held according to the following:

- 11<sup>th</sup> MCM and Final Workshop, hosted by Telenor, in Bergen, Norway, from Wednesday - 2000/Apr/26 - 9:00 to Friday - 2000/Apr/28 - 17:00

Following the decision to have the Workshop dedicated to the problem of the mutual influence between the user's head and the mobile phone's antenna, an invitation was sent to the Chairman of COST 244 bis (which deals with the biomedical effects); he replied that, in principle, their Action will join ours in this event, but details still have to be clarified.

Since the Workshop is dedicated mainly to the areas dealt with in WG2, it was decided that the other WGs will also their discuss technical documents during the 2<sup>nd</sup> day of the workshop, their contributions being included in an annex of the finalreport.

It was also decided that during the MCM that the WGs chairmen will present the challenges for the next project, to be discussed by all delegates.

## **12. Any Other Business**

The Action Points from this meeting are as follows:

<b>No.</b>	<b>Action</b>	<b>Who</b>	<b>Deadline</b>
1	Send information on www address to the <i>Webmaster</i>	Those who still have not done it.	ASAP
2	Send files with abstracts of TDs to the <i>Webmaster</i>	Those who still have not done it.	ASAP
5	Send reports from Liaisons to the <i>Chairman</i>	Liaisons Rapporteur	2000/Jan/31
7	Send proposals for Short-Term Missions to the <i>Chairman</i>	All	2000/Jan/31
8	Check information contained on the www site, and send corrections to the <i>Webmaster</i>	All	ASAP
14	Send list of joint collaboration results within the project to the <i>Chairman</i>	All	2000/Feb/14
17	Submit papers to the PIMRC conference	All	2000/Feb/25
18	Send files of papers accepted for the AP2000 Conference to <i>Chairman</i>	Students	2000/Jan/31
19	Send updated list of TDs to be included in the Section to <i>Chairman</i> with copy to <i>Chapter Editors</i>	Section Editors	2000/Jan/31
20	Send files with contributions (text, plus list of figures, tables and acronyms) to Final Report to <i>Chapter Editors</i>	Section Editors	2000/Feb/29
21	Send files with contributions (text, plus list of figures, tables and acronyms) to Final Report to <i>Chairman</i>	Chapter Editors	2000/Mar/31
22	Send correspondences between TDs and papers in the open literature to <i>Chairman</i> with copy to <i>Section Editors</i>	All	2000/Feb/15
23	Send acronym of the institution to <i>Chairman</i>	All	2000/Jan/31

24	Submit papers to the final Action Workshop	All	2000/Mar/20
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### **15. Close of the Meeting**

The meeting was attended by a total of 71 people, Annex D. The Chairman thanked the Local Organiser for hosting the meeting, and all delegates for their participation, and formally closed it.

## **Annex A**

# **Agenda**

1. Opening formalities
2. Adoption of the Agenda
3. Approval of the Minutes of the 9th Meeting in Leidschendam
4. Status of the Action
5. Action Final Report
6. Budget and reimbursements
7. Short Term Missions
8. Proposal of the follow up Action
9. Presentation and discussion of documents
10. Liaisons with other international bodies
11. Future meetings and workshop
12. Any other business
13. Close of Meeting

## Annex B

### List of Documents

TD(00)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
001	Propagation in Road Tunnels: Influence of the Traffic Conditions and Channel Characterisation for Adaptive Antennas	Martine Liénard, Samuel Betrencourt, Pierre Degauque	University of Lille	France	2
002	Adaptive Array Processing for Time Division CDMA Utilizing Multi-Step Joint Detection	Martin Weckerle, Tobias Weber, Paul W. Baier, Jochen Oster	University of Kaiserslautern	Germany	1
003	New Heuristic Method for Frequency Assignment	Martin Hellebrandt, Hans Heller	Siemens	Germany	3
004	Statistical Channel Modelling Based on Raytracing Simulations	Jann E. Dietert	Technical University of Aachen	Germany	2
005	Stochastic Channel Model for Outdoor Applications Based on Raytracing Simulations	Jann E. Dietert	Technical University of Aachen	Germany	2
006	Channel Capacity Evaluation of Multi-Element Antenna Systems Using a Spatial Channel Model	Alister Burr	University of York	UK	P
007	Evaluation of Space-Time Codes	Alister Burr	University of York	UK	1
008	Comparison of Propagation Models for Small Urban Cells in GSM900 and 1800	Joao Chaves, Pedro Oliveira, Luis M. Correia	IST - Technical University of Lisbon	Portugal	2, 3
009	Investigation of the Characteristics of Measured Delay Power Density Spectra for the 5.2 GHz Indoor Radio Channel.	Torsten Englert, Ralf Kattenbach, Henning Früchtling	University of Kassel	Germany	2
010	Sector and Polarisation Dependent Wideband Indoor Propagation Channel Measurements at 5.1 GHz	Alain Sibille	ENSTA	France	2
011	Modelling and Measurements of EM-Wave Propagation in the Berlin Subway	Dirk Didascalou	Universität Karlsruhe	Germany	2
012	A Statistical Model for Connectivity Between Mobile and Base Stations. Part 2	John Orris, Stephen K. Barton	University of Manchester	UK	1, 3
013	Bandwidth-independent Fading Characterisation	Henrik Asplund	Ericsson Research	Sweden	2
014	A Novell Approach in the Determination of Visible Surfaces in 3D Vector Geometries for Ray-Optical Wave Propagation Modelling.	Jürgen Maurer	University of Karlsruhe	Germany	2, 3

