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and conditions, as appropriate.

3GPP2 TSG-P 1 2 **Wireless Packet Data Networking** 3 TITLE: 4 5 TSG-P Meeting Summary, Meeting #21 6 7 **SOURCE:** SAMSUNG Chair, 3GPP2 TSG-P **ELECTRONICS** Samsung Telecommunications America 1130 E. Arapaho Road Richardson, TX 75081 Haeng S. Koo (972)761-7755 hskoo@sta.samsung.com **ABSTRACT:** 8 9 This document contains the summary of the TSG-P meeting, which was held on January 15 - 19, 2001 in 10 San Diego, CA. 11 **RECOMMENDATION:** 12 13 Review for accuracy and amend as needed. 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 **Notice** 32 33 The contributor grants a free, irrevocable license to 3GPP2 and its Organizational Partners to incorporate 34 text or other copyrightable material contained in the contribution and any modifications thereof in the creation of 3GPP2 publications; to copyright and sell in Organizational Partner's name any Organizational 35 Partner's standards publication even though it may include portions of the contribution; and at the 36 Organizational Partner's sole discretion to permit others to reproduce in whole or in part such contributions 37

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# Wireless Packet Data Networking Meeting Report, Meeting #21

Date:

January 15 – 19, 2001

Location:

Hilton San Diego Mission Valley

San Diego, CA

Chair:

Haeng S. Koo, Samsung Electronics

Phone:

972.761.7755

E-mail:

hskoo@sta.samsung.com

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# Quorum Members, Attendees, and Attendance Status

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Organization	Attendee of this meeting	Last 4 Meetings
	,	Attended
3Com	Ed Campbell	#18 #19 #20 #21
Alcatel USA	Tom Tansil	#20 #21
Certicom Corp	Dorothy Gellert	#20 #21
Cisco	Rajesh Bhalla	#18 #19 #20 #21
Ericsson	Lila Madour	#18 #19 #20 #21
Hyundai Electronics	Yeon Sang Koo	#18 #20 #21
ETRI		#18 #20
Fujitsu	Mamoru Higuchi	#18 #19 #20 #21
Hitachi	Morihisa Matsumoto	#18 #19 #21
KDDI		#19 #20
LG Electronics	Byung-Keun Lim	#18 #20 #21
Lucent Technologies	Tom Hiller	#18 #19 #20 #21
Mitsubishi Electric	Daqing Gu	#20 #21
Motorola	Sebastian Thalanany	#19 #20 #21
NEC		#19
Nokia	Thin Nguyenphu	#20 #21
Nortel Networks	Kuntal Chowdhury	#18 #20 #21
Qualcomm Inc.	Raymond Hsu	#18 #19 #20 #21
Samsung Electronics	Haeng S. Koo	#18 #19 #20 #21
SK Telecom	Dongkie Lee	#20 #21
Sprint PCS	Iris Zeng	#18 #19 #20 #21
Sun Microsystems	Pat R. Calhoun	#20 #21
Verizon Wireless	Bryan Cook	#20 #21

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# **Others Present**

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Organization	Attendee
Award Solutions, Inc	Linda Morales
Bell Mobility	Khai Nguyen
Ericsson	Ulises Olvera
Fujitsu	Alan Hameed
Lucent Technologies	Mike McPheters
Lucent Technologies	Frank Alfano
Lucent Technologies	Mike Dolan
Megisto Systems	Kenneth Rehbehn
Motorola	Wayne Bowen
Nokia	Anna Sillanpaa
Nokia	Craig Rhoades
Nokia	Ernie Tacsik
Qwest Communications	Jim Gately

Samsung Electronics	Jae Hyuk Do
Samsung Electronics	Junhyuk Song
Samsung Electronics	Fabricio Velez
Sprint PCS	Mark Lipford
Starent Networks	Paul Shieh
Sun Microsystems	James Kempt
Tantivy Communications	Howard Heller
Telcordia Technologies	Scott English
Toshiba	Yoshiyuki Tsuda

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## 1. Call To Order and Opening Remarks

The meeting was called to order at 9:30 AM on January 15, 2001 at Hilton San Diego Mission Valley San Diego, CA.

# 2. Attendance Registration

- 6 The attendance roster was circulated, and the names and organizations of the present are reflected above. The quorum list
- stood at 17 member companies. With 14 member companies present, a quorum was declared. Alcatel USA, Certicom
- 8 Corp., Mitsubishi Electric, Nokia, SK Telecom, Sun Mircrsystems, and Verizon Wireless were added to the quorum list.

## 3. Review and Adoption of Agenda

The Chair introduced 3GPP2-P00-20010115-001 as the proposed agenda, which was approved as presented.

