SG-Network TF Conf Call Notes - DRAFT

Date/Time: 19Aug10, 2-3pm EDT **Participants:**

Matt Gillmore (chair) Ron Cunningham (vice-chair) Andy Bordine David Cypher David Gosch Gwen Durrill Jerry Armes John Buffington Jorjeta Jetcheva Kuor Hsin Chang Michael Northern Mike Corbett Vincent Bemmel

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

Agenda Items / Major Discussions:

EPRI Use Cases – latest contribution – Ron over viewed EPRI's smart grid use case repository website that is publicly available after accepting the general use terms and conditions. The site contains ~160 use cases with the latest set of ~20 coming from a tailored collaboration project #1021464 with volume 2 from that project being the AEP's Interoperability Test Plan: Use Cases. Ron will send out email notification to the group of the EPRI use case repository URL. It was also noted that OpenSG is preparing a statement of intended use of the use cases to be sent to EPRI per EPRI's request. Discussed: the intended usage of the new use cases plus the other use cases.

It was agreed to:

 SG-Network to scan this full set of EPRI smart grid use cases to identify voids in the SG Network deliverables (Requirements Table, SRS), and factor that into filling the voids.

Reference Diagram r0.6D – Ron over viewed the latest draft of the baseline reference diagram that was emailed out earlier today. This version attempts to address the recommended changes discussed in last weeks conf call. A couple of small additional tweaks were noted in today's call. It was noted that some of the diagram edits will require the release 4.0 data flow references to be changes in the next release.

The participants were requested to provide any additional edits to the document prior to and by next week's conf call so that the diagram could be finalized as the basis for the next release of the Requirements Table and other more textually oriented documents. Note, the reference diagrams are still sourced as ANSI D size but a separate but manually sync'd ANSI E size is being prepared to better create more separation of the very busy Distribution and Customer domains.

Security Coord across OpenSG, CSWG, PAP 2 – Darren Highfill facilitated a conf call Wednesday with the leaders of SG-Network, SG Security, PAP 2, and CSWG to address some apparent misunderstandings or interpretations of what each group was performing concerning smart grid security. Matt, Vincent and Ron left those discussions thinking that agreement of each groups role, scope, and intent of documenting up security was better understood and that what SG Network and SG Security were documenting at the payload level was appropriate and should not be considered at complete odds of the high level per Logical Interface Categories that the CSWG group had performed. Viewing security at the payload will naturally produce a different set of security risk assessments that a high level view will not uncover.

Work will continue to better document, coordinate amongst these groups to what each groups security documentation and assessments/guidelines address and how it relates to the other groups deliverables. CSWG agreed to take on the task of identifying the LICs of the SG Network payloads per the latest NISTIR 7628 document and understanding of the LICs. SG Network and SG Security will continue to document the C-I-A security risk levels at the payload level and SG Network documenting the payload attributes, with SG security documenting up the controls and mitigation measures to individual interfaces associated to specific C-I-A risk levels.

SRS Progress & Payload Attributes – Discussed:

- Matt indicated that Cheong Siew BC Hydro, provided an Excel macro that parsed a table of payloads to the use cases for vetting that the SRS section 3 content included all the needed content and to be used to help track SRS documentation progress and work assignments
- Documenting the payload attributes how and where in the SRS

It was agreed to:

• Add the payload attribute data into the section 3 use case subsections. Matt will prepare a draft of the how and format for review by next week's conference call.

Any RF Interference to smart grid – potential PAP – Matt summarized the current understanding of the issues being raised and how SG Network might get ahead of the this one e.g. adding more content into the Requirements Table. Discussed: whether this item was specific to just the RF media versus interference or communication issues that might arise on any media used for a given interface, e.g. SG Network requirements are to be as technology agnostic as possible.

It was agreed to:

• Matt would run this up with the OpenSG TC for guidence on what SG Network needs to further document.

ZigBee SEP 2.0 Technical Design Details – Matt and several others from OpenSG SG Comminications SG Network were participating in technical design details this week in Spokan, WA.

Database Next Steps - see update in ToDo's .

Wireless Backhaul Carrier Metrics (aka Collborative NMS) – David Gosch introduced a potential separate bit of work with the proposed objective to expose "realtime" metrics and events from a carrier wireless network and then normalizing and integrating these into a Utility management system. (AMI leased backhaul being a prime use case). Attached is a link to David's discussion points and embedded presentation. Slide 8 contains the initial set of metrics.

http://collaborativenms.blogspot.com/. [Some readers companies might block access to

this site. If that's the case, other arrangements for viewing this material will be made e.g. as a pdf, alternate posting site.]

Discussed:

- Having the utilities document up the need of this type of information dependant upon whether the backhauls are utility designed, or built, or operated versus a canned solution provided as a service to the utility by the carrier.
- Buy-in by carriers to participant and actively support and offer the service
- Matt offered to bring to the table examples of some of the metric needs from one utilities point of view. Further discussions are anticipated.

Aggregation of Requirements (PAP 2 and database) Specific to Networks -

Jorjeta Jetcheva raised a request for inclusion of the ability and reporting on not just the traffic that traverses between any pairing of actors but more focused on the traffic that traverses through and within a specific network. Discussed:

- what capabilities and data exists currently in the Requirements spreadsheet and database or are anticipated/planned to be added
- the aggregation method/process introduced in the PAP 2 guidelines for feeding into the NIST wireless model
- The participants requested Jorjeta work up an example of what the request (including the intended use) and provided that back to the group for further discussion of the need and how (if agreed) it would be satisfied.

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) – Matt will prepare a draft format/template change to accommodate payload attributes to address a need for substantiating security C-I-A risk level assignments.
 - Actor Normalization (Andy Bordine) 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 next release date (tbd) for either a 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 and prepare needed payload requirement sets (Mike Corbett) Initial effort was refocused to work out the process kinks.
 - 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.
- Functional/Volumetrics database (Jerry Armes, Klause Bender, Kelly Flowers, Matt Gillmore, David Gosch, Ron Cunningham) – The latest set of proposed capabilities to add to the database is located in the SG Network webpages in the webin-progress / database-wip folder with file name "database-tasks-28Jul10.doc". A work session is scheduled for 25Aug10 3pm CDT.
- 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.
- 6. **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 26Aug10 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