SG-Network TF Conf Call Notes - DRAFT

Date/Time: 12Aug10, 2-3pm EDT **Participants:**

Matt Gillmore (chair) Ron Cunningham (vice-chair) Bill Godwin Cheong Siew Daniele Loffreda Gary Stuebing Gwen Durrill Jerry Armes John Buffington Jorjeta Jetcheva Kelly Flowers Klaus Bender Michael Northern Mike Corbett

Note: others may have been on the call, but the note taker did not catch names.

Agenda Items / Major Discussions:

PAP 2 Draft of Guidelines for Use of Wireless in the Smart Grid – Ron walked through a set of edits and new content that he and Bill Godwin contributed for consideration for inclusion in section 3 and intro of section 5 for draft 6 of the PAP 2 guidelines document. The intent of the edits and content was to further clarify what the SG Network TF's documentation of business functional and volumetric requirements contained and how to consume that information as intended by SG Network. Discussed: some additional edits to that markup were recommended from the conf call participants. Matt reiterated that SG Network has the opportunity to provide feedback to the PAP 2 guidelines content and that the next due date for consideration as input into draft 6 is 15Sep10.

It was agreed to:

- include additional items into the section 2.2 for especially terms that SG Network uses that might not have the same interpretation as the audience that may just be focusing on the the PAP 2 guidelines e.g. SG Networks' use of business application latency versus "network latency"
- Table 1 Field Tools indicate the actor belonging in both the Distribution and Customer domains and change the ref diagram to illustrate this similar to how Distributed Storage and Generation actors are shared between Transmission and Distribution
- Section 3.4 add in text to explain the rationale why SG Network carried the business functional and volumetric requirements down to the each actor-toactor pairing along a communications path versus just keeping it at a high level originating source actor and target consuming actor.

Reference Diagram – Ron over viewed a proposed update to the reference diagram in the Distribution and Customer domains to better clarify: a) a set of actors that were documented for the Distributed Storage devices (of the pad mount size) that are not located in substations where those are of a much larger size; b) added data flows for the other HAN devices for further documenting the requirements that address those actors.

Discussed: other edits to the ref diagram

It was agreed to:

- transition the diagram to an E size to all for more space to make current areas of the diagram more readable e.g. Distribution and Customer domains
- add another ESI actor that is not in the Smart Meter to allow better separation between a 3rd party ESI and a utility ESI actor

SRS – Matt over viewed an approach of how to keep track of whom has volunteered to work on specific section 3 subsections, including making sure that all the payloads are addressed in the SRS documentation for the specific use case. The table format presented was derived from the 2nd tab in the Requiremetns table (spreadsheet) that is amtrix of payload names and to which use case they are found in the detailed requirements tab.

<u>Discussed:</u> whether or not this approach seemed workable. Another option was raised of using the TOC as a base and add a column(s) of whom is preparing the content and the editor for that section.

It was agreed to:

- continue with the approach Matt proposed as it performed a QA on making sure the payloads were documented, which the TOC did not carry that level of detail
- an Excel macro or other bit of cell cross tab formulas would be created to bring forward the payload information in the Requirements Table 2nd tab into the table that Matt proposed to eliminate a lot of manually effort.

Database Next Steps – Matt recommended that a small group focus on drawing out the next steps, plan, and identifying resources to work the additional needed features and capabilities into the database and other necessary tools. See update in the To-Do's section.

Smart Grid Interference on ZigBee – Kelly brought up some recent brew-ha-ha on reports that some Smart Grid wireless technologies had created interference issues with ZigBee, and that a call for a separate PAP to address this had been raised. Here's the link from SGIP that alludes to this. http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/EMIAndEMCImpactsOnSmartGrid

<u>Discussed:</u> what the actual situation was, what justifies the need for a separate PAP, and what legitimately can be done to address spectrum interference issues in general beyond what already exists in the FCC rules and certifications/

Note: checkout the ToDos for other updates that were mentioned in the conference call or provided to Matt or Ron.

