Title: 1 2 APPROVED SUMMARY OF ALL IP ADHOC MEETING 3 for the period of 20-21 September 2000 in Seoul, Korea Source: 4 5 Clifton J. Barber 6 **SECRETARY** 7 Oki Network Technologies 70 Crestridge Drive Suite 150 Suwanee, Georgia 30024 (678) 482-2669 Fax (678) 482-8941 8 cbarber@okitele.com 9 **Abstract:** 10 This document is a summary of the discussions from the 3GPP2 ALL IP AdHoc meetings held at the Sheraton Walker Hill Hotel in Seoul, Korea during the period of 20-21 September 2000. 11 **Recommendation:** 12 13 For review and approval. 14 **Notice:** 15 16 © 2000 3GPP2 17 The contributor grants a free, irrevocable license to 3GPP2 and its partner SDOs to incorporate text contained in 18 this contribution and any modifications thereof in the creation of a standards publication; to copyright in the name 19 of 3GPP2 or its partner SDOs any standards publication even though it may include portions of this contribution; 20 and, at their sole discretion, to permit others to reproduce in whole or in part the resulting standards publication 21 from the partner SDOs.

- During the period of 20-21 September 2000, a meeting of 3GPP2 All IP AdHoc was held at the
- 2 Sheraton Walker Hill Hotel in Seoul, Korea. This report is intended to summarize those
- 3 discussions.
- 4 1. CALL TO ORDER AND OPENING REMARKS: The meeting was called to order on
- 5 20 September 2000 at 10:15 AM local time by All IP AdHoc Co-Chair Mark Lipford
- 6 (Sprint PCS). The sign-in sheets indicate that approximately 50 persons were in attendance.
- PR POLICY QUERY: The Chair referred the participants to the copyright statement on the agenda and noted that submission of a contribution at this meeting would be assumed as commitment to that copyright statement.
- 11 3. ATTENDANCE REGISTRATION: An electronic sign-in sheet was distributed to for the registration of attendees.
- 4. AGENDA REVIEW AND APPROVAL: The agenda was presented and approved without objection as modified by the discussion (ALLIP-20000920-001R3).
- 5. CONTRIBUTIONS: ASSIGNMENT TO AGENDA ITEMS: Contributions (ALLIP-20000920-000R3) were assigned to agenda items all in soft copy format only.
- MEETING SUMMARY APPROVAL: The meeting summary for the August 2000 meeting in San Francisco, CA (ALLIP-20000920-002) was presented and approved without objection as submitted.
- 20 7. CORRESPONDENCE: None.
- 21 8. REPORTS:

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- 22 a. 3GPP2
  - A Liaison Report from TSG-S (ALLIP-20000920-010) was presented as FYI.
  - The meeting summary of the NAM and Requirements Focus Groups meeting in Vancouver, BC during the period 6-8 September 2000 (-ALLIP-20000920003) was presented and approved without objection as editorially modified by the discussion (ALLIP-20000920-003R1). However, this contribution was subsequently disapproved in conjunction when the review of contribution ALLIP-20000920-019 indicated that the description of evolution phases defined by the Evolution FG in conjunction with contribution ALLIP-RFG20000906-009 was noted to be in error. The revised summary (ALLIP20000920-003R1) was then re-approved without objection.
- b. MWIF: A brief verbal summary of MWIF status was provided by Mike Dolan (Lucent). He indicated that MWIF WG4 was in the process of preparing simulation strategies to be presented to both 3GPP and 3GPP2. In addition, he indicated that MWIF Architectural notes and recommendations (ALLIP-20000920-022) will be discussed under the NAM agenda item.
- 40 c. CDG: No report.

- d. 3GPP: No report. 1
- 2 OTHERS: None. e.

## 9. **FUTURE MEETINGS**

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4 The Chair noted the recommendation of the NAM FG that a V&V session of the FG is 5 scheduled for final document V&V. There was discussion on whether this meeting should 6 be a full AdHoc meeting since approval of the final document by the full AdHoc will be 7 required. The group decided without objection that this meeting would be a FG meeting only for V&V of both NAM and requirements documents and that a full AdHoc 8 9 conference call would be held subsequently to approve the final output. The detailed 10 schedule was summarized as follows:

11	•	3-5 October 2000	All IP AdHoc Final meeting - Chicago, IL
12	•	18-20 October 2000	NAM FG - Essex Inn in Burlington, VT
13	•	23 October 2000	NAM FG output broadcast on the e-mail exploder
14	•	25 October 2000	All IP AdHoc Conference Call for final acceptance
15			of documents (5:30 PM Eastern US time on 25 Oct.,
16			6:30 AM Japan on 26 Oct.)

