3GPP/PCG Meeting#2
Sophia Antipolis,
6-7 July 1999

3GPP/PCG#2(99)18
1 July 1999
page 1 of 14

Source: **Secretary**

Title: **Draft Report from OP Meeting#1**

Agenda item: **4**

Document for:

Decision	
Discussion	
Information	**X**

3GPP Organizational Partners
Meeting#1
Seoul, Korea,
27-28 May 1999

3GPP_OP#1(99)25
8 June 1999
page 2 of 7

Source:	**Secretary**	
Title:	**Draft summary minutes, decisions and actions from 3GPP Organizational Partners Meeting#1, Seoul, 27-28 May 1999**	
Agenda item:	**all**	

Document for:

Decision	**X**
Discussion	
Information	

1 Chairman's opening remarks

Dr Wee (Chairman) opened the meeting and welcomed the participants to Seoul. The list of participants is given at **Annex E**. [Note: although this was a meeting of the 3GPP Organizational Partners, the Market Representation Partners had also been invited to take part.]

2 Welcome by host and practical arrangements

Mr Dong Sum Lee, Secretary General of TTA, gave an explanation of the deployment of CDMA based systems in Korea and stressed the importance to Korea of obtaining globally harmonized standards for the 3rd Generation. He extended a warm welcome to the participants on behalf of TTA.

3 Adoption of the Agenda

The agenda was presented and approved as can be found in **Annex A** [3GPP_OP#1(99)01].

4 3GPP progress since December 1998

4.1 Progress in PCG

Mr Rosenbrock (PCG Chairman) gave an explanation of the results obtained during the first meeting of the PCG which took place in Fort Lauderdale from 1-4 March 1999 [3GPP_OP#1(99)20]. Good progress had been made during that meeting during which the Chairmen and Vice Chairmen for the four TSGs had been elected.

4.2 Progress in TSGs

The TSG SA Chairman had provided a Management Report covering the activities which had taken place since December 1998 [3GPP_OP#1(99)16]. This Management Report included a status list of all work items within 3GPP indicating their current status and target dates for completion.

Mr Sasaki commented on the conclusions drawn from the Management Report which had indicated that the work was proceeding according to schedule, adding that a number of draft specifications within TSG RAN had missed their target for approval. Mr Sasaki added that to overcome this problem ARIB would continue to work in parallel and to feed their results into 3GPP to ensure the completion of the first release by the end of 1999 [3GPP_OP#1(99)14].

Revised Terms of Reference
TSG SA had submitted revised Terms of Reference for approval by the Organizational Partners [3GPP_OP#1(99)04]. The following points were discussed which TSG SA were requested to take into account in preparing a further revised version for approval:

- The definition of the term "USIM" is inconsistent with the definition used by the remaining TSGs. TSG SA should ensure that a consistent definition is used throughout.

- The use of the terms "User", "User Equipment", "Terminal" and "Terminal Equipment" is inconsistent throughout the Terms of Reference for the TSGs. TSG SA should ensure that consistent definitions are used throughout.

- The sentence under Project Co-ordination, should indicate that the co-ordination role has been delegated to TSG SA by the PCG. [In reaching this conclusion a discussion took place concerning the inclusion or exclusion of the term "technical" co-ordination. Reference was made to the task assigned to TSG SA by the PCG [3GPP_OP#1(99)21].]

Action OP1/1: TSG SA to revise their Terms of Reference taking into account the comments raised during the OP#1 meeting.

TSG RAN had submitted revised Terms of Reference for approval by the Organizational Partners [3GPP_OP#1(99)05]. The following points were discussed which TSG RAN were requested to take into account in preparing a further revised version for approval:

- The definition of the term "USIM" is inconsistent with the definition used by the remaining TSGs. TSG SA should ensure that a consistent definition is used throughout.

- The use of the terms "User", "User Equipment", "Terminal" and "Terminal Equipment" is inconsistent throughout the Terms of Reference for the TSGs. TSG SA should co-ordinate the consistent use of these definitions.

- The terms OMCB and node B should be defined.

- Clarification is needed that TSG RAN work only on the radio access part of terminals and that there is no overlap with the work of TSG T.

- The sentence which can be found in the TSG T Terms of Reference should be added to the TSG RAN Terms of Reference as follows: "Liaising with the other TSGs, in particular TSG SA, to ensure a successful overall technical co-ordination."

Action OP1/2: TSG RAN to revise their Terms of reference taking into account the comments raised during the OP#1 meeting.

