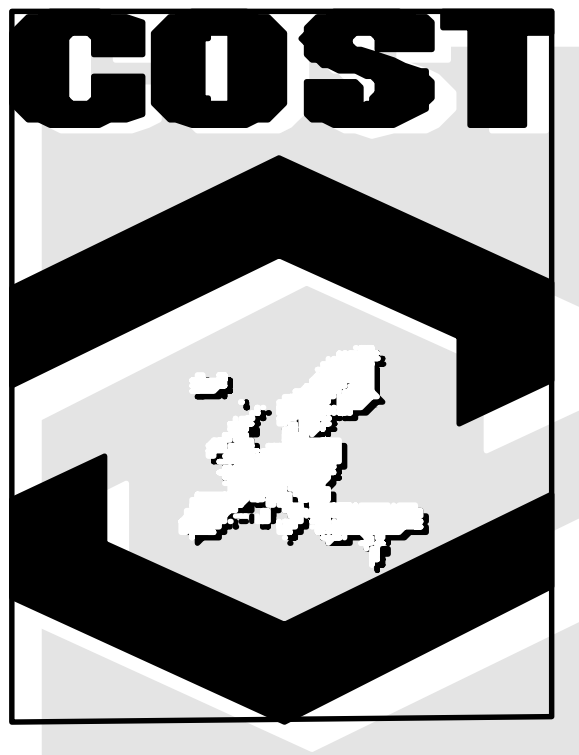


**European Co-operation in the Field of Scientific and Technical Research**



**COST 259**

**Wireless Flexible Personalised Communications**

Minutes of the 8th Meeting of the Management Committee,  
held in Vienna (A) on 22-23 April 1999

**COST 259**  
**Minutes of the 8th Meeting of the Management Committee,**  
**held at Mobilkom, Vienna (A), on 22-23 Apr. 1999,**  
**organised by the Technical University of Vienna**

**1. Opening Formalities**

The meeting was formally opened by the Chairman, Prof. Luis M. Correia, after which Prof. Ernst Bonek, the Local Organiser, addressed the plenary for a welcome message, and details on the way the meeting was organised.

**2. Adoption of the Agenda**

The Chairman asked for the introduction of an additional point in the Agenda, due to the fact that he had forgotten that elections should be held for the 3<sup>rd</sup> year term, according to the rules for Actions within COST. This was accepted by unanimity, and it was introduced as a point after *Future Meetings and Workshop*. The final version of the Agenda is shown in Annex A.

**3. Approval of the Minutes of the 7th 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 since the last meeting, but that the numbers of participating institutions and delegates have increased (80 and more than 200, respectively).

**5. Action Extension / Final Report**

The Chairman informed that the CSO is not favouring extensions longer than 1 year (for budget reasons), thus it would not be wise to apply for a long extension of the Action. After some discussion, it was agreed to apply for an extension of 4 months, up to Apr. 2000, on the following grounds: although the official starting date is 10<sup>th</sup> Dec. 1996, the kick-off meeting was really on 3<sup>rd</sup> Apr. 1997, due to the illness of Mr. Damosso (the former Action Chairman); this has delayed the work for 4 months, since the first working meeting took place only by the

beginning of May 1997, thus applying for a 4 months extension is just to keep the Action within its 3 year timetable as it was initially foreseen. The Chairman will write a request to the TCT applying for the extension, so that it can be included in the Agenda of its next meeting, to be held in Visegrad (Budapest, Hungary) by the beginning of June. This way, it is expected that by the next meeting of the Action a decision on the extension will be already known. All delegates should send suggestions supporting the Action extension to the Chairman, until the end of the month (Action Point 10).

The writing of the Final Report was also discussed since, even if the extension of 4 months is granted, there is not too much time to produce it. It was decided that it should be structured as a book, i.e., with topics grouped by Chapters and Sections, rather than just a collection of individual or institutional contributions. As a first proposal of contents, it was decided that each Chapter should correspond to the area of each Working Group (WG), with the possible exception of WG 2, which may originate two (one dealing with antennas and the other with propagation); a final decision has to be taken by the WGs. The contents and editors of the various Chapters and Sections are to be discussed at the WGs' level, and the following deadlines were approved, assuming that the extension is granted:

- Apr. 1999: \_\_ establish the first draft of contents  
\_\_ appoint Chapters / Sections editors
- 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

Everyone should commit to this schedule, and prepare their contributions to the Final Report to be given to the Chapter / Section editors by Dec. 1999 (Action Point 11)

The issue of a new proposal for a follow-up of the present Action was also brought up, since it usually takes some months to prepare it, to get it approved by the TCT and the CSO, and to have its MoU signed. It was decided that all those interested in joining the new Action should send their areas of work, as well as proposals for a name, to the Chairman until the end of May (Action Point 12). A first draft of the proposal for a new Action will be discussed at the next meeting, so that the final version is available after that.

