

3GPP2 TSG-P
Wireless Packet Data Networking

TITLE:

TSG-P Meeting Summary, Meeting #22

SOURCE:

Chair, 3GPP2 TSG-P



ELECTRONICS

Samsung Telecommunications America
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ABSTRACT:

This document contains the summary of the TSG-P meeting, which was held on February 12 -16, 2001 in Phoenix, AZ.

RECOMMENDATION:

Review for accuracy and amend as needed.

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**Wireless Packet Data Networking
Meeting Report, Meeting #22**

Date: February 12 – 16, 2001
 Location: Sheraton San Marcos Golf Resort & Conference Center
 One San Marcos Place Chandler, AZ 85225
 Chair: Haeng S. Koo, Samsung Electronics
 Phone: 972.761.7755
 E-mail: hskoo@sta.samsung.com

Quorum Members, Attendees, and Attendance Status

Organization	Attendee of this meeting	Last 4 Meetings Attended
3Com	Ed Campbell	#19 #20 #21 #22
Alcatel USA	Tom Tansil	#20 #21 #22
Certicom Corp	Dorothy Gellert	#20 #21 #22
Cisco	Rajesh Bhalla	#19 #20 #21 #22
Ericsson	Lila Madour	#19 #20 #21 #22
Hyundai Electronics		#20 #21
ETRI		#20
Fujitsu	Mamoru Higuchi	#19 #20 #21 #22
Hitachi		#19 #21
KDDI	Shuji Mijushima	#19 #20 #22
LG Electronics	Byung-Keun Lim	#20 #21 #22
Lucent Technologies	Tom Hiller	#19 #20 #21 #22
Mitsubishi Electric		#20 #21
Motorola	Wayne Bowen	#19 #20 #21 #22
NEC	Hirofumi Okata	#19 #22
Nokia	Thin Nguyenphu	#20 #21 #22
Nortel Networks	Kuntal Chowdhury	#20 #21 #22
Qualcomm Inc.	Raymond Hsu	#19 #20 #21 #22
Samsung Electronics	Haeng S. Koo	#19 #20 #21 #22
SK Telecom	Dongkie Lee	#20 #21 #22
Sprint PCS	Iris Zeng	#19 #20 #21 #22
Starent Networks	Paul Shieh	#21 #22
Sun Microsystems	Pat R. Calhoun	#20 #21 #22
Tantivy Communications	Howard Heller	#21 #22
Verizon Wireless		#20 #21

Others Present

Organization	Attendee
3Com	Mike Borella
Cisco	Glen Zorn
Ericsson	Lars-Erik Jonsson
Ericsson	Frances Lupien
Ericsson	Henrik Basilier
Ericsson	Jonas Wiorek
Fujitsu	Alan Hameed
Intel	Vineet Kumar
LG Electronics	Ki-Young Kim
Lucent Technologies	Mike McPheters
Lucent Technologies	Frank Alfano

Lucent Technologies	Mike Dolan
Motorola	Anda Farcasanu
Motorola	Baijun Zhao
Nokia	Craig Rhoades
Nokia	Ernie Tacsik
Samsung Electronics	Junhyuk Song
Samsung Electronics	Fabricio Velez

1

2 1. Call To Order and Opening Remarks

3 The meeting was called to order at 9:40 AM on February 12, 2001 at Sheraton San Marcos Golf Resort & Conference
4 Center in Chandler, AZ.

5 2. Attendance Registration

6 The attendance roster was circulated, and the names and organizations of the present are reflected above. The quorum list
7 stood at 24 member companies. With 19 member companies present, a quorum was declared. Starent Networks and
8 Tantivy Communications were added to the quorum list.