TSG T had submitted revised Terms of Reference for approval by the Organizational Partners [3GPP_OP#1(99)06]. The following points were discussed which TSG T were requested to take into account in preparing a further revised version for approval:

- The definition of the term "USIM" is inconsistent with the definition used by the remaining TSGs. TSG SA should ensure that a consistent definition is used throughout.

- The use of the terms "User", "User Equipment", "Terminal" and "Terminal Equipment" is inconsistent throughout the Terms of Reference for the TSGs. TSG SA should co-ordinate the consistent use of these definitions.

Action OP1/3: TSG T to revise their Terms of reference taking into account the comments raised during the OP#1 meeting.

Ciphering algorithm for 3G

TSG SA had proposed a process for developing a ciphering algorithm for 3rd Generation mobile systems [3GPP_OP#1(99)07]. The proposed process involved the use of ETSI SAGE to prepare the algorithm with participation from Individual Members from other Partners. A cost estimate had been provided for the development of the algorithm, and emphasis placed on the urgent need for this work to commence. This proposal was discussed at length with a number of concerns being raised on the need for the final product to be exportable worldwide. The proposal was also made the algorithm could be prepared in exactly the same way as for the GSM algorithm since that method was well known and proven. This would mean that the algorithm could be financed and prepared by ETSI and that the results would be licensed by ETSI to the remaining Partners. The ownership of the final result was also debated in conjunction with the method for funding this work. In conclusion, the urgent need for this work to be undertaken was fully endorsed. However, SA3 were requested to provide more details on the requirements for the algorithm together with an assessment of the export difficulties which could be encountered. SA3 should also provide more details on how the algorithm would be developed. The Secretary was requested to consider further the funding issues for this work based on the cost estimates that had already been provided. The PCG was requested to take care of this subject during their next meeting which will take place on 6/7 July.

Action OP1/4: SA3 to provide more details on the requirements for the algorithm together with an assessment of the export difficulties which could be encountered, and further explanation of the proposed method for development.

> **Action OP1/5:** Secretary to consider further the method for funding the development of the ciphering algorithm using the cost estimates provided by SA3.

Liaising with the ITU

Mr Sasaki presented the reply which had been sent by ARIB to ITU-R in response to the liaison statement that they had sent to 3GPP Organizational Partners [3GPP_OP#1(99)12]. The response had been formulated by TSG RAN and had been submitted to ITU-R in the name of ARIB. China had also formulated a reply to the liaison statement but this was not fully in line with the view developed by TSG RAN. This response raised the question of whether TSGs were permitted to liaise directly with the ITU and confirmation was given that under the current working procedures, direct liaison with the ITU was not permitted.

Mr Sasaki also presented a reply that had been sent by ARIB to a similar liaison statement received from ITU-R concerning the preference for the inclusion of references to 3GPP specifications in ITU Recommendations or whether the full text should be incorporated [3GPP_OP#1(99)13]. The question of ownership and copyright was also raised. It was noted that 3GPP would not publish any results but that the results would be published by each Organizational Partner. The choice for reference or inclusion still remained. After several drafting sessions the following text was agreed as a response to ITU-R which Mr Ohlsen (ARIB) agreed to present to the next meeting of ITU-R TG8/1:

> *"The SDOs participating in 3GPP have joint ownership of the Technical Specifications and Technical Reports developed within 3GPP. They are ready to grant licenses including copyright, free of charge to ITU, to include SDOs deliverables in whole or in part into ITU Recommendations on a reciprocal basis. The participating SDOs will retain the right to maintain their deliverables.*
>
> *3GPP, which is not a legal entity, does not publish it's Technical Specifications and Technical Reports. 3GPP products will be transposed into SDO deliverables exclusively by the participating SDOs. Each participating SDO determines the publication and distribution policy of its transposed deliverables."*

> **Action OP1/6:** Hakan Ohlsen to present agreed text to ITU-R TG8/1 concerning copyright of 3GPP specifications.

An attempt was made to develop a response concerning the use of references as opposed to the inclusion of full text within ITU Recommendations. After repeated trials it was not possible to agree on the text to be sent to ITU-R and the matter was abandoned. Each Organizational Partner was left to respond to the liaison statement in their own manner.

The Chairman concluded that due to the difficult nature of the discussions that had taken place during this meeting, and the considerable time that had been consumed, TSGs should refrain from preparing draft responses to liaison statements received from the ITU.

> **Decision OP1/1:** TSGs should not prepare draft responses to liaison statements received from the ITU. Responses should be formulated by Individual Members who are also members of the ITU.