## **6. COST 231 Book**

The Chairman reported that he had been informed by the COST Telecom Secretariat that the printing of the book is almost finished, and that the copies should be available in a few days. It was agreed with COST Telecom Secretariat that the distribution will be done by the Action Secretariat at IST, not only to COST 231 and 259 participants but to TCT members

and Chairmen of other COST Actions as well, besides others interested in having a copy of the book.

Dr. David Bacon (Radiocommunications Agency, UK) asked if the book was under any copyright, thus preventing from copying it. Since no one knew the answer, the Chairman will inquire about it. Nevertheless, all wishing to receive additional copies of the book should send their request to the Action Secretariat.

## **7. Budget and reimbursements**

The Chairman informed that a total of 16 applications for Short-Term Missions have been received, from which 12 were already formally approved, and 4 are still under evaluation. There is still budget for a few more missions, but the applications have to be received until the end of May, so that they can still be processed until the end of June, which were the conditions for the additional funding for Short-Term Missions within the Action (Action Point 7).

The Chairman also informed that the reimbursements concerning the Thessaloniki meeting were already processed. They have practically spent the 24 kEuro, corresponding to 80 % of the advanced payment of 30 kEuro concerning the budget for 1999, which means that any additional reimbursements will have to wait for the rest of the funding.

The Chairman reported that the remaining 23 kEuro from the 1998 budget plus the additional 11.5 kEuro were not received yet, which means that the reimbursement for the Short-Term Missions will have to wait until the funds are received from Brussels. All the documents concerning the expenses of 1998 have already been sent to the COST Telecom Secretariat, being expected that money will be received soon.

As far as the budget for 1999 is concerned, the Chairman informed that a provisional amount of 114 kEuro has been granted (which includes the advanced 30 kEuro). Since this value is similar to the one of 1998, it is expected that it will make possible to comply with the most important items of the budget; this means that there is a possible budget for Short-Term Missions, but this will have to be analysed.

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

A total of 43 Temporary Documents, which are listed in Annex B, were distributed, being discussed at the Plenary and at the three WGs, Annex C.

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

This point was postponed due to the lack of time.

## **10. Future Meetings and Workshop**

The next meetings will be held according to the following:

- \_ 9<sup>th</sup> MCM, hosted by KPN, in Leidschendam, The Netherlands, from Thursday - 1999/Sep/23 - 9:00 to Friday - 1999/Sep/24 - 17:00.
- \_ 10<sup>th</sup> MCM, hosted by Univ. Valencia, in Valencia, Spain, from Wednesday - 2000/Jan/19 - 9:00 to Friday - 2000/Jan/21 - 12:00.
- \_ 11<sup>th</sup> MCM and Final Workshop, in a location still to be defined, 2000/Apr. on the week starting 24<sup>th</sup>.

A decision on the local and date of the 11<sup>th</sup> MCM and on the organisation of the Final Workshop will be taken at the next meeting.

The Chairman reminded that the decision on the acceptance of papers submitted to VTC'99-Fall will take place in the weekend immediately after this meeting.

## **11. Election of the Chairmen for the 3<sup>rd</sup> Year Term**

All Chairmen as well as the Vice-Chairman were re-elected by unanimity:

- Chairman: Prof. Luis M. Correia (IST - Tech. Univ. of Lisbon, P)
- Vice-Chairman: Dr. Jean-Frédéric Wagen (Swisscom, CH)
- WG 1 Chairman: Prof. Stephen K. Barton (Univ. of Leeds, UK)
- WG 2 Chairman: Prof. Ernst Bonek (Tech. Univ. of Vienna, A)
- WG 3 Chairman: Dr. Thomas Kürner (E-Plus, D)

## **12. Any Other Business**

Prof. Luis Correia thanked all delegates that have contributed to and participated in the 2<sup>nd</sup> COST 259 Workshop, Joint COST 259/260 Workshop, which took place immediately before this MCM, thus contributing for its success, not only in terms of programme (Annex E) but also in terms of attendance, with a total of participants of 125 (Annex F).

