3GPP2 TSG-SX Meeting Summary #1 – Busan, Korea

DATE: March 11, 2013
LOCATION: Busan, Korea

CHAIR: Dr. Xiaowu (Frankle) Zhao, ZTE
VICE CHAIR: Yuezhen Wang, China Telecom

Mike Dolan, Alcatel-Lucent

SECRETARY: Eileen McGrath Doohan, representing 3GPP2

OPENING PLENARY

1. TSG-SX Opening Remarks by TSG-SX Chair

The TSG-SX Chair conducted TSG-SX plenary meeting sessions as follows (times are in local time):

- Opening plenary 9:00 AM 12:13 PM, Monday, March 11, 2013.
- Interim Plenary 3:00 3:15PM, Monday March 11, 2013.
- Closing plenary 8:40 10:57 AM, Friday, March 15, 2013.

2. Introduction and Attendance Registration

Ms. Doohan conducted a roll call of member companies. 12 of 16 quorum members responded as present, for 75% quorum. Refer to the quorum list in Section "14. Adjournment" for details. Attendance was recorded as follows:

| Company | Name | E-mail |
|--------------------------------|-----------------------|----------------------------------|
| Alcatel-Lucent | Mike Dolan | Mike.dolan@alcatel-lucent.com |
| Alcatel-Lucent | Jane Brownley | jane.brownley@alcatel-lucent.com |
| Applied Communication Sciences | Achilles Kogiantis | akogiantis@appcomsci.com |
| China Telecom | Yuezhen Wang | wangyzh@gsta.com |
| China Telecom | Li Wenyi | liwenyi@gsta.com |
| China Telecom | Heng Nie | nieheng@ctbri.com.cn |
| Huawei | Jixing Liu | liujixing@huawei.com |
| NEC | Hirofumi Okata | h-okata@cq.jp.nec.com |
| Nokia Siemens Networks | Victor Coello | Victor.coello@nsn.com |
| Qualcomm | Roozbeh Atarius | ratarius@qti.qualcomm.com |
| Qualcomm | Alex Gogic | agogic@qti.qualcomm.com |
| Qualcomm | Jack Nasielski | jackn@qualcomm.com |
| Qualcomm | Jun Wang | jwang@qti.qualcomm.com |
| RITT/CCSA | Xiayu Li | lixiayu@mail.ritt.com.cn |
| Sprint Nextel | Bonnie Chen | BonnieChen@sprint.com |
| Sprint Nextel | George Cummings | George.cummings@sprint.com |
| ZTE | Xiaowu Zhao | Zhao.xiaowu@zte.com.cn |
| 3GPP2 | Eileen McGrath Doohan | eileen.m.mcgrath@mac.com |

3. Numbering of Contributions

The following SX00-20130311-xxx documents were numbered and assigned to the listed agenda items, as follows:

| # | Subject | Source | Status |
|-------|-------------------|---------------|---------------------------|
| 000 | Document Register | Chair, TSG-SX | FYI. |
| 001r1 | Agenda | Chair, TSG-SX | Approved, modified as r3. |