## 10. **OLD BUSINESS**

## STAGE 1 REQUIREMENTS a.

- In the absence of both the Requirements Editor and his stand-in for the Vancouver meetings, Henrik Basilier (Ericsson) led the discussions on this topic.
- The All IP Requirements document v0.6.2 (ALLIP-20000920-004) was presented and the changes from the recent FG meetings were reviewed in detail. The changes were accepted without objection but additional minor editorial changes were noted.
- The Requirements Open Item List (ALLIP-20000920-004A) was presented and the changes were reviewed in detail.

There was only one (1) remaining open item (item 21) and TSG-A input was required on that topic. Although the Chair of the TSG-A RAN WG indicated no problem with the text as proposed, several concerns were expressed regarding the inefficiencies of vocoder placement in the RAN. However, after substantial discussion, the requirement was approved without objection for incorporation into the requirements document as written with the understanding that this requirement may need to be fleshed out or modified during the final review process.

During the review of the Open Item List, it was noted that many of the items that were indicated as approved in this document had not been included in the Requirements document v0.6.2. Those approved items need to be added.

1 An updated version (v0.6.3) of the Requirements (ALLIP-20000920--2 004R1) document was noted including corrections of all of the omissions 3 indicated above. 4 b. **NAM** 5 NOTE: This portion of the meeting was conducted as a NAM FG meeting and was facilitated by NAM FG Co-Chair, Mike Dolan (Lucent). 6 7 The NAM document v0.7.2 (ALLIP-20000920-005R1) was presented by 8 the Editor and all changes were reviewed. Editorial comments should be 9 directed to the Editor by e-mail. NOTE: The group agreed that, in the 10 future, the Editor will broadcast only the pdf file of the NAM document and all other versions of the document will be posted to the 3GPP2 ftp 11 12 website by the Secretary. 13 A contribution entitled "All IP Evolution" (ALLIP-20000920-028) was 14 presented by the Evolution FG Editors. This contribution proposed text 15 for Section 5 of the NAM as agreed to within the Evolution FG. The text in this document was accepted without objection as modified by the 16 17 discussion (ALLIP-20000920-028R1). 18 A contribution entitled "Should we integrate the "Service Manager" and 19 the "Session Control Manager", or shouldn't we? This is the question." (-ALLIP20000920-006) was presented by Ericsson. This contribution 20 21 recommended the integration of the SM and SCM functions in the NAM. 22 This recommendation was accepted by the group without objection. In addition, the text in the contribution as modified by the discussion (-23 24 ALLIP-20000920006R1) was accepted without objection. 25 A contribution on NAM text updates (ALLIP-20000920-009R1) was presented by 3COM. This contribution proposed minor editorial changes 26 27 to the Border Router and Subscription OoS Manager sections. The text proposed in this contribution was accepted without objection. 28 29 A contribution on the improvement of Access Gateway text for the 30 TIA/EIA-41 Domain section (ALLIP-20000920-021) was presented by the 31 All IP AdHoc Experts. This text was approved without objection. 32 A contribution on non-SIP service application access (ALLIP-20000920--012) was presented by Lucent. This contribution proposed changes to the 33 34 Service Application text and proposed the addition of a new functional 35 entity called Services Gateway. There was general interest in the concept 36 of the Services Gateway but the contributor was directed to revise and 37 resubmit at the next meeting based on the discussion. 38 A contribution on the MM entity function (ALLIP-20000920-016) was 39 presented by LGE. This contribution proposed the addition of paging 40 control to the MM. A small group of experts was designated to review this issue in conjunction with call flow analyses and prepare recommendations 41 42 for further discussion at this next meeting. The contributor will then revise 43 and resubmit the contribution after these deliberations are completed.