The Chairman reminded also that there is a Call for Papers for the AP2000 Conference, to be held in Davos, Switzerland, by 9-14 Apr. 2000, with the deadline on 1<sup>st</sup> July 1999 (Action Point 13).

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 <i>Webmaster</i>	Those who still have not done it.	ASAP
2	Send files with abstracts of TDs to <i>Webmaster</i>	Those who still have not done it.	ASAP
7	Send proposals for short missions to <i>Chairman</i>	All	99/May/31
8	Check information contained on the www site, and send corrections to <i>Webmaster</i>	All	ASAP
10	Send suggestions supporting the Action extension to the <i>Chairman</i>	All	99/Apr/30
11	Send contributions to the Final Report to <i>Chapter / Section editors</i>	All	99/Dec/31
12	Send areas of work, as well as proposals for a name, for the follow-up Action to the <i>Chairman</i>	All	99/May/31
13	Submit papers to the AP2000 Conference	All	1999/Jul/01

### **13. Close of the Meeting**

The meeting was attended by a total of 118 peoples, 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 7th Meeting in Thessaloniki
4. Status of the Action
5. Action extension / final report
6. COST 231 book
7. Budget and reimbursements
8. Presentation and discussion of documents
9. Liaisons with other international bodies
10. Future meetings and workshop
11. Election of chairmen for the 3<sup>rd</sup> year term
12. Any other business
13. Close of Meeting

## Annex B

### List of Documents

TD(99)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
027	Workgroup 1 - 7th Meeting Report	S. Barton	Leeds University	United Kingdom	Pl.
028	Workgroup 2 - 7th Meeting Report	E. Bonek	Technical University of Vienna	Austria	Pl.
029	Workgroup 3 - 7th Meeting Report	T. Kürner	E-Plus Mobilfunk	Germany	Pl.
030	A 3-D Extrapolation Model for Base Station Antennas' Radiation Patterns	F. Gil, A.R. Claro, J.M. Ferreira, C. Pardelinha and L.M. Correia	IST - Technical University of Lisbon	Portugal	2
031	Obtaining accurate predictions with an untuned semi-deterministic model used with an advanced statistical database	M. Basile	Ericsson Telecomunicazioni	Italy	3
032	Frequency Planning with respect to Interference Minimisation in Cellular Radio Networks	D. Beckmann and U. Killat	Technical University of Harburg-Hamburg	Germany	3
033	Simulation and Measurement of the Interference Rejection Capability of Handset Antenna Diversity	C. Braun	Allgon Mobile Communications	Sweden	Pl.
034	Combined performance for joint detection and turbo-codes in CDMA	A.G. Burr and G.P. White	University of York	United Kingdom	1
035	Assessment of a Propagation Model for Crossroads in Micro-cells	A.R. Claro, J.M. Ferreira and L.M. Correia	IST - Technical University of Lisbon	Portugal	2, 3
036	Cellular Planning in Urban Regular Structures for Millimetre Waveband Mobile Broadband Systems	C. Bedini and L.M. Correia	IST - Technical University of Lisbon	Portugal	2, 3
037	Spatial and Temporal Traffic Distribution Models for GSM	S. Almeida, J. Queijo and L.M. Correia	IST - Technical University of Lisbon	Portugal	3
038	An Experimental Investigation of the Bistatic Specular Scattering From Rough Dielectric Surfaces in the 60 GHz Band	E. Glangetas, B. Foulonneau and J.-C. Bie	France Telecom - CNET	France	2
039	Measurement-based characterisation of time-variant directional radio channels	D. Hampicke, A. Richter, A. Scheider, G. Sommerkorn and R. Thomä	Illmenau University of Technology	Germany	2
040	Adaptive Antennas for the TDD mode of UTRA	C. Anton-Haro, X. Mestre and J.R. Fonollosa	Polytechnic University of Catalonia	Spain	Pl.