| # | Subject | Source | Status |
|------|---|-----------------|-----------------------|
| 002 | TSG-X Summary Meeting Report, December 2012 | Chair, TSG-X | Approved for posting. |
| 003 | Incoming Liaison to TSGs re: For Your Review by 12 March 2013 – Four (4) Work Item Worksheets | Director, 3GPP2 | Advance Remanded WG1. |
| 003A | 00319: WI Proposal re: cdma2000 Single Radio Voice Call Continuity for IMS Emergency Calls (X-02A) | Sponsors | Advance Remanded WG1. |
| 003B | 00320: WI Proposal re: USSD Messaging on a Common Channel (X-02B) | Sponsors | Advance Remanded WG1. |
| 003C | 00321: WI Proposal re: Bug Fixes for R-UIM Specification | Sponsors | Advance Remanded WG1. |
| 003D | 00322: WI Proposal re: CDMA Card Application Toolkit Support for USSD and Advanced Location | Sponsors | Advance Remanded WG1. |
| 004 | TSG-S Summary Meeting Report, December 2012 | Chair, TSG-S | Approved for posting. |
| 005 | TSG-C Liaison Report for December 10-14 2012 | TGS-C Liaison | FYI. |
| 005A | WI Proposal re: Bug Fixes for R-UIM Specification | Sponsors | FYI |
| 005B | WI Proposal re: CDMA Card Application Toolkit Support for USSD and Advanced Location | Sponsors | FYI. |
| 006 | Courtesy Copy of Liaison to TIA TR-45.4 dated Dec 13, 2012 re: Approval of TSG-A Specifications for Publication | Chair, TGS-A | FYI. |
| 007 | Courtesy Copy of Liaison to TIA TR-45.4 dated Dec 13, 2012 re: Initiation of V&V for TSG-A Specification(s), originally copied to TSG-S and TSG-X | Chair, TSG-A | FYI. |
| 008 | Courtesy Copy of Liaison to 3GPP2 TSG RAN3 dated December 12, 2012 re: R3-122935 – LS on LTE-HRPD inter RAT SON, originally copied to TSG-S and TSG-X | Chair, TSG-A | FYI. |
| 009 | Courtesy Copy of Liaison to 3GPP2 Director dated December 14, 2012 re: Work Plan Questions | Chair, TSG-C | FYI. |
| 010 | Incoming Liaison dated December 14, 2012 re: TSG-C review of S.P0148-A v0.2 Dynamic RAN Power Management Stage 1, originally addressed to TSG-S | Chair, TSG-C | Remanded to WG1. |
| 011 | Incoming Liaison dated December 14, 2012 re: V&V Initiation of S.P0148-A v0.3 – Comments Due 8 March 2013 | Director, 3GPP2 | Remanded to WG1. |
| 012 | Incoming Liaison dated December 14, 2012 re: V&V Initiation of S.P0151-A v0.8 – Comments Due 8 March 2013 | Director, 3GPP2 | Remanded to WG1. |
| 013 | Courtesy Copy of Liaison to SC dated December 14, 2012 re: For Your Review by 28 December 2012 – Two (2) Work Item Worksheets | Director, 3GPP2 | FYI. |
| 014 | Courtesy Copy of Liaison to SC dated December 14, 2012 re: For Your review by 29 December 2012 – S.R0126-A v1.0 | Director, 3GPP2 | FYI. |
| 015 | Courtesy Copy of Liaison to SC PMT dated December 14, 2012 re: New work item proposals | Chair, TSG-X | FYI. |

| ,, | Oution | 0 | Obstant |
|--------|---|------------------------------|--|
| # | Subject WI Proposal re: cdma2000 Single Radio | Source | Status |
| 015A | Voice Call Continuity for IMS Emergency Calls (X-02A) | Sponsors | FYI. |
| 015B | WI Proposal re: USSD Messaging on a Common Channel (X-02B) | Sponsors | FYI. |
| 016 | Courtesy Copy of Liaison to ITU-T SG11 dated December 14, 2012 re: Request for feedback on attached draft revision of Supplement 62 to ITU-T Q series Recommendations | Chair, TSG-X | FYI. |
| 016A | Modifications to Draft revised Supplement TRQ.ETS-Overview | Chair, TSG-X | FYI. |
| 017 | Courtesy Copy of Liaison to ITU-T SG11 dated December 14, 2012 re: Availability of civic alerting function of 3GPP / 3GPP2 terminal at roaming | Chair, TSG-X | FYI. |
| 018r1 | TSG-SX Correspondence Template v2.0 | Secretariat, TSG- SX | Approved for posting. |
| 019 | Redirected Correspondence to TSG-SX dated December 13, 2012 re: Release of WI(s) for TSG Review, originally addressed to TSG-X | Chair, TSG-S | Advance Remanded to WG1. |
| 019A | 00318: WI Proposal re: CDMA-LTE Carrier Aggregation Study | Sponsors | Advance Remanded to WG1. |
| 019B | Work Item Tracking List | TSG-S PMT | Advance Remanded to WG1, FYI. |
| 020 | TSG-S Liaison Report for December 2012 | Secretary, TSG-S | FYI. |
| 021 | Incoming LS dated Jan 28 2013 re: LS on MSISDN Delivery for 3GPP2 network | 3GPP SA2 | Remanded to WG3. |
| 022 | TSG-SX WG 1 Meeting Report from Jan 14, 2013 | Chair, TSG-SX WG1 | FYI. |
| 023 | TSG-SX WG1 Meeting Report from Feb 25, 2013 | Chair, TSG-SX WG1 | FYI. |
| 024 | Notification of 3GPP2 TSG-SX Development of a 3GPP2 Technical Document: S.R0148-A Dynamic RAN Power Management Stage 1 | Chair, TSG-SX WG1 | FYI. |
| 025r1 | TSG-SX Terms of Reference | ALU and US Cellular | Approved. Chair to present to SC. |
| 026 | Comments on SC-level documents | ALU | Approved as attachment for outgoing correspondence to PMT. |
| 027A | Attachment to oneM2M on collaboration | ALU | Closed. |
| 027Br1 | LS to oneM2M on collaboration | ALU | Closed. |
| 028 | Work Item on Interworking for 3GPP Release 11 | China Telecom, ALU, et al | Remanded to WG1. |
| 029 | Incoming LS dated Feb 19, 2013 re: Study on IMT Vision for 2020 and Beyond | ITU-R WP5D | FYI. |
| 030 | Incoming LS dated Feb 19, 2013 re: Study on Future Technology Trends for Terrestrial IMT Systems | ITU-R WP5D | FYI. |
| 031 | Incoming LS dated Feb 19, 2013 re: Revision of recommendations ITU-R M.1580-4 and ITU-R M.1581-4 | ITU-R WP5D | FYI. |
| 032 | TSG-SX WG2 MMD Agenda for Busan | Chair, TSG-SX WG2 | FYI. |
| 033 | TSG-SX WG1 V&V Comments on S.P0151-0 v0.4 eHRPD – E-UTRAN Interworking Matrix TR | TSG-SX WG1 | Remanded to WG1. |
| 034 | Wireless Characteristics Matrix Combined | NIST | Remanded to WG4. Chair noted that the March 21 conference call scheduled to generate a response. |

