1 **Title:**

2 **APPROVED SUMMARY OF TSG-S MEETING**

3 for 24-27 October 2005 in Beijing, China

4 **Source:**

5 Clifton J. Barber

6 SECRETARY

7 Representing KDDI
8 CJ Barber Consulting Services
9 3028 Saint Andrews Court
10 Jonesboro, GA 30236
11 (770) 210-2988
12 (770) 456-4099 fax
13 cbarber@cjbarberconsulting.com

14 **Abstract:**

15 This document is a summary of the 3GPP2 TSG-S meetings that were held during the period of
16 24-27 October 2005 in Beijing, China.

17

18 **Recommendations:**

19 For review and approval.

20

21 **Notice:**

1 During the period of 24-27 October 2005, 3GPP2 TSG-S meetings were held at the Friendship
2 Hotel in Beijing, China. This document is intended to summarize those proceedings.

3 **OPENING PLENARY**

4 1.   CALL TO ORDER AND OPENING REMARKS: The meeting was called to order on
5   24 October 2005 at 2:25 PM local time by TSG-S Chair, Nick Yamasaki (KDDI). The
6   Chair welcomed the participants to Beijing.

7   The meeting participants each introduced themselves and were requested to sign-in
8   electronically using the server sign-in facility. The PMT Manager, Victoria Bosserman,
9   participated by phone.

10 2.   ATTENDANCE REGISTRATION AND ROLL CALL: A roll call of TSG-S active
11   companies indicated 14 companies in attendance out of 21 active companies (67%
12   participation). Thus, meeting quorum was achieved.

13   The Secretary noted that no proxy statements had been received for this meeting

14 3.   DISTRIBUTION AND NUMBERING OF CONTRIBUTIONS: Contributions were
15   documented in S00-20051024-000. All contributions were distributed in soft copy format
16   and made available from the LAN based server.

17 4.   ADOPTION OF AGENDA: The proposed agenda (S00-20051024-001) was presented
18   and reviewed. **DECISION: The agenda was approved without objection as modified**
19   **by the discussion (S00-20051024-001R1).**

20 5.   REVIEW AND APPROVAL OF PREVIOUS MEETING SUMMARY: The summary of
21   the September 2005 TSG-S meeting in Vancouver, BC, Canada (S00-20051024-002) was
22   presented. Action on this summary was deferred to closing Plenary.

23 6.   REVIEW OF ACTION ITEMS FROM PREVIOUS MEETING: The following action
24   items were left open from the September 2005 meeting and require additional
25   consideration:

26   •   WG3 has agreed to take the lead on coordinating the comments from all WGs
27   related to the list of topics to be included in the 3GPP2 Drafting Rules document
28   being developed by the OP WPD AdHoc on Beijing.

29   This action is held OPEN until closing Plenary.

30   •   All WG Chairs are requested to include their updates to the workplan as
31   attachments to their reports to the closing Plenary and all changes should be noted
32   with revision marks.

33   This is an on-going action.

1 • An LS dated 20 September 2005 regarding Request for comments on IEEE
2 802.11u Requirements Document from IEEE 802.11 (S0020050926-042) was
3 remanded to WG1 and WG4 for review and action as appropriate with a reminder
4 to coordinate any potential response with TSG-X by closing Plenary of the
5 October 2005 meeting.

6 Planning for this action will be discussed later in the agenda.

7 • WG1 and WG4 were also actioned to consider whether or not IEEE documents
8 will need to be normatively referenced in 3GPP2 publications in the future and, if
9 so, to prepare correspondence to the SC requesting the establishment of
10 appropriate agreements.

11 This action is held OPEN until closing Plenary.

12 7. CORRESPONDENCE AND LIAISON REPORTS

13 • OP: No contributions.

14 • SC: The following contributions were discussed:

15 • E-mail correspondence to TSG-C dated 3 October 2005 regarding the use
16 of 3G1x terminology (S00-20051024-021) was presented from the 3GPP2
17 SC Chair. The direction from the SC Chair was that the 3G1x
18 terminology should not be used. **ACTION: This contribution was**
19 **remanded to all WGs for review and action as appropriate.**

20 • 3GPP2 SECRETARIAT: The following correspondences were noted from the
21 3GPP2 Secretariat:

22 • E-mail correspondences regarding SC level review and approval of
23 S.R0100-0 v1.0 Push-to-Talk over Cellular (PoC) System Requirement
24 (S00-20051024-024) was presented from the 3GPP2 Secretariat.
25 **ACTION: This contribution was remanded to WG1 as FYI.**

26 • E-mail correspondences regarding SC level review and approval of
27 S.S0028-A v3.0 OAM&P for cdma2000 (3GPP R4 Delta Specification)
28 (S00-20051024-025) was presented from the 3GPP2 Secretariat.
29 **ACTION: This contribution was remanded to WG5 as FYI.**

30 • E-mail correspondence regarding SC level review and approval of
31 S.S0078-A v3.0 Common Security Algorithms (S00-20051024-026) was
32 presented from the 3GPP2 Secretariat. **ACTION: This contribution**
33 **was remanded to WG4 as FYI.**

34 • E-mail correspondences regarding SC level review and approval of
35 S.S0055-A v3.0 Enhanced Cryptographic Algorithms (S00-20051024-
36 027) was presented from the 3GPP2 Secretariat. **ACTION: This**
37 **contribution was remanded to WG4 as FYI.**

- E-mail correspondence dated 6 October 2005 regarding SC level review date for seven (7) documents including S.S0028-A v3.0, S.S0055-A v3.0, and S.S0078-A v3.0 (S00-20051024-028) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG4 and WG5 as FYI.**

- E-mail correspondence dated 30 September 2005 regarding V&V review of S.P0111-0 v0.6 Expanded R-UIM Identifier (S00-20051024-029) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG1 as FYI.**

- E-mail correspondence dated 30 September 2005 regarding V&V review of S.P0086-B v0.3 IMS Security Framework (S00-20051024-030) was presented from the 3GPP2 Secretariat. NOTE: This e-mail incorrectly stated that comments should be formatted as contributions to the opening Plenary in Beijing when it should have indicated the opening Plenary in Maui. **ACTION: This contribution was remanded to WG4 as FYI.**

- E-mail correspondence dated 12 October 2005 regarding No Secretariat Comments on S.P0111-0 v0.6 Expanded R-UIM ID (S00-20051024-031) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG1 for review and action appropriate.**

- E-mail correspondence dated 7 October 2005 regarding SC level review of eight (8) Work Items (S00-20051024-032) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG3 as FYI.**

- E-mail correspondence dated 7 October 2005 regarding SC level approval of four (4) Work Items (S00-20051024-033) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG3 as FYI.**

- E-mail correspondence dated 7 October 2005 regarding Cancellation of an Approved Work Item 3GPP2-00037 Prepaid Service Support for HRPD (S00-20051024-034) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to WG3 as FYI.**

- E-mail correspondence dated 17 October 2005 regarding 3GPP2 Work Item Worksheet v3.0 (S00-20051024-035) was presented from the 3GPP2 Secretariat as FYI for TSG-S.