## 4. Contributions Assignment to Agenda Items

The following 28 contributions were submitted, numbered and assigned to the agenda:

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Number	Title	Source	Agenda Item
3GPP2-P00-20010115-001	Proposed Agenda	Haeng Koo, Chair, Samsung	3
3GPP2-P00-20010115-002	Meeting Summary, Meeting #20	Haeng Koo, Chair, Samsung	5
3GPP2-P00-20010115-003	Correspondences	Haeng Koo, Chair, Samsung	6
3GPP2-P00-20010115-004	ESN Needed in Packet Accounting	Sprint PCS, Iris Zeng, Mark Lipford	8A8
3GPP2-P00-20010115-005	Destination IP Address in Packet Accounting	Sprint PCS, Iris Zeng, Mark Lipford	8A8
3GPP2-P00-20010115-006	Service Differentiation and PPP End-Point Differentiation	Qualcomm, Raymond Hsu	8A8
3GPP2-P00-20010115-007	Deferred Handoff PDSN-PDSN Tunneling Control Protocol Proposal	Lucent , Frank Alfano, Tom Hiller, Pete McCann	8A2
3GPP2-P00-20010115-008	Comments on Ericsson Zero Byte Compression Proposal 6	Lucent , Frank Alfano, Tom Hiller, Pete McCann	8A2
3GPP2-P00-20010115-009	Multiple Service Instances and Compression for Release B	Lucent , Tom Hiller, Pete McCann	8A2
3GPP2-P00-20010115-010	Multiple RLP and QoS	Lucent , Tom Hiller, Pete McCann	8A1
3GPP2-P00-20010115-011	PPP Resource Management at the PDSN	Cisco Systems, Rajesh Bhalla	8A4
3GPP2-P00-20010115-012	Fast Handoff in cdma2000 Wireless IP Networks PP Interface Stage-2 and Stage-3 Descriptions	Cisco Systems, Rajesh Bhalla	8A2
3GPP2-P00-20010115-013	0-byte Header Compression for cdma2000 Clarifications	Ericsson, Ulises Olvera- Hernandez, Mohammed Sammour, Francis Lupien, Lila Madour	8A2

3GPP2-P00-20010115-014	Proxy DNS Update by Home Agent for Mobile Node	SK Telecom, Dongkie Lee, Sung Kim	8A8
3GPP2-P00-20010115-015	A secure communication channel between an MS and its AAAH	Toshiba, Yoshiyuki Tsuda	8A8
3GPP2-P00-20010115-016	Definition of the Infrastructure Identifier D4	Nortel Networks, Serge Manning, Kuntal Chowdhury	8A8
3GPP2-P00-20010115-017	Sideways tunnel setup procedure for Inter PDSN fast handoff	Nortel Networks, Mohamad Khalil Abdel-Ghani Daraiseh Haseeb Akhtar, Emad Qaddoura Kuntal Chowdhury	8A2
3GPP2-P00-20010115-018	Proposed Enhancements to Support Verbose Accounting in IS-835-B	Nortel Networks, Khai Nguyen Serge Manning Pete Wenzel	8A8
3GPP2-P00-20010115-019	Comments on the Cisco's P00- 20001204-011 PDSN resource management	LG Electronics, Byung-Keun Lim	8A4
3GPP2-P00-20010115-020	Packet data inactivity timer based on realm	Motorola, Sebastian Thalanany	8A8
3GPP2-P00-20010115-021	Flow control over the RP interface	Motorola, Sebastian Thalanany	8A1
3GPP2-P00-20010115-022	Transfer of Airlink Records over the A11 interface	Motorola, Sebastian Thalanany	8A8
3GPP2-P00-20010115-023	Replacement text for Section 6.3.2, and Annex C in IS-835 Release B	Samsung, Jun Hyuk Song, Sang Yong Moon, Chae Yong Chong	8A8
3GPP2-P00-20010115-024	P.S0001-A-1 errata	Jun Hyuk Song, Sang Yong Moon, Chae Yong Chong	8A8
3GPP2-P00-20010115-025	Perfect Header compression over the air link	LG Electronics, Byung-Keun Lim	8A2
3GPP2-P00-20010115-026	Work Items for TSG-P Release B (P.S0001-B)	Samsung, Haeng S Koo	10
3GPP2-P00-20010115-027	TSG-P Terms of Reference	Samsung, Haeng S Koo	10
3GPP2-P00-20010115-028	Requirements for the PP Interface Protocol	Rajesh Bhalla, Cisco Systems	8A2

## 5. Review of Meeting Reports

- 2 The Chair introduced "3GPP2-P00-20010115-002, Meeting Summary, Meeting #20," and the contribution was accepted as
- 3 presented.