9 3. Review and Adoption of Agenda

10 The Chair introduced 3GPP2-P00-20010212-001 as the proposed agenda, which was approved as presented.

11 4. Contributions Assignment to Agenda Items

12 The following 35 contributions were submitted, numbered and assigned to the agenda:
13

Number	Title	Source	Agenda Item
3GPP2-P00-20010212-001	Proposed Agenda	Haeng Koo, Chair, Samsung	3
3GPP2-P00-20010212-002	Meeting Summary, Meeting #21	Haeng Koo, Chair, Samsung	5
3GPP2-P00-20010212-003	Correspondences	Haeng Koo, Chair, Samsung	6
3GPP2-P00-20010212-004	TSG-P Work Items	Haeng Koo, Chair, Samsung	10
3GPP2-P00-20010212-005	Service Differentiation of Simple IP and Mobile IP	Qualcomm, Raymond Hsu; Cisco Systems, Rajesh Bhalla	8A10
3GPP2-P00-20010212-006	PPP Resource Management at the PDSN	Cisco Systems, Rajesh Bhalla	8A4
3GPP2-P00-20010212-007	Fast Handoff in cdma2000 Wireless IP Networks -- PP Interface Stage-2 and Stage-3 Descriptions	Cisco Systems, Rajesh Bhalla	8A2
3GPP2-P00-20010212-008	AKA Support on DIAMETER	Lucent , Tom Hiller, Betsy Kidwell, Pete McCann	8B
3GPP2-P00-20010212-009	QoS Policy (Part 1, for Differentiated Services)	Lucent , Tom Hiller, Pete McCann	8A1
3GPP2-P00-20010212-010	RP Accounting Enhancement Requirements Discussion	Lucent , Tom Hiller, Mike Grinn	8A8
3GPP2-P00-20010212-011	Improvements to All-IP Advertising Agent NAM Text	Lucent , Tom Hiller, Mike Dolan	8B
3GPP2-P00-20010212-013	Dynamic home agent assignment with RADIUS based AAA server.	Nortel Networks, Kuntal Chowdhury, Serge Manning	8A5
3GPP2-P00-20010212-014	Accounting Considerations for Inter-PDSN Fast Handoff	Nortel Networks, Serge Manning, Kuntal Chowdhury	8A2
3GPP2-P00-20010212-015	Clarifications on the Verbose Accounting Attribute	Nortel Networks, Serge Manning, Kuntal Chowdhury	8A8
3GPP2-P00-20010212-016	ESN Needed in Packet Accounting	Sprint PCS, Iris Zeng, Mark Lipford	8A8
3GPP2-P00-20010212-017	0-byte Header Compression for cdma2000 Clarifications	Ericsson, Ulises Olvera-Hernandez, Francis Lupien, Lila	8A2

		Madour	
3GPP2-P00-20010212-018	End-to-End QoS model proposal for release B	Ericsson	8A1
3GPP2-P00-20010212-019	IPv6 in IS-835 release B	Ericsson	8A6
3GPP2-P00-20010212-020	Mobile IP versus Simple IP	Ericsson	8A10
3GPP2-P00-20010212-021	CDMA2000 Traffic classes, service instances and applied compression	Ericsson	8A2
3GPP2-P00-20010212-022	PDSN Resource Management	LG Electronics, Byung-Keun Lim	8A4
3GPP2-P00-20010212-023	Perfect header compression over the air link – r3	LG Electronics, Byung-Keun Lim	8A2
3GPP2-P00-20010212-024	Evaluation of the three proposals	LG Electronics, Byung-Keun Lim	8A2
3GPP2-P00-20010212-025	AAA server based Mobile DNS(MDNS) supporting IP push services	LG Electronics, Byung-Keun Lim	8A9
3GPP2-P00-20010212-026	Proposal of the guideline for IPv6	LG Electronics, Byung-Keun Lim	8A6
3GPP2-P00-20010212-027	Proxy DNS Update for Mobile Station	SK Telecom, Dongkie Lee, Sung Kim	8A9
3GPP2-P00-20010212-028	Optional treatment of voice media stream for multi-media communication over the air	Fujitsu, Mamoru Higuchi	8B
3GPP2-P00-20010212-029	Control of RAN service related parameters through AAA profiles	Motorola, Anda Farcasanu, Sebastian Thalanany	8A1
3GPP2-P00-20010212-030	Work plan for All-IP in TSG-P and TSG-S All-IP Ad hoc for consideration	Nokia, Thinh Nguyenphu	10
3GPP2-P00-20010212-031	WAP Push Architectural Overview	Fujitsu, Alan Hameed	8A9
3GPP2-P00-20010212-032	RP Accounting Enhancements Requirements Discussion	Cisco Systems, Rajesh Bhalla	8A8
3GPP2-P00-20010212-033	Discussion of Advertising Agent (ADA)	CommWorks, Mike Borella Ed Campbell	8B
3GPP2-P00-20010212-034	Service Differentiation problem between SIP and MIP	Samsung Electronics, Jun Hyuk Song, Chae Yong Chong, Sang Yong Moon	8A10
3GPP2-P00-20010212-035	Work Items for TSG-P Release C(P.S0001-B)	Haeng Koo, Chair, Samsung	10

1 5. Review of Meeting Reports

2 The Chair introduced “3GPP2-P00-20010212-002, Meeting Summary, Meeting #21,” and the contribution was accepted
3 with the following modifications:

- 4 ▪ Add joint meeting with TSG-A regarding fast handoff, and
- 5 ▪ Add Tantivy Communications in the attendance list.