- E-mail correspondence dated 29 September 2005 regarding Proposed Work Item Review (S00-20051024-036) was presented from the 3GPP2 Secretariat. **ACTION: This contribution was remanded to all WGs for review and comment with comments to be coordinated by WG3.**

1   •   TSG-S workplan files for October 2005 (S00-20051024-042) was
2   presented from the 3GPP2 Secretariat. **ACTION: This contribution**
3   **was remanded to all WGs for review and comment regarding the**
4   **TSG-S Development Schedule, noting their comments with rev marks,**
5   **as a part of their report to closing Plenary.**

6   •   TSG-A: The following contributions were discussed:

7   •   Correspondence dated 30 September 2005 regarding TSG-A Work Item
8   Review (S00-20051024-003) was presented from TSG-A. **ACTION:**
9   **This contribution was remanded to WG3 and WG4 for review and**
10   **action as appropriate.**

11   •   A contribution regarding 3GPP2 Drafting Rules topic proposal (S00-
12   20051024-044) was presented from TSG-A. **ACTION: This**
13   **contribution was remanded to WG3 review and action as appropriate.**

14   •   TSG-C: The following contributions were discussed:

15   •   The TSG-C Liaison Report for September 2005 (S00-20051024-004) was
16   presented from the TSG-C Liaison as FYI for TSG-S. **ACTION: The**
17   **following attachments were remanded to WG3 for review and action**
18   **as appropriate:**
19   •   **TSGC-063: Develop a point release to C.S0063 (S00-**
20   **20051024-004A)**
21   •   **TSGC-064: Point Release to C.S0017-012-A v1.0 (S00-**
22   **20051024-004B)**

23   •   Correspondence dated 30 September 2005 regarding S.P0112-0 GBA
24   Review Comments (S00-20051024-005) was presented from TSG-C.
25   **ACTION: This contribution was remanded to WG4 for review and**
26   **action as appropriate.**

27   •   Correspondence to TSG-S and TSG-X dated 30 September 2005 regarding
28   consideration of R-UIM Functional Separation (S00-20051024-006) was
29   presented from TSG-C. **ACTION: This contribution was remanded to**
30   **WG1 and WG4 for review and action as appropriate.**

31   •   Correspondence to TSG-A and TSG-X regarding EAP (S00-20051024-
32   007) was presented from TSG-C. **ACTION: This contribution was**
33   **remanded to WG4 for review and action as appropriate.**

34   •   Correspondence to TSG-A regarding DoS (S00-20051024-008) was
35   presented from TSG-C as FYI for TSG-S.

36   •   Correspondence regarding Proposed Work Item Review (S00-20051024-
37   009) was presented from TSG-C. **ACTION: This contribution was**
38   **remanded to WG3 for review and action as appropriate.**

- • Correspondence regarding 3GPP2 Workplan updates (S00-20051024-010) was presented from TSG-C. **ACTION: This contribution was remanded to WG3 for review and action as appropriate.**

- • TSG-X: The following contributions were discussed from TSG-X:

  - • Correspondence to ITU-T SG8 dated 30 September 2005 regarding IP Applications over Mobile Systems (S00-20051024-011) was presented from TSG-X. **ACTION: This contribution was remanded to WG1 as FYI.**

  - • Correspondence dated 30 September 2005 regarding Stage 1 and SRD Issues (S00-20051024-012) was presented from TSG-X. **ACTION: This contribution was remanded to WG1 and WG3 for review and action as appropriate.**

  - • Correspondence dated 30 September 2005 regarding Joint Meeting on E-UIMID Stage 1 (S00-20051024-013) was presented from TSG-X. **ACTION: This contribution was remanded to the Numbering AdHoc as FYI**

  - • Correspondence dated 30 September 2005 regarding Device Management Notification Teleservice (S00-20051024-014) was presented from TSG-X. **ACTION: This contribution was remanded to WG1 and WG3 as FYI.**

  - • Correspondence to TSG-S dated 30 September 2005 regarding Publication of Specification X.S0008-0 v2.0, X.S0004 Support for the MEID (S00-20051024-015) was presented from TSG-X. **ACTION: This contribution was remanded to the Numbering AdHoc as FYI.**

  - • Correspondence to TSG-A, TSG-C, and TSG-S dated 30 September 2005 regarding Input to Wi-Fi Alliance Liaison (S00-20051024-016) was presented from the TSG-X WiFi Liaison. **ACTION: This contribution was remanded to WG3 for review and action as appropriate.**

  - • Correspondence dated 30 September 2005 regarding Support for Multiple Codecs in PoC (S00-20051024-017) was presented from TSG-X. **ACTION: This contribution was remanded to WG1 as FYI.**

  - • Correspondence to IEEE 802.11 dated 30 September 2005 regarding Request for Comments on IEEE 802.11u Requirements Document (S00-20051024-018) was presented from TSG-X. **ACTION: This contribution was remanded to WG1 as FYI.**

  - • Correspondence to TSG-A dated 30 September 2005 regarding Architecture for VoIP on HRPD Handoff to 1X Circuit Voice (S00-20051024-019) was presented from TSG-X. **ACTION: This contribution was remanded to WG2 for review and action as appropriate.**

1 • Correspondence to 3GPP SA2 dated 30 September 2005 regarding
2 Architecture for IMS VoIP on HRPD/WLAN Handoff to CS (S00-
3 20051024-020) was presented from TSG-X. **ACTION: This**
4 **contribution was remanded to WG1 and WG2 for review and action**
5 **as appropriate.**

6 • TR45: No contributions.

7 • ITU: No contributions.

8 • 3GPP: No contributions.

9 • 3GPP-SA5 and T1M1: No contributions.