TD(99)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
041	Validation and Adaptation of Models of Urban Propagation to Land and Irregular Construction	F. Isasi	Universidad de Vigo	Spain	2, 3
042	Multi-amplitude MSK signal performance in nonlinear channels	T. Javornik and G. Kandus	Jozef Stefan Institute	Slovenia	1
043	Mobile location using coverage information: Theoretical analysis and results	J. Jimenez, E. Alonso, H. Gonzalez, M. Romero and I. Berberana	Telefonica	Spain	3
044	Performance of Parallel Interference Cancellation in UTRA FDD Uplink	K. Kansanen	University of Oulo	Finland	1
045	Statistical Distribution of Incident Waves to Mobile Antenna in Microcellular Environment at 2.15 GHz	K. Kalliola and H. Laitinen	Helsinki University of Technology / Nokia / VTT	Finland	2
046	A Run-time Optimised Adaptive Antenna Array Processor for GSM	A. Kuchar, M. Taferner, E. Bonek, M. Tangemann and C. Hoek	Technical University of Vienna / Alcatel Telecom Corporate Research Center	Austria / Germany	1, 2
047	A Run-time Efficient 3D Propagation Model for Urban Areas Including Vegetation and Terrain Effects	T. Kürner	E-Plus Mobilfunk	Germany	2, 3
048	Reducing Out-of-band Emissions Due to Nonlinearities in OFDM Systems	M. Lampe and H. Rohling	Technical University of Harburg-Hamburg	Germany	1
049	Channel Modelling for the Propagation in Tunnel	M. Lienard and P. Degauque	University de Lille	France	Pl.
050	Nonlinear Modelling and Simulation of Active Array Antennas	S.L. Loyka	Swiss Federal Institute of Technology	Switzerland	2
051	System Level Channel Model for Wireless ATM Performance Evaluation	J. Meierhofer and U.P. Bernhard	ETHZ	Switzerland	1, 3
052	Analysis of Scattered Field Handset Antenna Measurements	B. Olsson	Telia Research	Sweden	2
053	Directional wideband channel measurements in urban and suburban areas	M. Pettersen, P.H. Lehne, J. Noll, O. Rostbakken, E. Antonsen and R. Eckhoff	Telenor	Norway	2
054	MAI Mitigation in DA ML Carrier Phase Recovery Loops for DS-CDMA Systems	L. Schumacher and L. Vandendorpe	Université Catholique de Louvain	Belgium	1
055	Evaluation of Handset Antenna Configurations	K. Sulonen and P. Vainikainen	Helsinki University of Technology	Finland	2
056	Downlink Beamforming for FDD Mobile Radio Systems based on Spatial Covariances	W. Utschick and J.A. Nossek	Munich University of Technology	Germany	1, 2

TD(99)	Title	Author(s)	Affiliation(s)	Country(ies)	WG
057	A Frequency-Domain Based Broadband Coverage Model	I. De Coster, B. Estevez, E.H. Van Lil and F Perez-Fontan	K.U. Leuven / University of Vigo	Belgium / Spain	3
058	Power and Traffic Driven Handover Algorithms in Microcellular Networks with Non-Uniform Traffic Distribution	R. Verdone and A. Zanella	University of Bologna	Italy	3
059	A Novel Multi-Antenna TD-CDMA Receiver Concept Incorporating the Estimation and Utilisation of Spatial Interference Covariance Matrices	M. Weckerle and A. Papathanassiou	University of Kaiserslautern	Germany	1, 2
060	Antenna Pattern Optimisation For Base Stations In Urban Microcellular Systems	V. Degli Esposti, G. Falciasecca, M. Fullone and G. Riva	University of Bologna / Fondazione Ugo Bordoni	Italy	2
061	COST 259 SWG 2.1 Mission Report: "Modelling Unification Workshop"	M. Steinbauer, H. Asplund, I. de Coster, D. Hampicke, R. Heddergott, N. Lohse and A. Molisch	Technical University of Vienna / / K.U. Leuven / / ETHZ	Austria / Sweden / Belgium / Germany / Switzerland	2
062	Comparison between Unitary ESPRIT and SAGE for 3-D Channel Sounding	M. Tschudin, C. Brunner, T. Kurpjuhn, M. Haardt and J. Nossek	ETHZ / TU Muenchen / Siemens	Switzerland / Germany	2
063	Real-Time Antenna Test Range for the Mobile Telephony Market	P.O. Iversen and P. Gareau	Satimo	France	Pl.
064	Indoor Propagation Measurements at 5 GHz Band	J. Kivinen and P. Vainikainen	Helsinki University of Technology	Finland	2
065	Robust DOA Estimation Using a Polarisation Sensitive Array for Mobile Communications	D. Segovia, R. Lorenzo and M. Sierra	Universidad Carlos III de Madrid	Spain	2
066	On the Diffraction by Two Staggered Half Planes	C. Bergljung	Telia Research	Sweden	2
067	Propagation Measurements and Spatial Channels for HIPERLAN 2	P. Karlsson and J. Pamp	Telia Research / IMST	Sweden / Germany	1, 2
068	Effects of Downlink Intercell Interference on MC-CDMA System Performance	M. Nunes, J. Santos, A. Rodrigues, J. Punt, H. Nikokaar and R. Prasad	IST - Technical University of Lisbon / Delft University of Technology	Portugal / The Netherlands	1, 3
069	Bodyloss for Handheld Phones	G.F. Pedersen, K. Olesen and S.L. Larsen	Aalborg University	Denmark	2