TD(00)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
015	A Model for Quick Calculation of Power Delay Profiles in Geometrically Simple Environments.	Jan Hansen, Michael Nold, Hansruedi Benedickter, Marcel Kossel	Swiss Federal Institute of Technology (ETH)	Switzerland	2
016	Performance of Directed Retry in a Mobile Radio System: the Impact of Propagation	Roberto Verdone, Alberto Zanella	University of Bologna	Italy	3
017	Smart Antenna Concepts for the UMTS Terrestrial Radio Access	Andreas Jarosch, Dirk Dahlhaus, Zhenlan Cheng	Swiss Federal Institute of Technology (ETH)	Switzerland	P
018	Wideband Channel Sounder for Time-Variant Indoor Radio Channels.	Ralf Kattenbach, Dieter Weitzel	University of Kassel	Germany	2
019	Performance of Turbo-Coded OFDM	Alister Burr, George White	University of York	UK	1
020	Comparison of Angular Dispersion Metrics in Synthetic and Measured Radio Channels.	Patrick Eggers	Aalborg University	Denmark	1, 2
021	Characterisation of Telia Scattered Field Test Room by Use of 3D Radio Environment Measurements	Mikael B. Knudsen, Gert F. Pedersen, Bo Olsson	Bosch Telecom Danmark, CPK / Aalborg University, Telia Research	Denmark, Sweden	2
022	Integrated Antennas for Mobile Communication Handsets.	Marta Martínez-Vázquez, David Sánchez-Hernández	Technical University of Valencia, Technical University of Cartagena	Spain	2
023	Chip Level Simulation of the Downlink in UTRA-FDD	J.J.Olmos, S. Ruiz	Universitat Politècnica de Catalunya (UPC)	Spain	P
024	Statistical Characteristics of Indoor Radio Propagation in NLOS Scenarios	Ralf Heddergott, Pascal Truffer	Swiss Federal Institute of Technology (ETH)	Switzerland	2
025	Tapped Delay Line Channel Models at 5.3 GHz in Indoor Environments.	Xiongwen Zhao, Jarmo Kivinen, Pertti Vainikainen	Helsinki University of Technology	Finland	2
026	Required Network Size for System Simulations in UMTS FDD Uplink.	Thomas Neubauer, Thomas Baumgartner	Technische Universität Wien	Austria	3
027	N-MSK Adaptive Modulation Techniques in Slow Rayleigh Fading Channel	Tomaz Javornik, Gorazd Kandus	Institut Jozef Stefan	Slovenia	1
028	Outage Probabilities of Maximal Ratio Combining Systems in an Exponentially Correlated Nakagami Fading With Multiple Interferers	Juan Reig, Narcis Cardona	Technical University of Valencia	Spain	2, 3

TD(00)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
029	Proactive Dynamic Resource Distribution Based on Borrowing and Control Engineering Methods for GSM - Like Systems	Nabil Elouardi, Jan Steuer, Markus Radimirsch, Holger Fette, Klaus Jobmann	University of Hannover	Germany	3
030	Measurements and Predictions of the Local Mean Power and Fast Fading Statistics Indoor Wireless Environments	Rafael P. Torres, Susana Loredo, Luis Valle, Marta Domingo	University of Cantabria	Spain	2
031	Comparison of Ray-Tracing Results With indoor Measurements	Thomas Zwick	University of Karlsruhe	Germany	2
032	Coupling Between GSM Base-Station Antennae on the Same Metallic Tower	Sylvie Tiertant	TDF-C2R	France	2
033	Radiation Efficiency of Handheld Phones	Gert F. Pedersen	Aalborg University	Denmark	2
034	Downlink Beamforming for Systems With Frequency Division Duplex (FDD)	Andreas Zwick	T-Nova	Germany	3
035	Modelling Unification Workshop II (on Micro and Pico Cells)	Martin Steinbauer, Jann E. Dieter, Torsten Engler...	T.U. Wien, T.U. Aachen, Ericsson, ETH	Austria, Germany, Sweden, Switzerland	2