10 • WiFi Alliance/IEEE 802: The following contribution was discussed:

11 • An LS to TSG-C, TSG-S, and TSG-X dated 18 October 2005 regarding
12 Media Independent Handover Services (S00-20051024-041) was
13 presented from IEEE 802.21. **ACTION: This contribution was**
14 **remanded to WG1 and WG3 for review and action as appropriate.**

15 • OMA (Open Mobile Alliance): The following contribution was discussed:

16 • An LS dated 28 September 2005 regarding OMA Work Programme
17 update for 3GPP2 for September 2005 (S00-20051024-037) was presented
18 from OMA REL. **ACTION: This contribution was remanded to WG3**
19 **for review and action as appropriate.**

20 • An LS to 3GPP2 TSG-S and TSG-X dated 17 October 2005 on the Mobile
21 Broadcast Services Specifications (S00-20051024-040) was presented
22 from OMA BAC-BCAST. **ACTION: This contribution was remanded**
23 **to WG1, WG3, and WG4 for review and action as appropriate with**
24 **comments to be coordinated by WG3 by closing Plenary of the**
25 **December 2005 meeting.**

26 • CDG: No contributions.

27 • OTHER: The following contributions were discussed:

28 • An LS dated 7 September 2005 regarding NGNMFG final report (S00-
29 20051024-038) was presented from the NGNMFG. **ACTION: This**
30 **contribution was remanded to WG5 for review and action as**
31 **appropriate.**

32 8. NEW/OLD BUSINESS: The following contributions were discussed:

33 • E-mail correspondence dated 3 October 2005 regarding additional information
34 related to the use of 3G1x terminology (S00-20051024-022) was presented from
35 Samsung as FYI for TSG-S.

36 • E-mail correspondence dated 3 October 2005 regarding 3G1x vs 1x (S00-
37 20051024-023) was presented from Samsung as FYI for TSG-S.

1   •   V&V comments on S.P0111-0 v0.6 Expanded R-UIM Identifier (S00-20051024-
2   039) was presented from Lucent. **ACTION: This contribution was remanded**
3   **to WG1 for review and action as appropriate.**

4   9.   WG BUSINESS:

5   •   WG1 ISSUES: The WG1 Chair, Alex Gogic (QUALCOMM), gave the following
6   verbal summary of the joint TSG-X and TSG-S meeting with the IEEE 802.11
7   liaison:

8   •   IEEE delegate, Stefano Faccin, introduced the "IEEE 802.11u
9   Requirements Document" (S00-20050926-042/A). This contribution
10   solicits comments on Interworking with External Networks specification,
11   being developed by IEEE 802.11u. Upon some discussion, the following
12   actions were recorded:

13   •   3GPP2 member companies should bring contributions related to
14   the document to the 3GPP2 super-meeting in Maui.

15   •   TSG-S and TSG-X Chairs must coordinate a joint meeting for
16   Monday, 5 December 2005 in Maui as follows: 11:00 AM to
17   11:45 AM, recess for lunch, then 1:15 PM to 2:00 PM.

18   •   Stefano Faccin then introduced a presentation from IEEE 802.21 titled
19   "IEEE 802.21 Media Independent Handoffs" (S00-20051024-041/A).
20   This document included an overview of a draft specification for
21   implementation of handoffs between IEEE 802.11 and cdma2000.
22   S.R0087-0 v1.0 WLAN interworking is referenced and the objective is to
23   work in concert with 3GPP2 in defining handoff procedures. The IEEE
24   802.21 specifications are still preliminary.

25   •   The TSG-X ERA Chair took an action to formally request from IEEE
26   802.21 that a draft of the specification, once sufficiently stable, be
27   forwarded to 3GPP2 for comment.

28   •   WG2 ISSUES: No additional contributions or issues were noted.

29   •   WG3 (PMT) ISSUES: No additional contributions or issues were noted.

30   •   WG4 ISSUES: No additional contributions or issues were noted.

31   •   WG5 ISSUES: No additional contributions or issues were noted.

32   •   VISION ADHOC ISSUES: The Vision AdHoc Report (S00-20051024-043) was
33   presented from the Vision AdHoc Chair. This report indicated the following:

34   "At this time, there are no additional items for the Vision group to work on and
35   the SC.R5001-0 3GPP2 Vision document is complete. The Vision AdHoc would
36   like to look beyond the present and foreseen capabilities of 3G.

37   The Vision AdHoc requests that the TSG-S Chair inform the SC that the assigned
38   mandates have been met and that no new additional contributions have been

1 received. Therefore the Vision AdHoc is requesting additional guidance from the
2 SC regarding possible topics it should be reviewing. If no input from the SC is
3 received the Vision AdHoc will likely go dormant."

4 **ACTION: The TSG-S Chair took an action to address this issue in the**
5 **TSG-S Report to the upcoming SC meeting.**

6 • EQUIPMENT NUMBERING ADHOC ISSUES: No additional contributions or
7 issues were noted.

8 • OMA ADHOC ISSUES: No additional contributions or issues were noted.

9 • UIM ADHOC ISSUES: No additional contributions or issues were noted.

10 The Plenary was recessed on 24 October 2005 at 4:45 PM local time.

11

12

13 **<u>CLOSING PLENARY</u>**

14 The Plenary was reconvened on 27 October 2005 at 1:40 PM local time by TSG-S Chair, Nick
15 Yamasaki (KDDI).

16 Quorum had been established at the opening Plenary and was not challenged at this session. No
17 additional 3GPP2 individual member companies were noted in attendance.

18

19 10. WORKING GROUP REPORTS:

20 • WG1 Report (S00-20051024-101) was presented by the WG1 Chair, Alex Gogic
21 (QUALCOMM), as FYI.

22 • Progressed the development of the following documents:
23 • S.P0087-A WLAN Interworking Stage 1 Revision A
24 • S.P0100-0 Press-to-Talk Over Cellular SRD
25 • S.P0111-0 Expanded R-UIM ID
26 • S.P0113-0 Enhanced cdma2000 SRD

27 • Participated with TSG-X in meeting with IEEE Liaison to discuss
28 inter-technology handoff issues with respect to IEEE 802.11 and 802.21.

29 • Completed work on S.P0111-0 Expanded R-UIM ID Stage 1 for
30 recommendation for publication.

31 • Led joint meeting to discuss S.P0113-0 Enhanced cdma2000 SRD. Next
32 joint TSG meeting will be held in Maui on Tuesday , 6 December 2005
33 during the 5:00 to 7:00 PM timeframe.