5   Requests for 3GPP Partnership/Observership

GSM Association

An application had been received from the GSM Association for Market Representation Partnership in 3GPP. This application had been processed electronically and had already been approved [3GPP_OP#1(99)08]. Mr Stocks, on behalf of the GSM Association, gave an explanation of their work emphasising the large operator membership that they represented.

A signing ceremony took place during which formal signature of the 3GPP Agreement was made by all Partners.

Decision OP1/2: GSM Association accepted as a Market Representation Partner in 3GPP.

CWTS
An application had been received from the China Wireless Telecommunication Standardization Group (CWTS) for Organizational Partnership in 3GPP [3GPP_OP#1(99)09]. Madam Shumin Cao gave an explanation of the role of CWTS confirming that all of the criteria were met for 3GPP Partnership [3GPP_OP#1(99)11]. It was noted that an IPR Policy had not yet been established within CWTS and the ETSI delegation encouraged the use of the same text as had been established within ETSI. The application was approved on the understanding that a compatible IPR Policy would be established by CWTS.

A signing ceremony took place during which formal signature of the 3GPP Agreement was made by all Partners.

Decision OP1/3: CWTS (China) accepted as an Organizational Partner in 3GPP.

TSACC
An application for Observership in 3GPP had been received from the Telecommunications Standards Advisory Council of Canada (TSACC). The application had been processed electronically and had already been approved.

Decision OP1/4: TSACC (Canada) accepted as an Observer in 3GPP.

6 Role of Market Representation Partners

Dr Eylert gave a presentation of the work and aims of the UMTS Forum [3GPP_OP#1(99)19]. This included an explanation of the actions taken by the UMTS Forum to provide comprehensive input to the work of 3GPP.

Mr Hadden explained the work of the GSA by means of a presentation [3GPP_OP#1(99)18]. This included details of the manufacturer expectations for the 3rd Generation and the growing membership of the GSA.

Mr Stocks gave an explanation of the work of the GSM Association and the importance they placed on consolidating operator requirements for 3GPP. Mr Stocks explained some previous concerns that the Association had had concerning the role of the Market Representation Partners and the involvement that they had in the decision making process. One remaining request was for the Market Representation Partners to be considered for invitation to future meetings of the Organizational Partners and to be able to bring two representatives rather than one. This proposal was considered and approved.

Decision OP1/5: MRPs to be considered for invitation to future meetings of the Organizational Partners and to be able to bring two representatives.

7 Maintenance of the 3GPP Description and Working Procedures

7.1 Review of the 3GPP decision making process

A contribution had been received from T1 on the role and status of the Market Representation Partners within 3GPP [3GPP_OP#1(99)24]. The contribution sought to obtain the best use of the

expertise available within the Market Representation Partners. Due to the late arrival of the document it was agreed to submit this to the PCG for further consideration.

> **Action OP1/7:** Contribution from T1 concerning the role of Market Representation Partners to be submitted to PCG for further consideration [3GPP_OP#1(99)24].

Additional information was also provided by T1 concerning unresolved issues that had been raised during the creation of 3GPP [3GPP_OP#1(99)22].

7.2   Proposed changes to 3GPP Description and Working procedures

Mr Woinsky explained the results that had been achieved by the ad hoc group created by the PCG for the further development of the 3GPP Working Procedures. The ad hoc group had discussed the matter electronically and had held one physical meeting which had led to a number of proposals and several matters to be clarified by the Organizational Partners [3GPP_OP#1(99)15 and 15rev1].

1) A discrepancy existed between the Working Procedures and the 3GPP Agreement concerning the acceptance of new Partners. It was agreed that the acceptance of a new Partner was considered as a modification to the agreement and as such must be approved by all Partners. It was agreed to align the documentation accordingly.

2) The approval of revisions to the Working Procedures currently rests with the Organizational Partners, but after a short discussion it was agreed that this task should be passed to the PCG.

3) The decision making process currently being used entitles each Individual Member to an un-weighted vote. Consideration had been given to the use of a weighted system but this had been rejected by the ad hoc group. A voluntary scheme was currently in place where multinational members only exercised a single vote rather than exercising all of the votes to which they are entitled. The voluntary use of this method of voting had proven successful but it was considered to be too early for such a system to be made mandatory. It was agreed that a more widespread voluntary application of the system should be encouraged and that any changes to the foirmal rules should be deferred to a later date.