- A contribution entitled "AAAAA modifications" (ALLIP-20000920-013) was presented by Lucent. This contribution recommended editorial changes to the authorization section. The modifications suggested were noted, but the NAM Editor also noted that there had been an editing error that resulted in the incorrect text for the Authorization Function. That text had been corrected already in a revised version of the NAM. The remainder of the contribution dealt with a small editorial issue and was taken into consideration by the editor. The document was noted as completed by the group.
- A contribution entitled "ANSI-41 Domain modifications" (ALLIP-20000920014) was presented by Lucent. This contribution proposed modifications to the TIA/EIA-41 Domain text for consistency to other sections of the NAM document. The actions taken by the group are listed below:
  - The proposed text for the TIA/EIA-41 Domain Support was accepted without objection except that the text related to interfaces m and n were removed pending further discussion.
  - A small group of experts was formed to generate call flows with respect to the authentication of a mobile across boundaries between legacy and Al IP networks.
  - The text on the HLR was accepted without objection.
  - The text on the SCP Server was accepted without objection except for item e in the bullet list.
  - Accepted the recommendation that Section 3.1.5 be deleted.
  - The change to the title of 3.1.6 was accepted and the entire section was moved to section 3.3. The text changes in this section were also accepted but there was no consensus on the proposed changes to the figure in this section.

Regarding the figure which was under discussion in the last section, a concern was identified that the lack of consensus posed a threat that functionality currently available in ANSI-41 would be lost. Sprint PCS indicated that this loss of functionality was unacceptable and that they would be generating a future contribution to add an appropriate requirement.

A contribution entitled "IP Domain view - R1" (ALLIP-20000920-017) was presented by LGE. This contribution was revised from the last meeting. There was general agreement that this type of diagram is useful and should be included in the NAM but there was not consensus on the details on the diagram. A small group of experts was formed to modify the diagram for discussion at the next meeting.

- The MWIF Architectural Comments and Recommendations on the 3GPP2 All-IP Network Architecture Model v.0.7.0 (ALLIP-20000920-022) were presented by the NAM FG Co-Chair. This contribution provides formal input to the All IP AdHoc based on certain aspects of the MWIF architecture. It included the following two (2) diagrams which are still in development and have not been released outside the group:
  - MWIF Layered Functional Architecture
  - MWIF Network Reference Architecture

Both of the recommendations included in this document had already been considered and implemented in the 3GPP2 All IP NAM so the document was considered as FYI. A response correspondence will be generated from the Chair.

- A contribution on call flow requirements (ALLIP-20000920-024) was presented by 3COM. This contribution proposed a list of requirements to be considered when developing call flows. This document was accepted for use in the development of the All IP call flows with the exception of the following:
  - Fundamental Requirement 5 was changed to "Accurate capture of failure information for the purpose of billing."
  - Corollary and secondary requirements 3, 4, and 5 were rejected.
- A contribution entitled "Example call flows for NAM validation PA2" (-ALLIP20000920-023) was presented by Ericsson. The call flow diagram related to Access registration and MIP registration in the IP MMed domain with HA allocated in visited network was reviewed in detail. During the discussion, the TSG-A representative expressed a concern regarding the separation of the Mobility Manager from the RAN. The NAM Co-Chair, backed by the AdHoc Chair, indicated to the TSG-A representative that the MM, at this point in time, has been decided by the AdHoc to be a part of the NAM. The call flow work is progressing to validate that NAM. Therefore all entities within that architecture must be used within those call flows when that functionality is addressed. The contributor was directed to revise and resubmit this contribution based on the discussion of this figure.
- A contribution entitled "Mobile IP Roaming Handoff Interactions Plane: Revised" (ALLIP-20000920-026) was presented by Motorola. This contribution, revised from the Vancouver meeting, proposes a Planar View of handoff mobility management of Mobile IP at various levels of access networks, access gateways, and access technologies. There was general consensus that the diagrams give valuable information in the development of the NAM. However, the actual completion of these diagrams should be the purview of TSG-A. A small group of experts was assigned given to generate 2-3 hard handoff call flow diagrams for use in validation of the NAM.