34 Noted the updated WG1 Development Schedule (S00-20051024-101A) as FYI
35 for the TSG.

1　**DECISION: Proposed correspondence to TSG-X regarding Stage I and SRD**
2　**Issues - S.P0106-0 (PSVT) Stage 1 (S00-20051024-116) was approved without**
3　**objection for transmission.**

4　**DECISION: Proposed correspondence to 3GPP2 SC Chair regarding**
5　**establishment of cooperative Relationship with IEEE 802 (S00-20051024-115)**
6　**was approved without objection for transmission.**

7　**DECISION: S.P0111-0 Expanded R-UIM Stage 1 Requirements (S00-**
8　**20051024-117) was approved without objection for publication as S.R0111-0**
9　**v1.0.**

10　**DECISION: Proposed correspondence to TSG-X regarding S.P0113-0**
11　**comments (S00-20051024-113) was approved without objection for**
12　**transmission with its attachment.**

13　**DECISION: Proposed correspondence to 3GPP2 MRPs regarding S.P0113-0**
14　**Enhanced cdma2000 SRD input (S00-20051024-112) was approved without**
15　**objection for transmission with its attachment.**

16　**DECISION: Proposed correspondence to TSG-A and TSG-C regarding**
17　**S.P0113-0 discussions in Maui (S00-20051024-114) was approved without**
18　**objection for transmission with its attachment.**

19　• WG2 Report (S00-20051024-102) was presented by Jörg Schmidt (Motorola), as
20　FYI.

21　• Reviewed remanded WIs and has no comments.

22　• Noted that S.P0037-0 v.4.0 All IP NAM is on hold until referenced
23　documents are published.

24　Noted the updated WG2 Development Schedule (S00-20051024-102A) as FYI
25　for the TSG.

26　No actions requested from Plenary.

27　• WG3 PMT Report (S00-20051024-103) was noted by PMT Chair, Eileen
28　Hadwen (NEC), as FYI. This report was not reviewed in detail.

29　**DECISION: The following WIs were approved without objection for TSG**
30　**review as distributed by the PMT Manager:**

31　• **3GPP2-00135: HRPD Supplemental Services Update (S00-20051024-**
32　**103C)**

33　• **3GPP2-00136: Update to Data Service Options for Spread Spectrum**
34　**Systems: Service Options 33 and 66 (S00-20051024-103D)**

1   **DECISION: The following WIs were approved without objection for SC**
2   **level review as distributed by the PMT Manager as available from the**
3   **3GPP2 website unless indicated as a contribution number below:**

4   •   **3GPP2-00062-A: WLAN - cdma2000 1X Circuit Switched Voice**
5   **Interworking (S00-20051024-103E)**

6   •   **3GPP2 00111: Expanded Removable UIM ID (EIUM-ID) (S00-**
7   **20051024-103F)**

8   •   **3GPP2-00116: cdma2000 Application on UICC (S00-20051024-103G)**

9   •   **3GPP2-00122: Band Class Cleanup**

10 Work Item 3GPP2-00125: Cross Notification between 3G1X and Alternate
11 Technologies has been canceled at the request of the sponsors.

12 **DECISION: 3GPP2-00052 Wireless Application Management has now been**
13 **retired.**

14 **DECISION: Proposed correspondence to SC Chair regarding cdma2000 1X**
15 **Name Clarification (S00-20051024-120) was approved without objection for**
16 **transmission with its attachments.**

17 **DECISION: Proposed correspondence to TSG-X WiFi Liaison regarding**
18 **WiFi Liaison Update from 3GPP2 Workplan (S00-20051024-121) was**
19 **approved without objection for transmission with its attachment pending**
20 **correction of 3G1x references by the PMT Manager.**

21 **DECISION: Proposed correspondence to WPD AdHoc regarding 3GPP2**
22 **Drafting Rules Proposal (S00-20051024-123) was approved without objection**
23 **for transmission with its attachments.**

24 **DECISION: Proposed correspondence to OMA REL regarding OMA Work**
25 **Programme (S00-20051024-118) was approved without objection for**
26 **transmission.**

27 **DECISION: Proposed correspondence to TSG-X regarding OMA Mobile**
28 **Broadcast Services specification (S00-20051024-119R3) was approved**
29 **without objection for transmission.**

30 •   WG4 Report (S00-20051024-104) was presented by WG4 Chair, Adrian Escott
31   (QUALCOMM), as FYI.

32   •   Progressed the development of the following documents:

33   •   S.R0086-B IMS Domain Security

34   •   S.P0109-0, S.P0112-0, S.P0114-0 GBA

35   •   S.P0110-0 Location Security Framework

36 Noted the updated WG4 Development Schedule (S00-20051024-104AR1) as FYI
37 for the TSG.

DECISION: Proposed correspondence to TSG-C regarding OTASP vs GBA (S00-20051024-125) was approved without objection for transmission pending correction of the subject line by the Secretary.

DECISION: Proposed correspondence to TSG-C regarding EAP over HRPD (S00-20051024-126) was approved without objection for transmission.

DECISION: Proposed correspondence to TIA TR45 regarding V&V comments on S.P0110-0 IP Based Location Services Security Framework (S00-20051024-127R1) was approved without objection for transmission with its attachments.

DECISION: S.P0112-0 v0.2 Generic Bootstrapping Architecture System Requirements Document (S00-20051024-128) was approved without objection for V&V by the 3GPP2 OPs and TSG-S with comments due on or before 28 November 2005.

ACTION: WG4 should review the coexistence of multiple revisions of S.P0055 and S.P0078 and recommend to Plenary any action as required.

- WG5 Report (S00-20051024-105) was presented by WG Chair, Jörg Schmidt (Motorola), as FYI.

  - Progressed the development of the following documents:

    - S.R0017 "3G Wireless Network Management System High Level Requirements"

    - S.S0028-A "OAM&P for cdma2000 (3GPP R4 Delta Specification)

    - S.P0028-xxx-C "OAM&P for cdma2000 (3GPP R6 Delta Specification)

    - S.P0093-0 Definition of Performance Measurement Types

DECISION: Proposed correspondence to 3GPP SA5 regarding Comments & questions regarding 3GPP SA5 R6 IRP definitions (S00-20051024-124) was approved without objection for transmission.

- The Vision AdHoc did not meet.