4) The need to introduce a new category of "Guests" was discussed and approved. The "Guests" would be granted temporary participation rights in the TSGs.

5) The matter of responding to liaisons received from the ITU was discussed but it was agreed that the existing rules were perfectly clear and that no changes were necessary.

6) The use of principal and alternate voting representatives was discussed but no conclusions were drawn.

The ad hoc group was requested to prepare revised Working Procedures for approval at the next meeting of the PCG taking into account the decisions made during this meeting.

> **Action OP1/8:** The ad hoc group on Working Procedures to prepare revised Working Procedures for approval at the next meeting of the PCG taking into account the decisions made during OP#1.

A contribution had been received from ARIB, questioning what process should be followed were work is proposed in 3GPP which is outside of the 3GPP scope [3GPP_OP#1(99)10]. After a short discussion some text was agreed which defines clearly the process to be followed:

"3GPP should define whether the proposed technical item is out of scope of 3GPP and justify its decision

If the work item is outside of the scope of 3GPP, and where a common global solution is desired, 3GPP should recommend how that should can be achieved

If the proposed technical item has no impact on global roaming and circulation of terminals, or has no adverse impact on the future development of the standard, such a technical item can be defined by the interested SDO not by 3GPP.

The above definitions should be applied by the 3GPP TSGs on a case by case basis."

Decision OP1/6:	Process agreed for the handling of proposed work items which fall outside of the scope of 3GPP.

7.3   Approval of revisions

There were no approved revisions during this meeting since the matter was passed to PCG.

8   Resources for 3GPP Support Team

Mr Scrase gave an explanation of the work being undertaken by the Mobile Competence Centre which included the 3GPP Support Team [3GPP_OP#1(99)23]. This included a summary of the resources made available by ETSI for 1999 and the use of those resources during the first quarter. There was still a shortfall in resources reported by the TSGs and this shortfall was hoped to be made good by contributions to be received from the Organizational Partners.

8.1   Budgetary requirements and sources of funding

A discussion took place on the funding requirements for the Support Team, and whilst the quality of the support being received was not in question, some further detail was required in terms of financial planning. In particular, the T1 delegation requested that account be taken of the accommodation and infrastructure costs and that they be included within the budget estimates for the year 2000, in order that the true cost of running the activity can be identified. On the basis of more complete estimates it would be possible for the Organizational Partners to agree a method of sharing the cost. It was also stressed that a financial separation should be shown between the cost of supporting 3GPP and that of supporting SMG. On the basis of this additional information a more complete financial model should be prepared for the year 2000.

Action OP1/9:	Mr Scrase to prepare a financial model for 3GPP support for the year 2000 including a full analysis of the operational costs.

Mr Scrase added that the pledge of financial support from the Organizational Partners for the year 2000 would be gratefully received, although consideration should be given to providing some financial assistance for 1999 to enable the demands from the TSGs to be met without delay.

ARIB and TTA confirmed that they would be providing one expert each to work on a voluntary basis within the Support Team and that they should commence work in the near future.

TTC commented that they would consider providing a financial contribution to assist in the running of the support team.

T1 commented that their preference would be for the total cost of the operation to be equally split between the Organizational Partners.

8.2 Organization of Support Team

Dr Bailey (T1) introduced a proposal for a Support Team Committee to be established within the PCG to oversee the operation and to audit the financial accounts of the Mobile Competence Centre [3GPP_OP#1(99)17]. This proposal was briefly discussed but was referred to the PCG for further discussion.

> **Action OP1/10:** T1 proposal for a Support Team Committee to be established, to be further considered within PCG [3GPP_OP#1(99)17].

9 Date of next meeting

The next OP meeting will take place in conjunction with the PCG meeting scheduled for 20-21 December 1999.

10 Any Other Business

Informal information was provided on the recommendations that had been agreed by the Operators Harmonization Group which had meet in Toronto during the same week as this OP meeting. The information was noted.

The text of a press release was prepared during this meeting for release by the Organizational Partners.

Closing remarks

A vote of thanks was recorded for Dr Wee for his chairmanship during this meeting.

There being no further business the meeting was closed.