| # | Subject | Source | Status | |
|--------|---|----------------------|--|--|
| 035 | TSG-SX WG4 Conference Call Summary | Chair, TSG-SX WG4 | FYI. | |
| 036 | China Telecom Presentation to support CLCA Study work item | China Telecom | Remanded to WG1. | |
| 037r1 | TSG-SX Structure and Leadership | Chair | Noted for TSG operating practice. | |
| 038 | TSG-SX WG3 PDS Meeting Agenda | Chair, TSG-SX WG3 | FYI. | |
| 039 | TR-45.8 re: TIA-PN-4977 ballot comments | Chair, TR45.8 | Remanded to WG1. | |
| 039A | TIA-PN-4977 Ballot comments (ALU) | Chair, TR-45.8 | Remanded to WG1. | |
| 039B | TIA-PN-4977 Ballot comments (Q) | Chair, TR-45.8 | Remanded to WG1. | |
| 039C | TIA-PN-4977 Ballot comments (NSN) | Chair, TR-45.8 | Remanded to WG1. | |
| 040 | TR-45.8 re: TIA-PN-928-A ballot comments, X.P0008-A v0.2 | Chair, TR-45.8 | Remanded to WG1. | |
| 040A | TIA-PN-928-A Ballot Comments (ALU) | Chair, TR-45.8 | Remanded to WG1. | |
| 040B | TIA-PN-928-A Ballot Comments (NSN) | Chair, TR-45.8 | Remanded to WG1. | |
| 041 | TR-45.8 re: TIA-PN-4945-A ballot comments, S.R0148 | Chair, TR-45.8 | Remanded to WG1. | |
| 041A | TIA-PN-4945-A Ballot comments (ALU) | Chair, TR-45.8 | Remanded to WG1. | |
| 042 | TSG-SX WG1 Meeting Agenda | Chair, TSG-SX WG1 | FYI. | |
| 043 | V&V Comments on X.P0008-A | 3GPP2 Secretariat | Remanded to WG2. | |
| 044 | 3GPP2 SC.R4002-0 v8.3 | TIA TR-45 EUMAG | Remanded to WG1. | |
| 045A | TSG-X Workplan | Director, 3GPP2 | Remanded to all WGs, FYI. | |
| 045A1 | TSG-X Workplan MMD Updates | WG2 | Remanded to Secretariat for inclusion to TSG-SX Projects Work Plan. | |
| 046 | 3GPP2 Workplan Files | Director, 3GPP2 | Remanded to WG1, FYI. | |
| 047 | oneM2M 3GPP and 3GPP2 Defined Networks | oneM2M | Closed. | |
| 048 | PMT Meeting Summary | SC PMT | Remanded to WG1. | |
| 049 | Incoming Correspondence re: SC-level documents review | SC PMT | FYI. | |
| 049A | SC-level documents | SC PMT | FYI. | |
| 050r1 | Proposed Outgoing Correspondence to PMT re: SC-level Document Review Comments | Chair, TSG-SX | Approved for Distribution. | |
| 050A | SC-level Documents Review Comments | ALU | Approved for Distribution. | |
| 051 | Proposed Outgoing Correspondence to PMT re: Work Item Review Comments | TSG-SX | Approved for Distribution. | |
| 051A | Work Item 3GPP2-00322, CCAT Support for USSD and Advanced Location | TSG-SX | Approved for Distribution. | |
| 100 | Document Status Table | WG1 | FYI. | |
| 101r3 | WG Report to Closing Plenary | WG1 | Report was presented as FYI. | |
| 101Ar1 | WG1 Development Schedule | WG1 | N/A | |
| 101B | Not Used | WG1 | N/A | |
| 101C | S.P0151-0 V&V Comment Disposition Record | WG1 | Approved as attachment to 101J. | |
| 101D | S.P0151-0 v0.5 S.P0151-0 v0.5 eHRPD – EUTRAN Interworking Matrix TR | WG1 | Approved for a 2 nd V&V, based upon technical comments received at 1 st V&V. | |
| 101DA | 101D, PDF form | WG1 | Approved for 2 nd V&V, based upon technical comments received at 1 st V&V. | |
| 101E | Outgoing Correspondence to TIA TR-45.8 re: V&V Comment Disposition of S.P0151-0 v0.4 eHRPD – EUTRAN Interworking Matrix | WG1 | Approved for distribution with 101C. | |
| 101F | S.P0148-A V&V Comment Disposition Record | WG1 | Approved as attachment to 101H. | |