- The Equipment Numbering AdHoc Report (S00-20051024-107) was presented by AdHoc Chair, Alex Gogic (QUALCOMM), as FYI.

  - Continued to review issues related to ESN Exhaust for input to TR45 EUM AdHoc

  - Discussions on Expanded R-UIM ID format continue.

NOTE: The 3GPP2 Secretariat is reminded to post S.R0048-A v4.0 on the 3GPP2 web site.

1
2
3

DECISION: Proposed correspondence to TIA TR45 EUM AdHoc regarding Analysis and Consideration Regarding ESN Reclamation (S00-20051024-122R1) was approved without objection for transmission.

4   •   The UIM AdHoc did not meet.

5   •   The OMA AdHoc did not meet.

6

7   11.   ADDITIONAL CORRESPONDENCES AND LIAISON REPORTS:

8   •   OP: No contributions.

9   •   SC: No contributions.

10   •   3GPP2 SECRETARIAT: No contributions.

11   •   TSG-A: No contributions.

12   •   TSG-C: No contributions.

13   •   TSG-X: Correspondence dated 24 October 2005 regarding Advanced Notice of
14   Incoming Liaison from ITU-R WP 8F (S00-20051024-110) was presented from
15   TSG-X as FYI for TSG-S.

16   •   TR45: Correspondence dated 26 October 2005 regarding Extension of V&V of
17   S.P0086-B v0.3 (S00-20051024-111) was presented from TIA TR45. **ACTION:**
18   **This contribution was remanded to WG4 for review and action as**
19   **appropriate.**

20   **ACTION: The Secretary must officially extend the V&V period for**
21   **S.P0086-B to 2 December 2005.**

22   •   TR45 AHAG: No contributions.

23   •   ITU: No contributions.

24   •   3GPP: No contributions.

25   •   3GPP-SA5 and T1M1: No contributions.

26   •   WiFi Alliance/IEEE 802: No contributions.

27   •   OMA (Open Mobile Alliance): No contributions.

28   •   CDG: No contributions.

29   •   OTHER: No contributions.

30   12.   NEW BUSINESS (continued): No contributions.

1 13.   OLD BUSINESS (continued):

2   •   The TSG-S Document Status Table (S00-20051024-100) was presented and
3   reviewed. **DECISION: This contribution was approved as modified by the**
4   **discussion (S00-20051024-100R1) pending final review by WG Chairs and**
5   **document Editors by COB next Tuesday.**

6 14.   ADMINISTRATION AND OTHER BUSINESS:

7   •   The future meeting schedule for TSG-S is noted as follows:

5-8 December 2005	Grand Wailea Hotel in Maui, HI
16-19 January 2006	The Fairmont Hotel Vancouver in Vancouver, BC, Canada
20-23 February 2006	Cheju, Korea

9   •   Although not explicitly reviewed during the meeting, the assignments, other than
10   document remands, that were not completed at this meeting are summarized as
11   follows:

12   •   Approval of the summary of the September 2005 TSG-S meeting in
13   Vancouver, BC, Canada (S00-20051024-002) was deferred to closing
14   Plenary at the October 2005 meeting but inadvertently omitted from
15   closing Plenary review.

16   •   The Vision AdHoc requests that the TSG-S Chair inform the SC that the
17   assigned mandates have been met and that no new additional contributions
18   have been received. Therefore the Vision AdHoc is requesting additional
19   guidance from the SC regarding possible topics it should be reviewing. If
20   no input from the SC is received the Vision ad hoc will likely go
21   dormant."

22   •   The TSG-S Chair should follow up on correspondence to the SC Chair
23   regarding establishment of cooperative Relationship with IEEE 802.

24 This meeting was adjourned on 27 October 2005 at approximately 5:12 PM local time.

25

1   A listing of the contributions for this meeting is itemized below:

NUMBER	SUBJECT	SOURCE	ACTION
OPENING PLENARY - 3GPP2-S00-20051024-			
000	CONTRIBUTION REGISTER	SECRETARY	FYI
001	AGENDA	CHAIR	APPROVED
002	Meeting Summary - September 2005 - Vancouver, BC, Canada	SECRETARY	OPEN
003	Correspondence dated 30 September 2005 regarding TSG-A Work Item Review	TSG-A	WG3, WG4
004	TSG-C Liaison Report - September 2005	TSG-C LIAISON	FYI
005	Correspondence dated 30 September 2005 regarding S.P0112 GBA Review Comments	TSG-C	WG4
006	Correspondence to TSG-S and TSG-X dated 30 September 2005 regarding consideration of R-UIM Functional Separation	TSG-C	WG1, WG4
007	Correspondence to TSG-A and TSG-X regarding EAP	TSG-C	WG4
008	Correspondence to TSG-A regarding DoS	TSG-C	FYI
009	Correspondence regarding Proposed Work Item Review	TSG-C	WG3
010	Correspondence regarding 3GPP2 Workplan updates	TSG-C	WG3
011	Correspondence to ITU-T SG8 dated 30 September 2005 regarding IP Applications over Mobile Systems	TSG-X	WG1
012	Correspondence dated 30 September 2005 regarding Stage 1 and SRD Issues	TSG-X	WG1
013	Correspondence dated 30 September 2005 regarding Joint Meeting on E-UIMID Stage 1	TSG-X	NUMBERING ADHOC
014	Correspondence dated 30 September 2005 regarding Device Management Notification Teleservice	TSG-X	WG1, WG3
015	Correspondence to TSG-S dated 30 September 2005 regarding Publication of Specification X.S0008-0 v2.0, X.S0004 Support for the MEID	TSG-X	NUMBERING ADHOC
016	Correspondence to TSG-A, TSG-C, and TSG-S dated 30 September 2005 regarding Input to Wi-Fi Alliance Liaison	TSG-X WIFI LIAISON	WG3
017	Correspondence dated 30 September 2005 regarding Support for Multiple Codecs in PoC	TSG-X	WG1
018	Correspondence to IEEE 802.11 dated 30 September 2005 regarding Request for Comments on IEEE 802.11u Requirements Document	TSG-X	WG1
019	Correspondence to TSG-A dated 30 September 2005 regarding Architecture for VoIP on HRPD Handoff to 1X Circuit Voice	TSG-X	WG2