6 6. Correspondence

7 The Chair presented the following correspondences:

- 8 ▪ To Frederic Leroudier, TSG-A Chair, regarding Addition of ESN to the Accounting Parameters,
- 9 ▪ From Frederic Leroudier, TSG-A Chair, regarding Fast Handoff Support,
- 10 ▪ From Hideo Okinaka, TSG-S Chair, regarding Header Compression for Multimedia, and
- 11 ▪ To George Turnipseed, TSG-A Chair and Jean Alphonse, TSG-C Chair, Re: Packet Data Inactivity.

12 7. Reports

13 Tom Hiller made a report on the IETF activities.

1 **8. Old Business**

2 **A. 3G Packet Data Technical Standard (Rel B)**

3 **1. QoS**

4 Tom Hiller presented 3GPP2-P00-20010212-009, QoS Policy (Part 1, for Differentiated Services). This contribution
5 proposes the QoS policy based on the IP and air QoS mapping for multiple service instances. This contribution was left
6 open since the QoS framework is not defined yet.

7 Lila Madour presented 3GPP2-P00-20010212-018, End-to-End QoS model proposal for release B. This contribution
8 presents possible end-to-end QoS scenarios for CDMA2000 and recommends a limited number of scenarios that would
9 provide a basis for supporting the remaining scenarios in the future. This contribution was left open.

10 Anda Farcasanu presented 3GPP2-P00-20010212-029, Control of RAN service related parameters through AAA profiles.
11 This contribution proposes a mechanism for controlling RAN data session related parameters through users profiles
12 provisioned at the AAA. Both of the functional areas presented, access and PDSN QoS coordination and variable values
13 for the inactivity timer, were left open. Operator input is needed at the next meeting whether the inactivity timer is
14 configurable on a user basis.

15 The TSG will define the QoS framework based on the requirements, for which Serge Manning volunteered to be the editor.
16 Serge will start email discussion on the QoS requirements.

17 **2. Support of multimedia services**

18 Francis Lupien presented 3GPP2-P00-20010212-017, 0-byte Header Compression for cdma2000 Clarifications. This
19 contribution provides further details on the operation of a ROCH based 0-Byte header compression profile for cdma2000.
20 Related to this contribution, Francis Lupien also presented additional information on the blanks and burst operation for a
21 ROHC based 0-byte header compression profile. These contribution was left open.

22 Byung-Keun Lim presented 3GPP2-P00-20010212-023, Perfect header compression over the air link – r3. This proposal
23 uses the signaling channel to carry the header control information instead of the PPP link. The TSG didn't see an
24 advantage of using the signaling link over the PPP link. This contribution was not accepted.

25 Byung-Keun Lim also presented 3GPP2-P00-20010212-024, Evaluation of the three proposals, for information only.

26 The TSG further discussed the requirements for the header compression algorithm. A list of requirements was selected
27 based on the IETF requirements [Requirements for robust IP/UDP/RTP header compression, <draft-ietf-rohc-rtp-
28 requirements-04.txt>] and additional ones discussed at the meeting. Glen Zorn was selected as an editor of the
29 requirements document. Members were asked to send him a description of their interesting requirement and the
30 justification. Once the requirements document is distributed, the TSG will discuss and decide on the requirements before
31 the next meeting.

32 Some of the members expressed that they were not ready to make decision and needed another meeting cycle to study the
33 two proposed algorithms. Header compression algorithm will be selected at the next meeting based on the requirements.
34 Ericsson and Lucent were requested to make another presentation on their algorithms.

35 Rajesh Bhalla presented 3GPP2-P00-20010212-007, Fast Handoff in cdma2000 Wireless IP Networks -- PP Interface
36 Stage-2 and Stage-3 Descriptions. This contribution was accepted as a new baseline for the PP Interface standard.

37 Serge Manning presented 3GPP2-P00-20010212-014, Accounting Considerations for Inter-PDSN Fast Handoff. Whether
38 the target PDSN need to send the air link record or not is an open issue. This contribution was left open.