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### 4 6. Correspondence

- 5 The Chair presented the following correspondences:
  - From Hideo Okinaka, TSG-S Chair, Re: Pre-Paid Packet and Enhanced Charging Features - Assuming Release C includes All IP work, the TSG decided these features should be in Release C. The Chair will send a reply correspondence.
- 9 From Hideo Okinaka, TSG-S Chair, Re: Release C Planning For information only.
- 10 From Hideo Okinaka, TSG-S Chair, Re: 1xEV-DO Coordination Aggreed and no response is required.
- 12 To Frederic Leroudier, TSG-A Chair, Re: Fast Handoff For information only.

### 7. Reports

14 There was no report.

## 15 8. Old Business

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

### 17 **1. QoS**

18 Sebastian Thalanany presented 3GPP2-P00-20010115-021, Flow control over the RP interface. This contribution proposes

1 an optional ON-OFF flow control protocol over the RP interface to control flow from the PDSN to the RAN. This 2 contribution was left open to ensure that it fits well within the QoS framework.

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4 Tom Hiller presented 3GPP2-P00-20010115-010, Multiple RLP and QoS. This contribution discusses QoS and multiple service instances and makes proposals for the support of multiple service instances with PPP. This contribution was left 5 open, and the decision will be made based on the QoS framework.

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The Chair urged the participants to bring contributions on the OoS framework at the next meeting.

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### 2. Support of multimedia services

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10 The following four contributions on Fast Handoff were presented:

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Kuntal Chowdhury presented 3GPP2-P00-20010115-017, Sideways tunnel setup procedure for Inter PDSN fast handoff, which proposes the L3 sideway tunnel setup procedure between source and target PDSNs. This contribution was not accepted.

14 15 16

Rajesh Bhalla presented 3GPP2-P00-20010115-012, Fast Handoff in cdma2000 Wireless IP Networks -- PP Interface Stage-2 and Stage-3 Descriptions. This contribution was accepted as a baseline for the Stage 2 and 3 descriptions of fast handoff mechanism.

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- Tom Hiller presented 3GPP2-P00-20010115-007, Deferred Handoff PDSN-PDSN Tunneling Control Protocol Proposal.
- 21 This contribution proposes protocol for Level 2 tunnels for the deferred handoff based on the Proactive Foreign Agents
- 22 draft currently under consideration in the IETF. The TSG decided to generate the 3GPP2 list of requirements for the 23
  - PDSN-PDSN interface to communicate to the IETF.

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Rajesh Bhalla presented 3GPP2-P00-20010115-028, Requirements for the PP Interface Protocol, which was accepted with minor modifications.

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The following contributions were presented on Header Compression:

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Ulises Olvera-Hernandez presented 3GPP2-P00-20010115-013, 0-byte Header Compression for cdma2000 Clarifications, which offers clarifiactions on issues concerning ROCH based 0-Byte header compression profile for cdma2000. This contribution was left open for verification of its technical content.

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Tom Hiller presented 3GPP2-P00-20010115-008, Comments on Ericsson Zero Byte Compression Proposal. This contribution proposes an update procedure using the sister-link, that is the retransmitting RLP associated with the PPP link between the PDSN and mobile station. This contribution was left open.

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Byung-Keun Lim presented 3GPP2-P00-20010115-025, Perfect header compression over the air link. The TSG suggested the author to bring it again to the next meeting with more information, answering the questions raised during discussion of this contribution.

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Tom Hiller presented 3GPP2-P00-20010115-009, Multiple Service Instances and Compression for Release B, which proposes compression protocols for the corresponding service instances. This contribution was left open

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The TSG will make a decision on the compression protocol(s) at the next meeting.

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47 The TSG had a joint meeting with TSG-A on fast handoff. Rajesh Bhalla made a presentation on fast handoff, and the TSG 48 answered questions from TSG-A.

#### 49 3. Broadcast/Multicast

There was no contribution on this topic. 50

#### 51 4. Mobile IP enhancements

- 52 Rajesh Bhalla presented 3GPP2-P00-20010115-011, PPP Resource Management at the PDSN. This contribution proposes
- 53 release of idle/unused PPP sessions at the PDSN as soon as possible. There was a concensus on the need to release the
- 54 resources, but more contribution is expected on the soultion. This contribution was left open.

- 2 Byung-Keun Lim presented 3GPP2-P00-20010115-019, Comments on the Cisco's P00-20001204-011 PDSN resource
- 3 management, which offers a different solution to the resource management problem. This contribution was also left open
- 4 for decision with other solutions.