2

NUMBER	SUBJECT	SOURCE	ACTION
020	Correspondence to 3GPP SA2 dated 30 September 2005 regarding Architecture for IMS VoIP on HRPD/WLAN Handoff to CS	TSG-X	WG1, WG2
021	E-mail correspondence dated 3 October 2005 in response to TSG-C regarding the use of 3G1x terminology	SC CHAIR	All WGs
022	E-mail correspondence dated 3 October 2005 regarding additional information related to the use of 3G1x terminology	SAMSUNG	FYI
023	E-mail correspondence dated 3 October 2005 regarding 3G1x vs. 1x	SAMSUNG	FYI
024	E-mail correspondences regarding SC level review and approval of S.R0100-0 v1.0 Push-to-Talk over Cellular (PoC) System Requirement	3GPP2 SECRETARIAT	WG1
025	E-mail correspondences regarding SC level review and approval of S.S0028-A v3.0 OAM&P for cdma2000 (3GPP R4 Delta Specification)	3GPP2 SECRETARIAT	WG5
026	E-mail correspondence regarding SC level review and approval of S.S0078-A v3.0 Common Security Algorithms	3GPP2 SECRETARIAT	WG4
027	E-mail correspondences regarding SC level review and approval of S.S0055-A v3.0 Enhanced Cryptographic Algorithms	3GPP2 SECRETARIAT	WG4
028	E-mail correspondence dated 6 October 2005 regarding SC level review date for seven (7) documents including S.S0028-A v3.0, S.S0055-A v3.0, and S.S0078-A v3.0	3GPP2 SECRETARIAT	WG4, WG5
029	E-mail correspondence dated 30 September 2005 regarding V&V review of S.P0111-0 v0.6 Expanded R-UIM Identifier	3GPP2 SECRETARIAT	WG1
030	E-mail correspondence dated 30 September 2005 regarding V&V review of S.P0086-B v0.3 IMS Security Framework	3GPP2 SECRETARIAT	WG4
031	E-mail correspondence dated 12 October 2005 regarding No Secretariat Comments on S.P0111-0 v0.6 Expanded R-UIM ID	3GPP2 SECRETARIAT	WG1
032	E-mail correspondence dated 7 October 2005 regarding SC level review of eight (8) Work Items	3GPP2 SECRETARIAT	WG3
033	E-mail correspondence dated 7 October 2005 regarding SC level approval of four (4) Work Items	3GPP2 SECRETARIAT	WG3
034	E-mail correspondence dated 7 October 2005 regarding Cancellation of an Approved Work Item 3GPP2-00037 Prepaid Service Support for HRPD	3GPP2 SECRETARIAT	WG3
035	E-mail correspondence dated 17 October 2005 regarding 3GPP2 Work Item Worksheet v3.0	3GPP2 SECRETARIAT	FYI

NUMBER	SUBJECT	SOURCE	ACTION
036	E-mail correspondence dated 29 September 2005 regarding Proposed Work Item Review	3GPP2 SECRETARIAT	All WGs
037	LS dated 28 September 2005 regarding OMA Work Programme update for 3GPP2 - September 2005	OMA REL	WG3
038	LS dated 7 September 2005 regarding NGNMFG final report	NGNMFG	WG5
039	V&V comments on S.P0111-0 v0.6 Expanded R-UIM Identifier	LUCENT	WG1
040	LS to 3GPP2 TSG-S and TSG-X dated 17 October 2005 on the Mobile Broadcast Services Specifications	OMA BAC-BCAST	WG1, WG3, WG4
041	LS to TSG-C, TSG-S, and TSG-X dated18 October 2005 regarding Media Independent Handover Services	IEEE 802.21	WG1, WG3
042	TSG-S workplan files - October 2005	3GPP2 SECRETARIAT	All WGs
043	Vision AdHoc Report	VISION ADHOC	FYI
044	3GPP2 Drafting Rules topic proposal	TSG-A	WG1
CLOSING PLENARY - 3GPP2-S00-20051024-			
100	Document Status Table	WG1	APPROVED
101	WG1 Report	WG1	FYI
102	WG2 Report	WG2	FYI
103	PMT Report	WG3	FYI WIs APPROVED
104	WG4 Report	WG4	FYI
105	WG5 Report	WG5	FYI
106	Vision AdHoc Report	VISION ADHOC	N/A
107	Numbering AdHoc Report	NUMBERING ADHOC	FYI
108	UIM AdHoc Report	NOT SUBMITTED	N/A
109	OMA AdHoc Report	NOT SUBMITTED	N/A
110	Correspondence dated 24 October 2005 regarding Advanced Notice of Incoming Liaison from ITU-R WP 8F	TSG-X	WG3
111	Correspondence dated 26 October 2005 regarding Extension of V&V of S.P0086-B v0.3	TR45	WG4
112	Proposed correspondence to 3GPP2 MRPs regarding S.P0113-0 Enhanced cdma2000 SRD input	WG1	APPROVED
113	Proposed correspondence to TSG-X regarding S.P0113-0 comments	WG1	APPROVED

1

NUMBER	SUBJECT	SOURCE	ACTION
114	Proposed correspondence to TSG-A and TSG-C regarding S.P0113-0 discussions in Maui	WG1	APPROVED
115	Proposed correspondence to 3GPP2 SC Chair regarding establishment of cooperative Relationship with IEEE 802	WG1	APPROVED
116	Proposed correspondence to TSG-X regarding Stage I and SRD Issues - S.P0106-0 (PSVT) Stage 1	WG1	APPROVED
117	S.P0111-0 Expanded R-UIM Stage 1 Requirements proposed publication text	WG1	APPROVED
118	Proposed correspondence to OMA REL regarding OMA Work Programme	WG3	APPROVED
119	Proposed correspondence to TSG-X regarding OMA Mobile Broadcast Services specification	WG3	APPROVED
120	Proposed correspondence to SC Chair regarding cdma2000 1X Name Clarification	WG3	APPROVED
121	Proposed correspondence to TSG-X WiFi Liaison regarding WiFi Liaison Update from 3GPP2 Workplan	WG3	APPROVED
122	Proposed correspondence to TIA TR45 EUM AdHoc regarding Analysis and Consideration Regarding ESN Reclamation	NUMBERING ADHOC	APPROVED
123	Proposed correspondence to WPD AdHoc regarding 3GPP2 Drafting Rules Proposal	WG3	APPROVED
124	Proposed correspondence to 3GPP SA5 regarding Comments & questions regarding 3GPP SA5 R6 IRP definitions	WG5	APPROVED
125	Proposed correspondence to TSG-C regarding OTASP vs GBA	WG4	APPROVED
126	Proposed correspondence to TSG-C regarding EAP over HRPD	WG4	APPROVED
127	Proposed correspondence to TIA TR45 regarding V&V comments on S.P0110-0 IP Based Location Services Security Framework	WG4	APPROVED
128	S.P0112-0 v0.2 Generic Bootstrapping Architecture System Requirements Document proposed V&V text	WG4	APPROVED