39 Lila Madour presented 3GPP2-P00-20010212-021, CDMA2000 Traffic classes, service instances and applied compression.
40 This contribution presents the different traffic classes for CDMA2000 and their mapping into the different CDMA2000
41 service instances. This contribution is for information only.

42 **3. Broadcast/Multicast**

43 There was no contribution on this topic.

1 **4. Mobile IP enhancements**

2 Rajesh Bhalla presented 3GPP2-P00-20010212-006, PPP Resource Management at the PDSN. This contribution discusses
3 various methods to achieve optimal utilization of PPP session related resources.

4 Byung-Keun Lim presented 3GPP2-P00-20010212-022, PDSN Resource Management. This contribution proposes use of
5 registration update or registration request message with lifetime set to zero.

6 Out of the six proposed solutions including the LGE's proposal, the TSG narrowed them to the three proposed solutions (2,
7 5 and 6) and selected 5 as the solution. Rajesh will bring a contribution based on Solution 5.

8 **5. AAA V2 Impacts**

9 Kuntal Chowdhury presented 3GPP2-P00-20010212-013, Dynamic home agent assignment with RADIUS based AAA
10 server. The objective of this contribution is to provide redundancy and load balancing of HAs. This contribution was left
11 open, and Nortel Networks need to add solutions to the following requirements:

- 12 ▪ Detection of out of service HAs,
- 13 ▪ Selection of HAs,
- 14 ▪ RFC2002 compatibility and
- 15 ▪ Key distribution.

16 **6. Ipv6**

17 Lila Madour presented 3GPP2-P00-20010212-019, IPv6 in IS-835 release B. This contribution proposes a scope for IPv6
18 support in the wireless IP standard for release B. The TSG agreed on the following IPv4 and IPv6 inter-working scenarios:

- 19 ▪ MS has a single stack operational (may have dual stack capability),
- 20 ▪ PDSN has dual stacks,
- 21 ▪ RP is based on IPv4 (IPv6 is not required), and
- 22 ▪ HA has IPv4 or IPv6.

23
24 The inter-working is carrier domain and outside the scope of TSG-P. Lila will bring a contribution on the agreed upon
25 assumptions.

26 Byung-Keun Lim presented 3GPP2-P00-20010212-026, Proposal of the guideline for IPv6. The proposal on Mobile IPv6
27 was left open.

28 **7. Link layer protocol**

29 There was no contribution on this topic.

30 **8. Accounting Enhancements**

31 Tom Hiller presented 3GPP2-P00-20010212-010, RP Accounting Enhancement Requirements Discussion. This
32 contribution has two proposals:

- 33 ▪ *Proposal 1* – Accumulates the count of the number of dormant-active transitions and send the count periodically. This
34 proposal was left open to be revisited with the Cisco's contribution (3GPP2-P00-20010212-032).
- 35 ▪ *Proposal 2* – Combines all of the VSAs under a single VSA header. Again, this proposal was left open to be compared
36 with the previous Motorola's contribution (3GPP2-P00-20010115-022).

37
38 Serge Manning presented 3GPP2-P00-20010212-015, Clarifications on the Verbose Accounting Attribute. There was still
39 a lot of concern about generating too many accounting records triggered by a different destination IP address. It was again
40 indicated that commercial software is available for this kind of accounting purpose. Serge will kick off an email discussion
41 on this topic to gather the input from carriers on the need of this accounting attribute. This contribution was left open.

42 Iris Zeng presented 3GPP2-P00-20010212-016, ESN Needed in Packet Accounting, which was accepted as presented.

43 Rajesh Bhalla presented 3GPP2-P00-20010212-032, RP Accounting Enhancements Requirements Discussion, for
44 information only. This contribution provides information on the impacts to the IOS specifications resulting from Proposal
45 1 of the Lucent's contribution above (3GPP2-P00-20010212-010).

1 9. Push Service

2 Byung-Keun Lim presented 3GPP2-P00-20010212-025, AAA server based Mobile DNS(MDNS) supporting IP push
3 services. This contribution was kept open to be compared with dynamic DNS.

4 Dongkie Lee presented 3GPP2-P00-20010212-027, Proxy DNS Update for Mobile Station. This contribution proposes the
5 two methods (RADIUS and HA based) to be used when a mobile user wants network initiated service like push service.
6 This contribution was left open.

7 Alan Hameed presented 3GPP2-P00-20010212-031, WAP Push Architectural Overview. This contribution is for
8 information only.