| # | Subject | Source | Status | |
|--------|---|------------|--|--|
| 101G | S.P0148-A v1.0, Dynamic RAN Power Management Stage 1 (Word) | WG1 | Approved for publication as attachment to 101H. | |
| 101GA | S.P0148-A v1.0, Dynamic RAN Power Management Stage 1 (PDF) | WG1 | Approved for publication as attachment to 101H. | |
| 101Hr2 | Outgoing Correspondence to TIA TR-45.8 re: S.P0148-A dated March 15, 2013 | WG1 | Approved for distribution with 101F, 101G, 101GA. | |
| 1011 | SC.R4002-0 v9.0, GHA Assignment Guidelines and Procedures for MEID and SF_EUIMID (Word) | WG1 | Approved for Publication. | |
| 101IA | SC.R4002-0 v9.0, GHA Assignment Guidelines and Procedures for MEID and SF_EUIMID (PDF) | WG1 | Approved for Publication. | |
| 101Jr2 | Outgoing Correspondence to TIA TR-45.8 re: Re-ballot of S.P0151-0 v0.5 dated March 15, 2013 | WG1 | Approved for distribution announcing 2 nd V&V, with attachment 101D, 101DA, 101K. | |
| 101K | V&V Comment Form - Generic | WG1 | Approved as attachment to 101Jr1. | |
| 102r1 | WG2 Report to Closing Plenary | WG2 | FYI. | |
| 102A | X.P0042-B R&F (Word) | WG2 | Approved for R&F, comments due next meeting. | |
| 102B | X.P0042-B R&F (PDF) | WG2 | FYI. | |
| 103Ar1 | WG3 Report | WG3 | FYI. | |
| 103Br3 | PDS Work Plan | WG3 | Noted in TSG-SX Projects Work Plan. | |
| 103Cr1 | Action Items | WG3 | FYI. | |
| 103D | Proposed Outgoing Correspondence to TR- 45.8 re: new project | WG3 | Approved for distribution. | |
| 103E | Comment Form for X.P0062-A v0.8(PDF) for R&F | WG3 | FYI. | |
| 103F | X.P0062-A v0.8 (Word) Approved for R&F | WG3 | Approved for R&F. | |
| 103FA | X.P0062-A v0.8 (PDF) Approved for R&F | WG3 | Approved for R&F. | |
| 103G | Proposed Outgoing Correspondence to TIA TR-45.8 re: PN Request for X.P0068-0 v1.0 | WG3 | Approved for Distribution. | |
| 104 | WG4 (Reserved) | WG4 | N/A | |
| 105r3 | Meeting Agenda for Upcoming Meeting | Chair | Approved for posting. | |
| 106 | TSG-SX Terms of Reference | Chair | Approved for submittal to SC. | |
| 107 | Proposed Outgoing Correspondence from SC Chair to oneM2M dated March 18, 2013 re: Establishment of Liaison Relationship with oneM2M | Vice-chair | Approved as proposed input to SC Meeting in Busan, Monday, March 18, 2013. | |
| 108 | TSG-AC Terms of Reference | TSG-AC | FYI. | |
| 109 | SC PMT Terms of Reference | SC PMT | FYI. | |