## Annex C

### Sessions Schedule

	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
9:00 / 10:30	<b>Plenary</b>	<b>WGs 1, 2, 3</b>	<b>WGs 1+3, 2</b>
10:30 / 12:30	<b>WGs 1, 2, 3</b>	<b>WGs 1, 2, 3</b>	<b>Plenary</b>
14:00 / 15:30	<b>WGs 1+3, 2</b>	<b>Plenary</b>	
16:00 / 17:30	<b>WGs 1, 2 + 3</b>	<b>Plenary</b>	

## Annex D

### Attendance List

Country	Name	Affiliation
Austria	Ernst Bonek	INTHF / TU Wien
	Hermann Buehler	Ingenieurbüro Dr. Bühler
	Andreas F. Molisch	INTHF / TU Wien
	Thomas Neubauer	INTHF / TU Wien
	Martin Steinbauer	INTHF / TU Wien
Belgium	Emmanuel Van Lil	K.U.Leuven
Canada	Robert J.C. Bultitude	Communications Research Centre
Denmark	Jørgen Bach Andersen	Aalborg University
	Gert F. Pedersen	Aalborg University
	Klaus Pedersen	Aalborg University
Finland	Jarmo Kivinen	Helsinki Univ. of Technology
	Jaakko Talvitie	Elektrobit
France	Pierre Degauque	University of Lille
	Cyril Delemazure	TDF-C2R
	Martine Lienard	University of Lille
	Alain Sibille	ENSTA
	Sylvie Tiertent	TDF-C2R
Germany	Andreas Czyllwik	T-Nova Deutsche Telekom
	Jann E. Dietert	IHF RWTH Aachen
	Andreas Eisenblaetter	ZIB
	Nabil Elouardi	University of Hannover,
	Torsten Englert	University of Kassel
	Henning Fruechting	University of Kassel
	Hans Heller	Siemens
	Ralf Kattenbach	University of Kassel
	Thomas Kürner	E-Plus Mobilfunk
	Jüergen Maurer	University of Karlsruhe
	Joerg Pamp	IMST
	Jochen Schiller	University of Karlsruhe
	Matthias Schneider	IMST
	Jan Steuer	University of Hanover
	Werner Teich	University of Ulm
Martin Weckerle	University of Kaiserslautern	
Thomas Zwick	University of Karlsruhe	
Ireland	Saul Torrico	Comsearch
Italy	Eleni Brisku	CSELT
	Vittorio Degli-Esposti	DEIS, University of Bologna
	Andrea Di Rocco	Ericsson Telecomunicazioni
	Daniele Disco	CSELT
	Laura Dossi	CNR-CSTS, Politecnico di Milano
	Maurizio Magarini	Politecnico di Milano
Daniele Tortora	Siemens ICN	

	Roberto Verdone	CSITE-CNR, University of Bologna
	Alberto Zanella	CSITE-DEIS, University of Bologna
The Netherlands	Wim Kotterman	KPN Research
Norway	Ragnar Eckhoff	Telenor R&D
	Per H. Lehne	Telenor R&D
Poland	Marcin Ney	PTK Centertel
Portugal	Luis M. Correia	IST - Tech. Univ. Lisbon
	Joao Chaves	TMN
	Antonio Rodrigues	IST - Tech. Univ. Lisbon
Slovenia	Kandus Gorazd	Institut Jozef Stefan
	Tomaz Javornik	Institut Jozef Stefan
Spain	Narcis Cardona	Technical University of Valencia
	Jose Jimenez	Telefónica
	Leandro Juan	Technical University of Valencia
	Francisco López	Technical University of Valencia
	Marta Martínez-Vázquez	Technical University of Valencia
	Juan Reig Pascual	Technical University of Valencia
	Silvia Ruiz Boque	UPC
Sweden	Henrik Asplund	Ericsson Research
	Christian Bergljung	Telia Research
	Bo G. H. Olsson	Telia Research
Switzerland	Jan C. Hansen	ETH Zürich
	Ralf Heddergott	ETH Zürich
	Andreas Jarosch	ETH Zürich
	Jean-Frédéric Wagen	EIA-FR/HTA-FR
UK	Stephen K. Barton	Manchester University
	Kevin Boyle	Philips
	Alister Burr	University of York
	John Orriss	Manchester University