1 The NAM Open Item List (ALLIP-20000920-005B) was presented by the 2 NAM FG Co-Chair and reviewed in detail. The results of the review (-3 ALLIP- 20000920-005BR1) were defined as the basis for on-going work. 4 3GPP2 WORKPLAN c. 5 A contribution entitled "All IP workplan and distribution of work" (-ALLIP20000920-011) was presented by Sprint PCS and supported by 6 7 OUALCOMM, Lucent, 3COM, Ericsson, Nortel Networks, and TSG-P. The contributor noted that this contribution would supersede the 8 9 previously submitted contribution on this subject from Sprint PCS (-10 ALLIP-20000823003). This contribution recommended completion of the All IP Network development activity within the existing 3GPP2 11 organizational structure. It included an assignment of responsibilities for 12 each reference point on the NAM to each TSG or combination of TSGs 13 14 specifying levels of responsibility in cases of joint responsibility. It also indicated that the work of the TSGs with respect to the All IP Network 15 should be coordinated by a dedicated FG reporting to TSG-S. 16 17 A contribution on organization for All IP specification development (-18 ALLIP20000920-018) was presented by six (6) Japanese companies 19 including DDI, Fujitsu, Hitachi, IDO, KDD, and NEC. This contribution 20 recommended that a new TSG be formed to through consolidation of 21 TSG-N and TSG-P. 22 A contribution which presented Oki Network Technologies' 23 recommendations for the All IP specification development (ALLIP--20000920-019) was presented by Oki Network Technologies. This 24 document proposed a phased organization structure changes based on 25 specification development phases. The group indicated that the quoted 26 27 definition of the specification development phases, also indicated in the FG meeting summary (ALLIP-20000920-003), was incorrect and not intended 28 29 to be serial. 30 After some discussion, the group agreed without objection as follows: Start the work immediately using the existing TSG structure 31 32 This effort will be coordinated by a group under TSG-S. 33 That the SC set a time frame (approximately 8 months) for review 34 of the 3GPP2 organizational structure to see if any modifications of 35 that structure should be addressed. The input for this discussion 36 will come from all TSGs including particularly TSG-S and the 37 coordinating group.

TSGs.

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39 40 The responsibility matrix from the Sprint PCS contribution will be used as the basis for on-going discussions on the division of labor among the

- TSG-S input to the All IP AdHoc (ALLIP-20000920-020) was presented. This contribution recommended that TSG-S continue, as minimum, its traditional role including requirements definition, network reference/architecture model, and 3GPP2 workplan management. There was general acceptance from the group regarding this role.
- A contribution on All IP project management in TSG-S (ALLIP--20000920015) was presented by Lucent and Sprint PCS. This contribution including a detailed listing of responsibilities for a new group in TSG-S. Related issues which were noted in the resulting discussion including the following:
  - The contribution recommended a group within TSG-S which would handle requirements, NAM, and project management for the All IP effort. Some concern was expressed that the requirements and NAM should be handled in the normal TSG-S structure and that this group focus on the detailed project leadership issues. However, the group agreed that the internal organization of TSG-S related to this group is a TSG-S decision and not subject to input from the AdHoc.
  - The contribution indicated that TSG-S would be responsible for refining and maintaining the NAM. However, there was general agreement that each TSG is responsible for development of parts of the NAM (i.e., TSG-A is responsible for the RAN) and TSG-S is responsible of incorporating their output into a total 3GPP2 NAM.
  - There was general consensus to make a strong recommendation to TSG-S to establish a single group which can collocate with the other TSGs as required by those TSGs to facilitate project management, NAM development/maintenance including high-level system requirements, and to coordinate end-to-end specification development to facilitate fast decisions without going back through TSG-S.
  - The group further recommended that this coordinating group be established with the right technical mix and representation from all TSGs.
  - There was substantial discussion on whether this AdHoc should recommend to the SC that the TSG-S responsibility for Stage 1 development be delegated to this group with respect to All IP activities. Oki Network Technologies objected to this recommendation on the basis that this decision should be the decision of TSG-S. As the All IP Liaison to TSG-S, the objector volunteered and was subsequently directed to solicit TSG-S approval for delegation of these Stage 1 responsibilities to this group for response by the next adhoc meeting.