4. Agenda Review & Approval

• **SX00-20130311-001:** R0 was approved as noted in Section 3.

5. Meeting Summaries Review and Approval

 SX00-20130311-002: the TSG-SX previous Meeting Summary was approved as presented. A PDF will be posted.

6. Correspondence and Liaisons

The following correspondence and liaisons were discussed at the meeting:

• SX00-20130311-003/A/B/D/C, 005/A/B, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015/A/B, 016/A, 017, 019/A/B, 020, 021, 024, 026, 027A/Br1, 029, 030, 031, 034, 039, 040, 041, 100.

The following correspondence and documents were approved for transmission:

| List of Outgoing Correspondenc e ¹ | Plenary Contribution Number | Description | Source | Status |
|---|---|---|--------------|-------------|
| SX-201303-01/A | SX00- 20130311- 050r1/A | Proposed Outgoing Correspondence to PMT re: SC- level Document Review Comments, with SC-level Documents Review Comments | WG1 | Distributed |
| SX-201303-02/A | SX00- 20130311-051 | Proposed Outgoing Correspondence to PMT re: Work Item Review Comments, with Work Item 3GPP2-00322, CCAT Support for USSD and Advanced Location | WG1 | Distributed |
| SX-201303-03/A | SX00- 20130311- 101E/C | Outgoing Correspondence to TIA TR-45.8 re: V&V Comment Disposition of S.P0151-0 v0.4 eHRPD – EUTRAN Interworking Matrix, with S.P0151-0 V&V Comment Disposition Record | WG1 | Distributed |
| SX-201303- 04/A/B/C | SX00- 20130311- 101Hr2/F/G/G A | Outgoing Correspondence to TIA TR-45.8 re: S.P0148-A dated March 15, 2013, with S.P0148-A v1.0, Dynamic RAN Power Management Stage 1 / Comment Disposition Record / (Word) / (PDF)/ | WG1 | Distributed |
| SX-201303- 05/A/B/C | SX00- 20130311- 101Jr2/D/DA/K | Outgoing Correspondence to TIA TR-45.8 re: Re-ballot of S.P0151-0 v0.5 dated March 15, 2013, with (Word) / (PDF) / V&V Comment Form | WG1 | Distributed |
| SX-201303-06 | SX00- 20130311- 103D | Proposed Outgoing Correspondence to TR-45.8 re: new project | WG3 | Distributed |
| SX-201303-07 | SX-20130311- 103G | Proposed Outgoing Correspondence to TIA TR-45.8 re: PN Request for X.P0068-0 v1.0 | WG3 | Distributed |
| SX-201303-08 | SC-20130318- 005A | TSG-SX Project Work Plan | Secreta riat | Distributed |
| SX-201303-09 | SX-20130311- 105r3 | TSG-SX Agenda June 2013 | Chair | Posted |
| SX-201303-10 | SX00- 20130311- 101I/IA | SC.R4002-0 v9.0, GHA Assignment Guidelines and Procedures for MEID and SF_EUIMID (Word) / (PDF) | WG1 | Distributed |

Note 1: This identifier is used for cross-TSG correspondence tracking.

Refer to <u>Section 3</u> for additional actions/decisions.

7. Working Group Business

7A. WG1:

- **SX00-20130311-022, 023, 028, 033, 042:** Remanded to WG1.
- **\$X00-20130311-101:** WG1 report, as noted in Section 3.

7B. WG2:

- **\$X00-20130311-032:** Remanded to WG2.
- **\$X00-20130311-102:** WG2 report, as noted in Section 3.

7C. WG3:

- **SX00-20130311-021, 038:** Remanded to WG3.
- **\$X00-20130311-103:** WG3 report, as noted in Section 3.