1

2

STATUS OF APPROVED TSG-S SPECIFICATIONS AND REPORTS		
NUMBER	**TITLE**	**RESP**
S.R0003-0	3GPP2 System Capability Guide	WG1
S.R0003-A	3GPP2 System Capability Guide	WG1
S.R0004-0	3GPP2 Service Implementation Guide	WG1
S.R0005-A	3GPP2 Network Reference Model (Rev. A)	WG2
S.R0005-B	3GPP2 Network Reference Model (Rev. B)	WG2
S.R0006-0	Cellular Features Description (TIA/EIA-664-A Rev A)	WG1
S.R0007-0	User Selective Call Forwarding (Stage 1) v2.1	WG1
S.R0008-0	Answer Hold (Stage 1) v2.0	WG1
S.R0009-0	User Identity Module (Stage 1) (PN-4582) v1.0	UIM ID ADHOC
S.R0010-0	Preferred Language Enhancement (Stage 1) (PN-4289) v1.0	WG1
S.R0011-0	Advice of Charge (Stage 1) (PN-4289) v1.0	WG1
S.R0012-0	Rejection of Undesired Annoying Calls (Stage 1) (PN-4289) v1.0	WG1
S.R0013-0	Global Emergency Call Origination (Stage 1) v1.0	WG1
S.R0014-0	Tandem Free Operation (Stage 1) v1.0	WG1
S.R0015-0	ISDN Interworking (Stage 1) v1.0	WG1
S.R0016-0	Automatic Code Gapping (Stage 1) v2.0	WG1
S.R0017-0	3G Wireless Network Management System High Level Requirements (Stage 1)	WG5
S.R0018-0	Prepaid Services (Stage 1) (PN-4287) v1.0	WG1
S.R0019-0	Location Based System Services (LBSS) Stage 1 v1.0	WG1
S.R0021-0	Multimedia Streaming Stage 1 v1.0	WG1
S.R0022-0	Video Conferencing Stage 1 v1.0	WG1
S.R0023-0	High Speed Data Enhancements for cdma2000 1x Stage 1 - Data Only v2.0	WG1
S.R0024-0	WLL Stage 1 v1.0	WG1
S.R0025-0	WPP Stage 1 v1.0	WG1
S.R0026-0	High Speed Data Enhancements for cdma2000 1x Stage 1 - Integrated Data and Voice (1xEV-DV) v1.0	WG1
S.R0027-0	Personal Mobility Stage 1 v1.0	WG1
S.S0028-0	OAM&P Specification v1.0	WG5
S.S0028-0	OAM&P Specification v2.0	WG5
S.S0028-0	OAM&P Specification v3.0	WG5
S.S0028-A	OAM&P Specification v3.0	WG5
S.S0028-xxx-B	OAM&P Specification v2.0 - parts 000 through 0004	WG5
S.R0029-0	Access control based on call type Stage 1 v1.0	WG1
S.R0030-0	Broadcast Multicast Services Stage 1 v1.0	WG1
S.R0030-A	Broadcast Multicast Services Stage 1 v1.0	WG1
S.R0032-0	ESA and ESP Stage 1 v1.0	WG1

1

STATUS OF APPROVED TSG-S SPECIFICATIONS AND REPORTS		
NUMBER	**TITLE**	**RESP**
S.R0033-0	Realm Configured Packet Data Session Dormancy Timer Stage 1 v1.0	WG1
S.R0034-0	UIM ID Assignment Guidelines v2.0	UIM
S.R0035-0	RESCINDED: Superseded by S.R0079-0	WG1
S.R0037-0	3GPP2 NAM v2.0	WG2
S.R0038-0	3GPP2 Evolution Document v2.0	WG2
S.R0045-0	RESCINDED 21 July 2005	WG1
S.R0046-0	RESCINDED 21 July 2005	WG1
S.R0047-0	RESCINDED 21 July 2005	WG1
S.R0048-0	MEID Stage 1 v1.0	NUM ADHOC
S.R0048-A	MEID Stage 1 v4.0	NUM ADHOC
S.R0050-0	RESCINDED 21 July 2005	WG1
S.R0051-0	EMS Stage 1 v1.0	WG1
S.R0052-0	3GPP2 System Release Guide	WG3
S.S0053-0	Common Cryptographic Algorithms v1.0	WG4
S.S0054-0	Interface Specification for Common Cryptographic Algorithms v1.0	WG4
S.S0055-0	Enhanced Cryptographic Algorithms v1.0	WG4
S.S0055-A	Enhanced Cryptographic Algorithms v3.0	WG4
S.R0057-0	IP Based Service Architecture System Requirements v1.0	WG1
S.R0058-0	IP Multimedia Domain System Requirements	WG1
S.R0059-0	Legacy MS Domain Step-1 v1.0	WG1
S.R0060-0	Removable User Identity Module (R-UIM) Mobile Equipment (ME) Interface Testing v1.0	UIM ID ADHOC
S.R0061-0	Immediate Messaging	WG1
S.R0062-0	Presence Service	WG1
S.R0064-0	Multimedia Messaging Stage 1	WG1
S.R0064-A	Multimedia Messaging Stage 1	WG1
S.R0065-0	Fast Call Setup Stage 1 v1.0	WG1
S.R0066-0	IP Based Location Services Stage 1	WG1
S.R0067-0	Enhanced Call Recovery Stage 1 v1.0	WG1
S.R0068-0	LLA_ROHC Stage 1 v1.0	WG1
S.R0069-0	Header Stripping and Generation Stage 1 v1.0	WG1
S.R0070-0	3GPP2 Process Guidelines v1.0	WG1
S.R0070-A	RESCINDED IN FAVOR OF SC.R1003-0	WG3
S.R0071-0	Legacy System Packet Data Surveillance Requirements v1.0	WG4
S.R0072-0	IP System Packet Data Surveillance Requirements v1.0	WG4
S.R0073-0	Internet Over-the-Air Handset Configuration Management v1.0	WG1
S.R0074-0	Multimedia File Format Stage 1	WG1
S.R0075-0	Accounting and Auditing Stage 1	WG1