- 1 Regarding the meeting schedule proposed in the Sprint PCS contribution, 2 the Chair agreed to prepare a message for broadcast to all TSGs advising 3 the need for increased collocation and suggesting dates for increased 4 collocation for consideration by the TSGs. That message will be broadcast 5 for review on the All IP exploder prior to broadcast to the other TSGs. 6 The Chair agreed to incorporate discussed recommendations into the 7 proposed workplan (from the Sprint PCS contribution) for further 8 discussion. This input, included in a contribution entitled "3GPP2 All IP 9 Workplan - Baseline" (ALLIP-20000920-025), was presented by the Chair 10 and reviewed in detail. This contribution was subject to additional discussion and including consideration of a contribution from the TSG-A 11 12 representative on workplan mods (ALLIP-20000920-027). The modified 13 contribution (ALLIP20000920-025R3) was then approved without 14 objection. The group also agreed without objection to the following: This approved document will be broadcast to all TSGs for review 15 16 and comment as well as to the All IP e-mail exploder. 17 This document and all related comments will be reviewed at the 18 next AdHoc meeting in Chicago, IL and, if agreement can be 19 reached, approved at that meeting. 20 If consensus cannot be reached in Chicago, IL, a strategy must be implemented to allow final approval at the 25 October 2000 21 22 conference call. 23 11. **NEW BUSINESS:** 24 The Chair brought the idea of merging the Requirements and NAM documents 25 into a single document for the consideration of the group. The group indicated a 26 preference for keeping the documents as separate items. 27 The Chair presented an unnumbered contribution with a recommended 2001 28 meeting schedule. This schedule was accepted as the basis for TSG review and comment. 29 30 The Chair presented an unnumbered contribution of proposed correspondence to all TSGs which communicated the following information: 31 32 The draft All IP workplan. 33 • The recommended 2001 meeting schedule.
- 36 12. REVIEW OF ASSIGNMENTS: Not separately detailed.

The NAM v0.7.2

- 37 13. OPEN DISCUSSION: None.
- 38 14. ADJOURNMENT: The meeting was adjourned at 2:35 PM local time on 24 September 2000.

That contribution was approved without objection for transmission to the TSGs.

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

NUMBER	SUBJECT	SOURCE
ALLIP-200009	920-	
000	CONTRIBUTION REGISTER	SECRETARY
001	AGENDA	CHAIR
002	Meeting summary - August 2000 - San Francisco, CA	SECRETARY
003	Focus Group meeting summary - September 2000 - Vancouver, BC	SECRETARY
004	All IP Requirements	EDITOR
005	All IP NAM	EDITOR
006	Should we integrate the "Service Manager" and the "Session Control Manager", or shouldn't we? This is the question.	ERICSSON
007	Is there a need for a reference point between the "Service Application" and the "Position Server"?	ERICSSON
008	Should a specific "Service Application" be authorised? How?	ERICSSON
009	IP NAM text updates	3COM
010	TSG-S Liaison Report-0008	TSG-S
011	3GPP2 All IP Workplan Proposal	SPRINT PCS AND OTHERS
012	Non-SIP service application access	LUCENT
013	AAAAA modifications	LUCENT
014	ANSI-41 Domain modifications	LUCENT
015	The All IP project management in TSG-S	LUCENT
016	All IP NAM - MM entity discussion	LGE
017	All IP NAM - IP network domain view	LGE
018	Organization for All IP specifications development	DDI
019	Recommendations for specification development for 3GPP2 All IP Network	OKI
020	TSG-S input to the All IP AdHoc	TSG-S
021	Improvement of Access Gateway Text for TIA/EIA-41 Domain	ALL-IP ADHOC EXPERTS
022	MWIF Architectural Comments and Recommendations on the 3GPP2 All-IP Network Architecture Model v.0.7.0	MWIF
023	Example call flows	ERICSSON
024	Call flow requirements	3COM
025	All IP workplan proposal	CHAIR
026	Mobile IP Roaming Handoff Interactions Plane Revised	MOTOROLA
027	Proposed Modifications to All IP Workplan and Division of Work	CHAIR, TSG-A ALL IP ADHOC

ALLIP-20000920-				
028	All IP Evolution	EVOLUTION FG EDITORS		
029	Correspondence to MWIF	SECRETARY		