## Annex C

# Sessions Schedule

<b>Thursday</b>		<b>Friday</b>	
		8:30 / 10:30	<b>Plenary, SWG 2.1</b>
10:30 / 12:30	<b>Plenary</b>	11:00 / 12:30	<b>WGs 1+3, 2</b>
14:00 / 15:30	<b>WGs 1+2, 3</b>	14:00 / 15:30	<b>WGs 1, 2, 3, SWG 2.2</b>
16:00 / 17:30	<b>WGs 1, 2+3</b>	16:00 / 17:30	<b>WGs 1, 2, 3, SWG 2.2</b>

## Annex D

### Attendance List

Country	Name	Institution
Austria	Holger Arthaber	INTHF/TU-WIEN
	Ernst Bonek	INTHF/TU-WIEN
	Hermann Bühler	Ingenieurbüro Dr. Bühler
	Andreas Gehring	INTHF/TU-WIEN
	Martin Hagenauer	INTHF/TU-WIEN
	Helmut Hofstetter	INTHF/TU-WIEN
	Klaus Hugl	INTHF/TU-WIEN
	Herbert Jäger	INTHF/TU-WIEN
	Klaus Kopsa	INTHF/TU-WIEN
	Alexander Kuchar	INTHF/TU-WIEN
	Juha Laurila	INTHF/TU-WIEN
	Andreas Molisch	INTHF/TU-WIEN
	Thomas Neubauer	INTHF/TU-WIEN
	Heinz Novak	INTHF/TU-WIEN
	Christian Pommer	INTHF/TU-WIEN
	Günther Pospischil	INTHF/TU-WIEN
	Martin Steinbauer	INTHF/TU-WIEN
	Martin Strasser	INTHF/TU-WIEN
Manfred Taferner	INTHF/TU-WIEN	
Martin Toeltsch	INTHF/TU-WIEN	
Belgium	Laurent Schumacher	Université Catholique Louvain
	Emmanuel Van Lil	K.U.Leuven
Croatia	Juraj Bartolic	University of Zagreb
	Davor Bonefacic	University of Zagreb
Denmark	Jørgen Bach Andersen	CPK/Aalborg University
	Klaus I. Pedersen	CPK/Aalborg University
	Troels B. Sorensen	CPK/Aalborg University
Finland	Ari Alastalo	Nokia Research Center
	Kimmo Kalliola	Nokia & Helsinki University of Technology
	Kimmo Kansanen	University of Oulu
	Heikki Laitinen	VTT Information Technology
	Kati Sulonen	Helsinki University of Technology
	Jaakko Talvitie	Elektrobit
	Pertti Vainikainen	Helsinki University of Technology
	Graeme Woodward	Centre for Wireless Communications
France	Jean-Claude Bic	France Telecom/CNET
	Bertrand Foulonneau	France Telecom
	Mohamed Karray	France Telecom
	Sylvie Tiertant	TDF-C2R
	Raphael Visoz	France Telecom/CNET

