SG-Network TF Conf Call Notes - DRAFT

Date/Time: 23Jul2012, 4pm eastern **Participants:**

Matt Gillmore (chair)Kostas ToliosRon Cunningham (vice-chair)Rich TolwayDoug GrayTime GodfreyNote: others may have been on the call, but the note taker did not catch names.

Agenda Items / Major Discussions: [text in blue, post the conf call additional information] SRS Work Review – Matt indicated he performed a cleanup of the SRS-WIP documents folder while retaining the original file timestamps. Matt also posted to the "SRS-WIP\5.0 SRS Sections" folder the recent edited PHEV use case and the section4 status table. The currently working draft of the SRS was posted at the root of the SRS-WIP folder e.g. "SG Network SRS V5 draft version 1.doc"

SRS Preview Release for SGAC– The section4 status table Matt posted Monday (see item above), contains a flag for which sections are potentials for inclusion in the preview draft of the SRS that Matt & Ron will present to the SGIP SGAC Architecture Working Party in a week or so. The list of sections includes:

- Customer Information
- Demand Response load control
- Dispatched Distributed Cust stor + island mode
- Electric Transportation
- Firmware Program update
- Meter Events
- Meter Reading
- Outage Restoration mgmt
- Premises Network Administration
- price events
- Service Switch

PAP02 Update – Doug provided a summary of the status of editing on the NISTIR 7761 section 6 subsections that were out for review and are essentially complete for content e.g.

- 6.2 Coverage, Capacity, Latency Tradeoffs
- 6.3 Advanced Antenna Systems and Spectrum Considerations
- 6.4 Multi-Link/Multi-Hop/Mesh

Section 6.8 Evaluate and Assessment of Multi-Dwelling Meters in Basements of High Rise Buildings, was reviewed with the participants with a few more observations and comments provided back to Doug for consideration.

There are 2 sections devoted to the Modeling Area Frameworks and the Wireless Modeling Tool e.g.:

6.5 Smart Grid Modeling Framework and Tool (Doug and Ron are still added content based on the effort of linking the Model-Area data and scaled SG Network Requirements to the Wireless Modeling Tool steps/processes)

6.7 Assessment of Modeling Tool Results (pending finishing the actual parsing and scaling of SG Networks Requirements input and exercising the tool for all applicable wireless standards representative technologies across the spectrum bands and assessment of the outputs from the Wireless Modeling Tool)

Ron walked through the latest edits of parsing and scaling the SG Network Requirements for calculating/linking the inputs to the PAP02 wireless modeling tool. The main changes since the last review of this material was: a) specifying the remaining actor payload quantities by the density categories; b) correcting for what parameters and how they are calculated for feeding into the latency portion of the modeling tool. <u>Discussed:</u>

- the need to include the quantity of DAPs into the SG Network Requirements scaling but that the number of DAPs was an output of the propagation path loss model calculations
- how to deal with the field tool actor to endpoint message flows for those as the SG Network TF did not presume a requirement for those endpoint to endpoint payloads to require the use of the DAP, but the current wireless modeling tool does expect that
- the large firmware/program endpoint update payloads creating a shew in some of the averaged parameters that are needed by the modeling tool and how to deal with those
- that once all of these parsing, scaling and parm calculations items are resolved, the textual content in the SRS and the NISTIR 7761 sections would get created/updated so that others can perform similar consumption and wireless assessments e.g. focus on the network linkage between the DAP and the back office.

Action Items:

• Ron will use the feedback from the discussion points above to revise the parsing, scaling and parameter (s)calculation processes and reissue.

To-Do's (description, lead person, current update)

- System Requirements Specifications the following items need to be updated: Matt & Ron provide pre-release version of the SRS and present to the SGAC's AWP by end of Jul2012.
 - Matt to solicit guidance and How-Tos to allow the numerous figures and tables to be linked into the master SRS source document to allow easier updating of individual figures an tables, then allow the intended pdf format of the SRS regenerated as needed, versus all of the manual copy/paste format steps currently being performed.
 - sect 2.1.4 Deliverables Matt to add in brief descriptions of the primary tangible deliverables e.g. SRS, Requirements Table, Reference Diagram, Application Payloads Table
 - sect 2.2.1.3 Note: it is not expected that the mapping of the SG Network application payloads to CIM messaging will make it into the pending SRS deliverable unless resources to perform that are identified and volunteered or engaged.

Sect 4:

▲ Write the overview for each of the use cases

- ▲ Section 4.*.3 needs Scenarios pasted in and described
- ▲ NOTE that DA reference architecture is generic for DA use cases
- Matt, <in progress> consolidate Distribution Grid Management & other DA use cases

sect 5 Appendix

- Ron to add 2 columns to the payloads (sect 5.5) and change the page orientation to landscape for that section.
- Ron to work up content to explain the minimal requirements and dependencies when selecting which use cases and application payloads are appropriate for specific Deployment profiles.
- Ron, <in progress> Add Method for adaptation of the requirements table information to specific analysis needs (Copy from NISTIR 7761v1 section 3, and modify)

II. Requirements Table - Release 5.2? potential use cases and needs

- A. 11 child requirement rows (Premise Network Admin & Firmware /Program Update use cases) need their payload name and type corrected
- B. Factor in the additional edits needed in the "How Often" content as identified in creating the profile and scaling the data for input into the PAP02 wireless modeling tool.
- C. Distributed DA Maint, DSDR, (Ron) Volt / Var control use case rqmts
- D. (Matt) Security payload overhead addtl volumetrics (?)
- E. Security Key Exchange add payload rqmts
- F. PHEV and PrePay add follow the money payload rqmts
- G. HAN (plus those for PLC technology consideration)
- III. Functional/Volumetrics database refer to "database-update-needs-29Aug2011.doc" file in the Rqmts-Database-wip folder for list of additional database coding needs.
- IV. SG Network TF artifacts Alignment with OpenSG & other Organization efforts Matt and Ron to work with SG Systems WG on determining those alignment steps. Alternatively to take proposal to OpenSG TC to address establishing a normalization effort across OpenSG concerning architectural and semantics references used by the various groups. Note: Ron is carrying this same normalization request to the SGAC.

Next Working Session / Conf Call(s):

Monday 30Jul2012 4-5pm eastern – normal SG Network TF weekly call

URL https://www2.gotomeeting.com/join/738908066

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