Annex A   Adopted agenda

1	Chairman's opening remarks
2	Welcome by host / practical arrangements
3	Adoption of the Agenda
4	3GPP Progress since December 1998 4.1 Progress in PCG 4.2 Progress in TSGs
5	Requests for 3GPP Partnership/Observership
6	Role of Market Representation Partners
7	Maintenance of 3GPP Description and Working Procedures 7.1 Review of the 3GPP decision making process 7.2 Proposed changes to 3GPP Description and Working Procedures 7.3 Approval of revisions
8	Resources for 3GPP Support Team 8.1 Budgetary requirements and sources of funding 8.2 Organization of Support Team
9	Date of next meeting
10	Any other Business

Annex B   List of Decisions

N°.	DECISION
D-OP1/1	TSGs should not prepare draft responses to liaison statements received from the ITU. Responses should be formulated by Individual Members who are also members of the ITU.
D-OP1/2	GSM Association accepted as a Market Representation Partner in 3GPP.
D-OP1/3	CWTS (China) accepted as an Organizational Partner in 3GPP.
D-OP1/4	TSACC (Canada) accepted as an Observer in 3GPP.
D-OP1/5	MRPs to be considered for invitation to future meetings of the Organizational Partners and to be able to bring two representatives.
D-OP1/6	Process agreed for the handling of proposed work items which fall outside of the scope of 3GPP.

Annex C   List of Actions

N°.	RESPONSIBLE	ACTION
A-OP1/1	TSG SA	TSG SA to revise their Terms of Reference taking into account the comments raised during the OP#1 meeting.
A-OP1/2	TSG RAN	TSG RAN to revise their Terms of reference taking into account the comments raised during the OP#1 meeting.
A-OP1/3	TSG T	TSG T to revise their Terms of reference taking into account the comments raised during the OP#1 meeting.
A-OP1/4	SA3	SA3 to provide more details on the requirements for the algorithm together with an assessment of the export difficulties which could be encountered, and further explanation of the proposed method for development.
A-OP1/5	Secretary	Secretary to consider further the method for funding the development of the ciphering algorithm using the cost estimates provided by SA3.
A-OP1/6	Mr Ohlsen	Hakan Ohlsen to present agreed text to ITU-R TG8/1 concerning copyright of 3GPP specifications.
A-OP1/7	Secretary	Contribution from T1 concerning the role of Market Representation Partners to be submitted to PCG for further consideration [3GPP_OP#1(99)24].
A-OP1/8	Mr Woinsky	The ad hoc group on Working Procedures to prepare revised Working Procedures for approval at the next meeting of the PCG taking into account the decisions made during OP#1.
A-OP1/9	Secretary	Mr Scrase to prepare a financial model for 3GPP support for the year 2000 including a full analysis of the operational costs.
A-OP1/10	Secretary	T1 proposal for a Support Team Committee to be established, to be further considered within PCG [3GPP_OP#1(99)17].

Annex D   List of documents

Doc. No.	Document title	Source	Agenda item No.
01r1	Draft Agenda	Secretary	3
02	List of Participants	Secretary	all
03	List of Documents	Secretary	all
04	Revised Terms of Reference for TSG SA	Secretary	4.2
05	Revised Terms of Reference for TSG RAN	Secretary	4.2
06	Revised Terms of Reference for TSG T	Secretary	4.2
07	Financing requirements for 3GPP ciphering development work	TSG SA Chairman	4.2
08	Request from GSM Association for Market Representation Partnership in 3GPP	Secretary	5
09	Request from GSM CWTS for Organizational Partnership in 3GPP	Secretary	5
10	How to handle the items which are out of the scope of 3GPP	ARIB	7.2
11	China Wireless Telecommunication Standard Group (CWTS)	CWTS (Cao Shumin)	5
12	ARIB response to liaison statement received from ITU-R TG8/1	ARIB	4.2
13	Liaison Statement received from TSG RAN to the 3GPP Organizational Partners	ARIB	4.2
14	The Current Situation of ARIB Specification Development Process for IMT-2000	ARIB	4.2
15r1	Proposed changes to 3GPP Working Procedures	Mr Woinsky	7.2
16	3GPP TSG-SA Management Report	TSG SA Chairman	4.2
17	Proposal for Administration of the 3GPP Support Team	T1 (Chuck Bailey)	8.2
18	Slides presented by GSA	Mr Hadden	5
19	Slides presented by UMTS Forum	Dr Eylert	5
20	PCG1(99)20 Draft summary of PCG1	Secretary	4.1
21	PCG1(99)16r1 Managing the TSG Project Co-ordination role.	Secretary	4.1
22	T1 positions presented to the Partners meeting held in Copenhagen, December 1998	T1 (Asok Chatterjee)	7.1
23	Slides presented by ETSI Secretariat on 3GPP Support	ETSI (Adrian Scrase)	8
24	Contribution on MRP status	T1	7.1