Germany	Frank Althaus	Lehrstuhl für Nachrichtentechnik
	Dirk Beckmann	Technical University of Hamburg
	Andreas Eisenblätter	ZIB
	Henning Früchtling	University of Kassel
	Andreas Hayn	Technische Universität Darmstadt
	Martin Hellebrandt	RWTH-Aachen
	Reiner Hoppe	University of Stuttgart
	Ralf Kattenbach	University of Kassel
	Thomas Kürner	E-Plus
	Mattias Lampe	Technical Univ. of Hamburg-Harburg
	Frank Layer	University of Kassel
	Kurt Majewski	Siemens
	Jörg Pamp	IMST
	Matthias Schneider	IMST
	Wolfgang Utschick	TU München
	Martin Weckerle	University of Kaiserslautern
Thomas Zwick	University of Karlsruhe	
Greece	Athanasios Kanatas	National Tech. University of Athens
	Takis Mathiopoulos	University of Athens
Ireland	Cyril Burkley	University of Limerick
	Peter Cullen	Trinity College Dublin
	Saul Torrico	Comsearch
Italy	Oreste Andrisano	University of Bologna
	Massimo Basile	Ericsson Telecomunicazioni
	Eleni Brisku	CSELT
	Vittorio Degli-Esposti	University of Bologna
	Daniele Disco	CSELT
	Laura Dossi	Consiglio Nazionale Ricerche
	Michele Guelfi	Ericsson Telecomunicazioni
	Maurizio Magarini	Politecnico di Milano
	Jan Marquardsen	Telital
	Claudio Mattiello	CSELT
	Guido Tartara	Politecnico di Milano
	Daniele Tortora	Italtel
Roberto Verdone	CSITE-CNR/University of Bologna	
Netherlands	Marc Van den Homberg	KPN Research
Norway	Per H. Lehne	Telenor R&D
	Magne Pettersen	Telenor R&D
	Olaf Rostbakken	Telenor
Poland	Marcin Ney	PTK Centertel
Portugal	Sandra Almeida	Telecel
	Ana Claro	TMN
	Luis M Correia	IST – Tech. Univ. of Lisbon
	José Fernandes	IT – Universidade de Aveiro
	José Ferreira	IST – Tech. Univ. of Lisbon

	Francisco Gil	Optimus
	António Morgado	IT - Universidade de Aveiro
	Custódio Peixeiro	IST – Tech. Univ. of Lisbon
	José Queijo	IST – Tech. Univ. of Lisbon
	António Rodrigues	IST – Tech. Univ. of Lisbon
Slovenia	Gorazd Kandus	IJS
Spain	Silvia Ruiz Boque	UPC
	Jose Jimenez	Telefonica
	Fernando Perez-Fontan	University of Vigo
Sweden	Henrik Asplund	Ericsson
	Claes Beckman	Allgon
	Christian Bergljung	Telia Research
	Pär Berglund	Allgon
	Olle Edvardsson	Allgon
	Peter Karlsson	Telia Research
	Per Ödling	LTH
	Bo Olsson	Telia Research
	Björn Ottersten	Royal Institute of Technology
Switzerland	Patrick Barbey	Wavecall Wireless Consulting
	Juerg Meierhofer	ETH Zurich
	Karim Rizk	Wavecall Wireless Consulting
	Martin Tschudin	ETH Zurich
	Jean-Frederic Wagen	Swisscom
UK	David F. Bacon	Radiocommunications Agency
	Stephen K. Barton	Leeds University
	Kevin Boyle	Philips Research
	Alister Burr	University of York
	John Hudson	Nortel Networks
	Stephen Kendall	Motorola
	David Lister	Vodafone
	Robert Piechocki	University of Bristol
	Paul Sheehan	Aethos
George Tsoulos	University of Bristol	

## Annex E

### Joint COST 259 / 260 Workshop Programme

# COST 259/260 Joint Workshop Sessions - Schedule

## Tuesday, April 20 1999

**9:00 - 9:05 Welcome: Ernst Bonek**

**9:05 – 10:30 Morning session / 1st half -- Chairman: Ernst Bonek**

- *Luis M. Correia (Chairman of COST 259), "Presentation of the Action COST 259"*
- *Robert J. Piechocki and George Tsoulos, "Combined GWSSUS and GBSR Channel Model with Temporal Variations"*
- *Alister G. Burr, "Evaluation of Influence of Directional Antennas Using a Spatial Channel Model"*