#### 5 5. AAA V2 requirements on the current architecture

6 There was no contribution on this topic.

#### 7 6. lpv6

8 There was no contribution on this topic.

#### 9 7. Link layer protocol

10 There was no contribution on this topic.

### 8. Other Release B work items

- 12 Dongkie Lee presented 3GPP2-P00-20010115-014, Proxy DNS Update by Home Agent for Mobile Node. This
- contribution proposes a method to be used when a mobile user wants network initiated service like push service. This 13
- 14 contribution was deferred until the push service architecture is defined for the CDMA2000 network. 15

16 Raymond Hsu presented 3GPP2-P00-20010115-006, Service Differentiation and PPP End-Point Differentiation. This 17 contribution proposes solutions for the service differentiation problem identified by SK Telecom in [P00-20001204-015R2]

18 and the PPP end-point differentiation problem identified by Lucent in [P00-20001204-006]. This contribution was left

19 open for further discussion.

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Iris Zeng presented 3GPP2-P00-20010115-004, ESN Needed in Packet Accounting. This contribution was accepted as presented. The Chair will send the liaison letter to TSG-A Chair on this accounting parameter.

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Mark Lipford presented 3GPP2-P00-20010115-005, Destination IP Address in Packet Accounting. There was a concern about generating too many accounting records triggered by a different destination IP address. It was also indicated that commercial software is available for this kind of accounting purpose. This contribution was left open.

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Kuntal Chowdhury presented 3GPP2-P00-20010115-018, Proposed Enhancements to Support Verbose Accounting in IS-835-B. The proposed accounting information is grouped by local and remote addresses and header information from IP packets. This contribution was left open for input from operators.

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Yoshivuki Tsuda presented 3GPP2-P00-20010115-015, A secure communication channel between an MS and its AAAH. Another server off AAAH can be used for this purpose, and the proposed feature is transparent to the core network. It was suggested the author submit the contribution with service description to TSG-S as an optional feature.

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Kuntal Chowdhury presented 3GPP2-P00-20010115-016, Definition of the Infrastructure Identifier D4. The TSG decided to change Base Station ID to BSCID and keep the rest as it is. Concensus among carriers is required to remove BSCID.

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Sebastian Thalanany presented 3GPP2-P00-20010115-020, Packet data inactivity timer based on realm. The proposd timer is used for releasing the network resources that are allocated unnecessarily for a dormant packet data session. The base of the contribution was accepted, but more details and carrier inputs are required. The Chair will send the liaison to TSG-A and TSG-C Chairs.

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Sebastian Thalanany presented 3GPP2-P00-20010115-022, Transfer of Airlink Records over the A11 interface. This contribution proposes the transfer of Airlink Records without the use of an accounting specific protocol encoding. The contribution was left open to investigate other ways of improvement.

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Jun Hyuk Song presented 3GPP2-P00-20010115-023, Replacement text for Section 6.3.2, and Annex C in IS-835 Release B, which was accepted with modifications.

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51 Jun Hyuk Song presented 3GPP2-P00-20010115-024, P.S0001-A-1 errata, which was accepted as presented. The proposed 52 change needs to be submitted as a ballot comment.

### 9. New Business

### A. Elelction of TSG Chair and Vice Chairs

Haeng S. Koo	Samsung Electronics	Chair	Re-elected
Raymond Hsu	Qualcomm	Vice Chair	Re-elected
Mamoru Higuchi	Fujitsu	Vice Chair	Newly Elected

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## B. Election of Working Group Chairs (Rel B and All IP)

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Since the TSG is just starting to work on the All IP work, it wasn't clear what the Working Group structure should be for the work in the area of All IP and the legacy networks. Election of Working Group Chairs was deferred until a concensus on the WG organization is reached.

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### C. All IP

12 The TSG participated in the Tuesday PM session of the TSG-S All IP AdHoc meeting.

## 10. Workplan Review

The Chair presented 3GPP2-P00-20010115-026, Work Items for TSG-P Release B (P.S0001-B), and the updates to the work items were made as shown in R1.

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The Chair also presented 3GPP2-P00-20010115-027, TSG-P Terms of Reference. Updates were made as shown in R1.

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The workplan for Release B is as follows:

Contributions: June, 2001
Baseline: July, 2001
V&V September, 2001

# 11. Review Assignments

The assignments from the meeting were reviewed.

# 12. Future Meeting Schedule

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Week	Location
February 12-16, 2001	Phoenix
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

# 13. Open Discussion

29 There was no open discussion.

## 30 14. Adjournment

The meeting was adjourned at 5:20 PM local time on January 18, 2001.