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

- 1. **System Requirements Specifications** normalize to other OpenSG SRS documents in style, target audience, and adding new use case content:
 - Comment/feedback template Matt will send notification out to several groups to start using the template.
 - core SRS editors/reviewers (Matt Gillmore, George Cosio, Klaus Bender, John Buffington, Ron Cunningham, Kelly Flowers, Vincent Bemmel) –
 - Actor Normalization (tbd) sub-group to provide recommendations with primary

focus on distribution actors with intent of establishing or reusing a good categorization of especially DA actors, but decompose a category only as needed to clarify documentation of use case business functional and volumetric requirements. Needing to restart this effort.

- 2. SG-Network Deliverable(s) Release 5/6 potential use cases the next priority set of use cases requirements draft potentials (see below for partial list).
 - Updated use case and targeted release table planning for a 18Aug10(?) posting for release 4.1 or possibly 5.0 (inclusion of new use cases)
 - Scan Previous use case requirements for consistent inclusion of error and other management payloads (Mike Corbett)
 - HAN (plus those for PLC technology consideration) Matt Gillmore and Don Sturek to reach out to ASHRAE(?) and SAE(?) for their current use case documentation for incorporating into functional/volumetrics requirements deliverables. Dealing with document terms of use and access points.
 - DA, divided into sub use cases:
 - Additional comm-paths added to already documented sub-use cases (Ron Cunningham) target for release 4.1
 - Dispatch Distributed Storage (Ron Cunningham) add island messaging to customer and revise use case for potentially a generic DER versus being focused just on Storage Batteries, targeted for release 4.1
 - DA Maint, DSDR, Volt / Var Distributed (Bill Godwin, Andy Bordine, Ron Cunningham) targeted for release 5.0
 - Outage Mgmt (Matt Gillmore) add payloads for ultimate consuming actors of outage information targeted for release 4.1
 - PHEV (Ron Cunningham & Vincent Bemmel) add "follow the money" payloads and others as extracted from SAE, targeted for release 4.1.
 - PrePay (Ron Cunningham) add "follow the money" & SMS text & email payloads targeted for release 4.1
 - Pricing TOU, RTP, CPP (Vincent Bemmel & Ron Cunningham) add in the pricing payloads, targeted for release 5.0
 - Configuration Mgmt (tbd) targeted for release tbd
- 3. Requirements Payloads C-I-A and L-M-H Values Need to resolve a few payloads where different C I A values were assigned for different actor-to-actor pairings. Refer to file "SG-Net_Rqmts-Table_v4.0_Payloads-Parents-CIA.xls" in the SG Network work-in-progress folder.
- 4. Functional/Volumetrics database (Jerry Armes, Klause Bender, Kelly Flowers, Matt Gillmore, David Gosch, Ron Cunningham) – A small group and a separate conference call is being scheduled to hammer out the details for identifying, planning, resourcing, and designing/developing the additional capabilities and features to deliver a tool to assist the user of the requirements usable and easier to report and extract out the data specific to their assessment needs. The latest set of proposed added capabilities of for the database is located in the SG Network webpages in the web-inprogress / database-wip folder with file name "database-tasks-28Jul10.doc"
- 5. PAP 1 SG Communications' Tasks (from Don Sturek's email)
 - provide feedback on the list of gaps found in HAN for IETF requested work
 - provide a specific list of security gaps in HAN (e.g. probably a subset from 1st bullet)
 - provide feedback and comment on Fred Baker's Internet Draft on Smart Grid

RFCs e.g. what's missing. Fred will add routing standards to the document.

- SG-Network Website Cleanup & Archiving Matt & Ron to perform some website content and folder cleanup to make it easier to locate and find content. This includes potential relocating the content from the SG Communications home page to the specific SG Network TF webpage.
- 7. **Deliverables Q/A Process and Format** Implementation of Q&A process on hold pending completion of other higher priority tasks.

Next Working Session / Conf Call(s):

Thursday 19Aug10 2-3pm EDT URL https://www2.gotomeeting.com/join/**738908066**

Use microphone and speakers (if using VoIP) - a USB microphone/headset is recommended. Or, call in using your telephone.

Dial **714-551-0021** Access Code: **738-908-066** Audio PIN: Shown after joining the meeting

Meeting ID: 738-908-066