7D. WG4:

- SX00-20130311-035: Remanded to WG4.
- **\$X00-20130311-104:** WG4 report, as noted in Section 3.

8. Unfinished Business

- 8A. V&V S.P0148-A v0.3: Dynamic Power RAN Management:
 - **SX00-20130311-011:** Remanded to WG1.
- 8B. V&V S.P0151-0 v0.4:eHRPD EUTRAN Interworking Matrix:
 - **SX00-20130311-033:** Remanded to WG1.
- 8C. V&V X.P0008-A v0.3: MAP Support for Mobile Equipment Identity (MEID):
 - SX00-20130311-043: Remanded to WG2.

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8D. Other Topics: N/A

9. New Business:

9A. Scope and Charter:

- SX00-20130311-025, 106: TSG-SX Terms of Reference: Approved for presentation to the SC.
- SX00-20130311-108: TSG-AC Terms of Reference presented, FYI.
- SX00-20130311-109: PMT Terms of Reference presented, FYI.

9B. R&F Activity:

- X.P0042-B v0.3, "Dual Radio Voice Call Continuity between IMS and Circuit Switched Systems": Approved for R&F, comments due in June, 2013.
- X.P0062-A v0.8, "Policy and Charging Control (PCC) for cdma2000 1x and HRPD": Approved for R&F, comments due in June, 2013.

9C. V&V Activity:

 SX00-20130311-101Jr2: S.P0151-0 v0.5, "eHRPD – EUTRAN Interworking Matrix": Approved for 2nd V&V, comments due in June, 2013.

9D. Publication:

N/A

9E. Other Topics:

- SX00-20130311-036: CDMA LTE Carrier Aggregation Study presentation. Approved assignment of new project: S.P(R)0153-0 v1.0, "Study for CDMA – LTE Carrier Aggregation".
- SX00-20130311-037r1: TSG-SX Restructure presentation. Approved as practice and method for TSG-SX.
- XS00-20130311-107: Proposed outgoing correspondence to oneM2M. Approved for presentation to the SC meeting in Busan, Korea.

10. Assignments:

- SX00-02130311-018r1: TSG-SX Correspondence template. Approved for use by all WGs.
- SX00-20130311-050/A: Correspondence to PMT re: SC-level Documents Review Comments. Approved for distribution.

11. Review Assignments:

• It was noted there were no additional assignments.

12. Next Meetings Schedule:

• SX00-20130311-105r3:

Hyatt Regency Miami, 400 South East Second Avenue Miami, Florida, USA 33131-2197

Tel: +1 305 358 1234, Fax: +1 305 358 0529

- In addition, several upcoming WG conference calls were noted:
 - WG4: March 21, 2013
 - WG2 & WG4: Device Binding Conference Call: May 1, 2013, 10AM Noon Pacific Time:

13. Open Discussion

N/A

14. Adjournment

The TSG-SX Closing Plenary was adjourned at 10:00AM local time on Friday, March 15, 2013. At the closing of TSG-SX meeting #1, there were 12 quorum members present from the quorum list of 16 companies. listed as follows:

| | Company Name ¹ | Attended 2013/03/11 | | |
|-----|--------------------------------------|---------------------|--|--|
| 1. | Alcatel-Lucent | 1 | | |
| 2. | Applied Communication Sciences | 1 | | |
| 3. | China Telecom | 1 | | |
| 4. | Ericsson | 1 | | |
| 5. | Hitachi | | | |
| 6. | Huawei Technologies | 1 | | |
| 7. | KDDI | | | |
| 8. | Kyocera | 1 | | |
| 9. | Motorola Mobility | | | |
| 10. | National Communications System | | | |
| 11. | NEC | 1 | | |
| 12. | Nokia Siemens Networks | 1 | | |
| 13. | Qualcomm | 1 | | |
| 14. | RITT | 1 | | |
| 15. | Sprint/Nextel | 1 | | |
| 16. | ZTE Corporation | 1 | | |
| 17. | CCSA - Observer | | | |

Note 1: Companies in **bold** were quorum members as of this meeting. As per articles 25a & 25b of the "Working Procedures Document", version 12, a member is added to the next meeting's quorum list after attendance of two consecutive meetings. A company missing three consecutive meetings will be dropped from that group's quorum list. Voting rights are established upon attendance at the 2nd consecutive meeting. Individual members that miss three consecutive meetings of the TSG are dropped from the TSG voting list at the close of the 3rd meeting.