9 10. Other Release B work items

10 The following three contributions were presented regarding service differentiation of Simple IP and Mobile IP:

- 11 ▪ 3GPP2-P00-20010212-005, Service Differentiation of Simple IP and Mobile IP Rajesh Bhalla,
- 12 ▪ 3GPP2-P00-20010212-020, Mobile IP versus Simple IP, by Lila Madour, and
- 13 ▪ 3GPP2-P00-20010212-034, Service Differentiation problem between SIP and MIP, by Jun Hyuk Song.

14
15 After discussing the three contributions, the TSG decided to accept 3-B case of RFC2290 as presented in 3GPP2-P00-
16 20010212-020 and reject all other cases. The proposed text changes based on this decision are expected at the next
17 meeting.

18 B. All IP

19 Tom Hiller presented 3GPP2-P00-20010212-011, Improvements to All-IP Advertising Agent NAM Text. This
20 contribution provides improvements to the text for the Advertising Agent in the All-IP NAM. During discussion of this
21 contribution, there were multiple approaches for ADA. The TSG decided to have a subgroup meeting of interested parties
22 on this subject to be championed by Mike Borella.

23 Related to the above contribution, Mike Borella presented 3GPP2-P00-20010212-033, Discussion of Advertising Agent
24 (ADA). This contribution provides a list of options as the starting point of the discussion.

25 Mamoru Higuchi presented 3GPP2-P00-20010212-028, Optional treatment of voice media stream for multi-media
26 communication over the air. This contribution provides a migration path of legacy network toward All IP network. There
27 are potential problems identified: Mobile Node need to know the two addresses, i.e. SIP proxy and Gateway, and handoff
28 coordination for voice and control channels. This contribution was not accepted.

29 Tom Hiller presented 3GPP2-P00-20010212-008, AKA Support on DIAMETER. This contribution proposes support of
30 AKA on AAA (DIAMETER) for link, network, and service authentication. It was left open.

31 The TSG had a joint meeting with All IP AdHoc and TSG-N.

32 9. New Business

33 None.

34 10. Workplan Review

35 The Chair presented 3GPP2-P00-20010212-004, TSG-P Work Items. Fast handoff was created separately from Header
36 Compression. Push Enabler with IP was also created as a new work item. The TSG decided to use Release C instead of
37 Release B according to the 3GPP2 workplan. This contribution was accepted with modifications as shown in R1 version of
38 this document. Related to workplan, Lila Madour volunteered to investigate the dependency of the work items with the
39 corresponding IOS and TSG-C work item schedules and bring a contribution at the next meeting.

40 The Chair also presented 3GPP2-P00-20010212-035, Work Items for TSG-P Release C(P.S0001-B). This contribution
41 provides an update to the 3GPP2 workplan and work item descriptions as a result of the above contribution (3GPP2-P00-
42 20010212-004). The Chair will send the correspondence to TSG-S Chair for the updates of the official 3GPP2 workplan
43 and work item descriptions.

1 Thinh Nguyenphu presented 3GPP2-P00-20010212-030, Work plan for All-IP in TSG-P and TSG-S All-IP Ad hoc for
2 consideration. This contribution is for discussion only.

3 The workplan for Release C is as follows:

- 4 ▪ Contributions: June, 2001
- 5 ▪ Baseline: July, 2001
- 6 ▪ V&V September, 2001

7 **11. Review Assignments**

8 The assignments from the meeting were reviewed.

9 **12. Future Meeting Schedule**

10 *Year 2001 Schedule*

Week	Location
March 12-16, 2001	Mauai
April 9 - 12, 2001	Atlanta
May 7 - 11, 2001	China
June 11 - 15, 2001	Vancouver
July 9 - 13, 2001	Montreal
August 13 - 17, 2001	Calgary
September 17 - 21, 2001	Japan
October 15 - 19, 2001	Korea
November 5 - 9, 2001	Tucson
December 3 - 7, 2001	Mauai

11

12 The TSG came up with the following information for Year 2002 meetings:

MONTH	LOCATION
1	CANCUN
2	ASPEN
3	JAPAN
4	SAN FRANCISCO
5	KOREA
6	VANCOUVER
7	ALASKA
8	CHINA
9	NEW YORK CITY
10	LAS VEGAS
11	MELBOURNE
12	HAWAII

13

14 The Chair will use this information for planning 2002 meetings with SC and other TSG chairs.

15 **13. Open Discussion**

16 There was no open discussion.

17 **14. Adjournment**

18 The meeting was adjourned at 1:00 PM local time on February 16, 2001.