Annex E   List of Participants

Org	Name	E-mail
ARIB	Kenji Ito	Kenji.ito@skk.siemens.co.jp
ARIB	Shin-ichi Itoh	Rty976@email.sps.mot.com
ARIB	Yutaka Maeda	Maeda@arib.or.jp
ARIB	Hakan Ohlsen	Hakan.ohlsen@lme.ericsson.se
ARIB	Sadaatsu Okasaka	Sadaatsu_okasaka@cm.tcd.hitachi.co.jp
ARIB	Hideo Okinaka	Okinaka@ma.kcom.ne.jp
ARIB	Hidetoshi Saito	h-saito@arib.or.jp
ARIB	Akio Sasaki	Sasaki@arib.or.jp
ARIB	Kazuyoshi Sato	Ka.sato@cew.melco.co.jp
ARIB	Mauri Ukonmaanaho	Mauri.ukonmaanaho@nokia.com
ARIB	Takanori Utano	Utano@wsp.yrp.nttdocomo.co.jp
ARIB	Kunio Watanabe	Watanabe@mcws.ts.fujitsu.co.jp
ARIB	Yukio Yoshimura	Yosimura@mcs.mt.nec.co.jp
CWTS	Qian Hang	Bzhch@public.bta.net.cn
CWTS	Cao Shumin	Csm@bupt.edu.cn
ETSI	Thomas Beijer	Thomas.a.beijer@telia.se
ETSI	Kari Lang	Kari.j.lang@nokia.com
ETSI	K. Lathia	Kiritkumar.lathia@italtel.it
ETSI	Karl Heinz Rosenbrock	Karl-heinz.rosenbrock@etsi.fr
ETSI	Adrian Scrase (Secretary)	Scrase@etsi.fr
GSA	Alan Hadden	GSAssoc@btinternet.com
GSM Association	Michael Stocks	Stocks_m@mtn.co.za
T1	Chuck Baily	Cbailey@tri.sbc.com
T1	Asok Chatterjee	Asok.chatterjee@ericsson.com
T1	Linda Hansen Melvin	Lmelvin@gsmna.com
T1	Mel Woinsky	Woinsky@nortelnetworks
TIA	Steve Dennett	QA1404@@email.mot.com
TIA	Susan Hoyler	Shoyler@tia.eia.org
TTA	Ho Kyu Choi	Choihk@telecom.samsung.co.kr
TTA	Myung Gook Jang	Mgjang@www.tta.or.kr
TTA	Ji-Eun Jeong	Jejeong@www.tta.or.kr
TTA	Dong Seung Kwon	Dskwon@amadeus.etri.re.kr
TTA	Hak Rim Kim	Hrkim@hansol.co.kr
TTA	Yeon Sang Koo	Hwkoo@hei.co.kr
TTA	Bong Kuk Lee	Bklee@www.tta.or.kr
TTA	Dong Do Lee	ddlee@sktelecom.com
TTA	Hee Joung Lee	Hjlee@lginfocomm.com
TTA	Keoung Hee Lee	Khlee@cc.rrl.go.kr
TTA	Moon Chul Lee	Leemch@www.tta.or.kr
TTA	Jeongmo Lim	Smile.Lim@nmp.nokia.com
TTA	SangKeun Park	Skpark@khgw.info.samsung.co.kr
TTA	Soon Chul Park	Pcspro@samsung.co.kr
TTA	Chang Ho Ryoo	Changho.ryoo@ekk.ericsson.se
TTA	Hyun Deuk Seo	Dragon1@kt.co.kr
TTA	Hong-Sub Shin	Hong@lgic.co.kr
TTA	Kyu Jin Wee (Chairman)	Kjwee@cc.rrl.go.kr
TTC	Nobuhiro Horisaki	Horisaki@ttc.or.jp

TTC	Yuzo Matsumoto	Matsumoto@hd.ts.fujitsu.co.jp
TTC	Yoshitomi Murai	Murai@lucent.com
TTC	Toru Owai	Ohwai@mcs.mt.nec.co.jp
TTC	Tatsumi Takabatake	Takabatake@mcs.abk.nec.co.jp
TTC	Hajime Yamada	h.yamada@hco.ntt.co.jp
TTC	Koji Yamamoto	Yamamoto@nw.yrp.nttdocomo.co.jp
TTC	Keiji Yoshino	yoshino@ttc.or.jp
UMTS Forum	Bernd Eylert	bernd.eylert@t-mobil.de