**11:00 - 12:30 Morning session / 2nd half -- Chairman: Luis M. Correia**

- *Joseph C. Liberti and B. John Koshy, "Spatial Channel Measurements and Modelling for Smart Antenna Systems" (invited)*
- *Frank Layer and Henning Früchtling, "Impacts of Movement on the Directional Properties of Indoor Radio Channels Based on a 3D Ray-Tracing Model"*

**14:00 - 15:30 Afternoon session / 1st half -- Chairman: Joseph C. Liberti**

- *Preben Mogensen, Klaus I. Pedersen, Frank Frederiksen and Bernard Fleury, "Measurements, Channel Statistics, and Performance of Adaptive Base Station Antennas" (invited)*
- *Martin Nilsson, Björn Lindmark, Mikael Ahlberg, Mikael Larsson and Claes Beckman, "Measurements of the Spatio-Tmeporal Polarization Characteristics at the 1800 MHz Band"*

**16:00 - 17:30 Afternoon session / 2nd half -- Chairman: Preben Mogensen**

- *Graeme Woodward and Jaakko Talvitie, "Wideband Spatial and Temporal Channel Modelling for ISM Bands"*
- *Per H. Lehne, Olaf Rostbakken and Magne Pettersen, "Estimating Smart Antenna Performance From Directional Radio Channel Measurements"*
- *Jose Fernandes, Jose R. Pereira, Paulo Jesus and Jose Ferreira, "Adaptive Array Antenna with Electronically Steerable Beam"*

# COST259/260 Joint Workshop

## Session - Schedule

Wednesday, April 21 1999

**9:00 - 10:30 Morning session / 1st half – Chairman: Peter Balling**

- *Antoine G. Roederer (Chairman of COST 260), "Presentation of COST Action 260 - Smart Antennas: Computer Aided Design & Technology"*
- *Will N. Keizer, "An Overview of RF and Adaptive Algorithm/Digital Beam Forming Hardware and Technology in COST 260"*
- *Guy A.E. Vandenbosch and Juan R. Mosig, "Antenna Modeling Efforts within the Antenna COST Actions 245 and 260"*

**11:00 - 12:30 Morning session / 2nd half -- Chairman: Will N. Keizer**

- *Hans Steyskal, "Aspects of Digital Beamforming and Adaptive Antennas" (invited)*
- *Klaus Hugl, "Frequency Transformation Based Downlink Beamforming"*

**14:00 - 15:30 Afternoon session / 1st half -- Chairman: Hans Steyskal**

- *Björn Ottersten, "Antenna Arrays for Wireless Communications - Models and Algorithms from a Systems Perspective" (invited)*
- *Klaus Kopsa, Juha Laurila, Robert Schürhuber and Ernst Bonek, "Semi-Blind Adaptive Antenna Detector with Subspace Tracing"*

**16:00 - 17:30 Afternoon session / 2nd half -- Chairman: Björn Ottersten**

- *Francois Delaveau, Francois Pison, Olivier Lambron and Cedric Demeure, "Smart Antennas for GSM Interference Resolution and Network Coverage Validation"*
- *Lester K. Chan, Andrew S. Wright and P. Takis Mathiopoulos, "Capacity Improvement Using Beamforming Antennas in IS-95 Cellular CDMA Systems"*
- Plenary discussion and wrap-up

## Annex F

### Joint COST 259 / 260 Workshop Attendance List

Country	Name	Institution
Austria	Holger Arthaber	INTHF/TU-WIEN
	Ernst Bonek	INTHF/TU-WIEN
	Hermann Bühler	Ingenieurbüro Dr. Bühler
	Leopold Faltin	Siemens
	Andreas Gehring	INTHF/TU-WIEN
	Martin Hagenauer	INTHF/TU-WIEN
	Helmut Hofstetter	INTHF/TU-WIEN
	Klaus Hugl	INTHF/TU-WIEN
	Herbert Jäger	INTHF/TU-WIEN
	Klaus Kopsa	INTHF/TU-WIEN
	Erwin Kubista	Joanneum Research
	Alexander Kuchar	INTHF/TU-WIEN
	Juha Laurila	INTHF/TU-WIEN
	Andreas Molisch	INTHF/TU-WIEN
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