1

STATUS OF APPROVED TSG-S SPECIFICATIONS AND REPORTS		
NUMBER	**TITLE**	**RESP**
S.R0077-0	3GPP2 Vision Document - PUBLISHED AS SC.R5001-0	VISION ADHOC
S.S0078-0	Common Security Algorithms v1.0	WG4
S.S0078-A	Common Security Algorithms v3.0	WG4
S.R0079-0	End-to-End QoS Stage 1	WG1
S.R0080-0	Wide Band Speech Codec for CDMA 2000 Systems Stage 1 v1.0	WG1
S.R0082-0	Enhanced Packet Data Air Interface Security Stage 1	WG4
S.R0083-0	Broadcast-Multicast Service Security Framework v1.0	WG4
S.S0083-0	Broadcast-Multicast Service Security Framework v1.0	WG4
S.R0084-0	Packet PrePaid Services Stage 1	WG1
S.R0086-0	3GPP2 IMS Security Framework	WG4
S.R0086-A	3GPP2 IMS Security Framework	WG4
S.R0087-0	WLAN - cdma2000 Interworking	WG1
S.R0088-0	RESCINDED IN FAVOR OF SC.R4001-0	NUM ADHOC
S.R0089-0	RESCINDED IN FAVOR OF SC.R4002-0	NUM ADHOC
S.R0090-0	Network Initiated Data Sessions (NIDS)	WG1
S.R0092-0	LMSD Step 2 Stage 1	WG1
S.S0093-0	cdma2000 Network Performance Measurement Types	WG5
S.R0094-0	Rm Interface Enhancements v1.0	WG1
S.R0095-0	Support for ISIM on UICC	WG1
S.R0096-0	TrFO	WG1
S.R0097-0	RESCINDED IN FAVOR OF SC.R1001-0	WG3
S.R0099-0	RESCINDED IN FAVOR OF SC.R1002-0	WG3
S.R0100-0	System Requirements for PoC	WG1
S.R0101-0	IOTA DM Stage 1	WG1
S.R0102-0	RESCINDED IN FAVOR OF SC.P2001-0	WG3
S.R0103-0	Network Firewall Configuration and Control Stage 1	WG1
S.R0104-0	HAT Authentication System Requirements	WG1
S.R0105-0	Hotlining System Requirements	WG1
S.R0106-0	Packet Switched Video Telephony (PSVT) Stage 1	WG1

1
2

STATUS OF TSG-S PROJECTS IN DEVELOPMENT		
NUMBER	**TITLE**	**RESP**
S.P0020-0	Location Information Restriction (LIR) Stage 1	WG1
S.P0036-0	All IP System Capability Guide	WG1
S.P0037-0	3GPP2 NAM	WG2
S.P0041-0	UIM Support in All IP Networks	UIM ID ADHOC
S.P0044-0	Rescue Channel Stage 1	WG1
S.P0063-0	RESCINDED	WG1
S.P0076-0	Protocol Alignment Reference	WG3
S.P0081-0	Wireless Applications Management	WG1
S.P0085-0	3GPP2 Equipment Numbering JEM Report and Conclusions - WITHDRAWN TO BE INCLUDED AS AN ANNEX IN S.R0048 MEID STAGE 1	NUM ADHOC
S.R0087-A	WLAN - cdma2000 Interworking	WG1
S.P0091-0	WITHDRAWN	
S.P0098-0	RESCINDED - 2/17/05 - Functionality included in X.P0028	WG4
S.P0107-0	RESCINDED - 4/20/05 - Unsponsored WI	WG1
S.P0108-0	HRPD-3G1x Interworking System Requirements	WG1
S.P0109-0	General Bootstrapping Architecture (GBA) Stage 2/3 specification	WG4
S.P0110-0	Location Services Security Framework Report	WG4
S.P0111-0	Expanded R-UIM Identifier Stage 1	WG1
S.P0112-0	General Bootstrapping Architecture (GBA) Stage 1 Requirements	WG1
S.P0113-0	Enhanced cdma2000 SRD	WG1
S.P0114-0	Security Mechanisms Using GBA	WG4

1

2

3

1

2

3GPP2 QUORUM ROLL CALL
TSG-S (Systems and Services Aspects)
    Beijing, China
      27-Oct-05

INDIVIDUAL MEMBER COMPANY	Attendance 10/24/2005	Attendance 10/27/2005	Consecutive Mtgs Missed	Voting Status	Quorum Status at Mtg Start
AIRVANA			3	0	**0**
ALLTEL	1		0	1	1
AXALTO	1		0	1	1
BELL MOBILITY			3	0	**0**
CHINA UNICOM			3	0	**0**
COMVERSE			1	0	**0**
DOCOMO US LABORATORIES			2	1	1
ERICSSON	1		0	1	1
ETRI			3	0	**0**
FRANCE TELECOM			2	0	**0**
FUJITSU	1		0	1	1
GEMPLUS			0	0	0
HUAWEI			2	1	1
HEWLETT PACKARD			0	1	1
HITACHI			3	0	**0**
KDDI	1		0	1	1
KYOCERA			0	1	1
LG ELECTRONICS	1		0	1	1
LG TELECOM	1		0	1	1
LUCENT	1		0	1	1
MOTOROLA	1		0	1	1
NATIONAL COMMUNICATIONS SYS			0	0	0
NEC	1		0	1	1
NOKIA	1		0	1	1
NORTEL NETWORKS	1		0	1	1
QUALCOMM	1		0	1	1
RESEARCH IN MOTION			0	1	1
SAMSUNG	1		0	1	1
SK TELECOM			2	0	**0**
SPRINT/NEXTEL			0	1	1
TELCORDIA			0	0	0
TELUS			0	0	0
US CELLULAR			0	0	0
VERIZON WIRELESS			0	1	0
TOTALS	14	0		21	21
QUORUM CALCULATION	67%	0%			
ADDITIONS					
					0
					0
					0
					0
					0
OBSERVERS AND GUESTS					
ARIB	1				

QUORUM STATUS NOTES:
- HIGHLIGHTED ZERO = Must attend 2 consecutive mtgs to be added to quorum list
- NON-HIGHLIGHTED ZERO = Will be added to quorum list next mtg if they attend
P = Letter of Proxy in effect