MEETING REPORT
TIA TR-51 Smart Utility Networks
Thursday December 15, 2011

Hyatt Regency at the Embarcadero
San Francisco, CA

Presiding: Mike Lynch, MJ Lynch Associates

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1.   Call to Order

The meeting was called to order by Mike Lynch (MJ Lynch Associates) at 9:30 AM PST.

John Notor, Smart Utility Network Alliance, is Secretary for this meeting.

2.   Attendee Introductions and E-Sign-In

The attendees in the room and on the call introduced themselves. They were directed to use the e-roster systems to sign-in to the meeting, as well as GoToMeeting if they were attending remotely. See Annex A for the list of attendees to this meeting.

Quorum was established with 9 of 12 member companies present.

3.   Chairs remarks

Michael Lynch made brief opening remarks.

4.   Intellectual Property Rights

The attendees were directed to note the IPR statement on the agenda and requested to make it known if there are any patents related to the work of the committee.

5.   Review and Approve Agenda

The draft agenda, TR51-20111214-002_agenda_d0, was reviewed and approved without objection.

6.   Review and Approve October 2011 Meeting Report

The draft meeting report, distributed as contribution TR51-20111011-008_Meeting_Report_Oct_2011.doc was reviewed. After minor edits the report was approved as TR51-20110906-008_Meeting_Report_Oct_2011_r2.doc.

7.   Appointment of John Notor as TR-51 Secretary

The Chair presented John Notor as a volunteer for the position of Secretary of TR-51. John Notor was appointed as secretary with the concurrence of voting members.

8.   VC TR-34 Briefing – Interest of Hughes Networks and iDirect in Smart Grid/Utility Std.

Tony Noerpel was not present but sent an email to George Ivanov, who presented the info for the group. The text of the email is as follows.

From: Anthony Noerpel [Anthony.Noerpel@hughes.com]
Sent: Thursday, December 15, 2011 10:37 AM
To: George Ivanov
Subject: TR34 and TR51

George

Again my apologies for not being able to attend the TR51 meeting today. Here is a statement from TR34 regards smart grid activities.

TR-34 would welcome a liaison with TR-51 "Smart Utility Networks" Engineering Committee.

TR-34 "Satellite Equipment & Systems" Engineering Committee recognizes both the benefits and limitations of satellite technologies in support of the smart grid effort. Obviously, a lot of work is needed in the smart grip evolution to support signaling between millions of smart meters and smart appliances such as electric car chargers and air conditioners. These signals are best supported by existing and proposed licensed and unlicensed band terrestrial technologies with limited range. And we know that satellite communications is not suitable. However, satellite communications has attractive and unique attributes which can support several necessary communications requirements. Since satellite links are completely independent of local infrastructure, it is the best solution for independent redundancy where required. As the hurricane Katrina demonstrated, satellite communications is the only technology which can be deployed quickly during a recovery phase from an emergency event. Fixed, transportable and completely mobile solutions already exist to support dispatch and maintenance. For monitoring of remote grid infrastructure such as rural power lines and power generators, satellite communications technologies offer a rapidly deployable and economic solution. Satellite coverage is ubiquitous over North America in several operating frequency bands from L and S

bands to Ku and Ka bands.

A summary list:

Dispatch, maintenance and emergency
Repair crews from different regions can have common and reliable communications even to support recovery from devastating natural disasters such as Katrina.
Advanced metering infrastructure
Communications from remote locations not reliably or economically served by other means of communications
Backhaul of Aggregated smart meter traffic
Monitoring remote sites
Generation, transmission line load and power factor substations, distribution automation
Backup, redundancy, reliability, availability
Ubiquity – uniform coverage across North America
Independent link availability and reliability for redundancy
Internet access

I hope this helps introduce TR-34 to TR-51.

9.   Member Tools/Ballot Tools Presentation

George Ivanov presented the Tools overview, demonstrating the various tools available for meeting setup, balloting, etc. George answered several questions about specific issues from those in attendance.

10.   Technical Contributions – Layer 1

Hiroshi Harada presented an update to the Layer 1 presentation, TR51-20111214-004-Physical_Layer_Text_Draft_2.0_final.doc.

There were questions and clarifications by various attendees, as well as comments about some edits to the document and the inclusion of an annex.

The meeting was recessed at 11 AM PST to allow editorial changes to the document.

The meeting was called back into order at 11:25 AM.

The Secretary uploaded the edited document to the TIA web site. There were some additional edits, which were incorporated. The final document for balloting is ANSI-TIA-PN-4957.100.pdf, which contains the Layer 1 specification.

Motion: To approve ANSI-TIA-PN-4957.100.pdf for submission to a 45 day ballot per TIA rules.
Moved: NICT
Second: ADI
Discussion
Vote: 8 Yes 0 No 1 Abstain
Motion Passed.

11.   Technical Contributions – Layer 2

Phil Beecher presented the summary of the L2 ad hoc meeting from Wednesday, December 14, 2011.

12.   Liaisons

Phil Beecher, Beecher Communications Consultants Ltd., provided an update to OpenSG and NIST SGIP activities.

Octavio Lima, Ericsson, presented an update of TR-50 activities. Sent out documents for publication, now in discussion about moving forward.

Hiroshi Harada, NICT, provided an update regarding ARIB activities in Japan, specifically on the proposed transition from 950 MHz to 920 MHz for Smart Grid. These rule changes have now been approved and printed as of December 14, 2011. Guidelines need to be adopted and published by ARIB, expected completion by the end of March 2012.

Phil Beecher stated that IEEE 802.15.4g has is almost approved and is in the final stages moving towards publication.

13.   Other Business

The Chair reported that there is now an official liaison between IEEE 802.15 and TIA TR-51, which is the Chair, himself, Michael Lynch.

The Chair clarified the process of coordinating the exchange identifying copyright information between TR-51 and IEEE 802.15.

14.   2012 Meeting Schedule

The meeting schedule going forward was reviewed. Meetings are agreed as follows:

1. February 21, 22, 2012 in Los Angeles, CA, suggested venue is Hyatt in Downtown LA.
2. April 11, 12, 2012, in Boston, MA, suggest venue is TBD.
3. June 5, 2012, in Grapevine, TX, at the Gaylord Texan, collocated with TIA 2012.

4. September 14, 2012, at the Hyatt Grand Champion, Indian Wells, CA.

The L2 Ad Hoc Chair, Phil Beecher, will schedule ad hoc teleconferences prior to the February meeting.

15. **Adjournment**

There being no further business, the meeting was adjourned at 12:45 PM PDT.

This meeting was conducted in accordance with the TIA Engineering Manual and Legal Guide.

Submitted by
John Notor, Smart Utility Network Alliance
Secretary

ANNEX A

Attendees to TR-51 December 2011 Meeting:

Attendee	Company / Representing
Kent, Jeritt	C: Analog Devices, Inc.
Beecher, Phil	C: Beecher Communications Consultants Ltd
Rolfe, Benjamin	C: Blind Creek Associates
Taylor, Larry	C: DTC (UK)
Lima, Octavio	C: Ericsson Inc.
Ramasastry, Jay	C: Silver Spring Networks
Harada, Hiroshi	C: NICT
Shah, Kunal	C: Silver Spring Networks
Notor, John	C: Smart Utility Network Alliance
Seibert, Cristina	C: Silver Spring Networks
Lynch, Michael	C: MJ Lynch Associates
Ivanov, George	C: TIA
Kojima, Fumihide	C: NICT
Sum, Chin Sean	C: NICT