From: Craig Rodine <craig.rodine@chargepoint.com>

Sent: Thursday, May 18, 2017 2:32 AM

To: VGIworkinggroup

Subject: initial comment on proposed VGI WG work plan

Thank you for the opportunity to participate in the VGI Working Group. I look forward to participating fully in each of the subgroups.

In response to the May 15 meeting, I have a few comments about the ElaadNL study presented by Ms. Driessen. ChargePoint believes that this study is incomplete and partial, and that there should be additional considerations made:

- 1. The ElaadNL Protocol Study failed to include IEEE P2690 "CNMP", which was launched in January 2017 and currently has seven technology firms as members: AddÉnergie, ABB, ChargePoint, Chargerlink (China), IoTecha, Nissan, Siemens. CNMP is designed to address VGI use cases and interfaces and has considerable technical advantages.
- 2. The ElaadNL study includes a catalog of unofficial specifications and SDO standards but did not include any assessment of their technical strengths and weaknesses, how widely they are implemented, nor how mature they are in general and specifically for EV charging infrastructure. Almost all, even those from SDOs, are immature have only been implemented on pilot scale, and don't include key functionality.
- 3. This study shows an overly-complex architecture, with entities [examples: ClearingHouse, eMSP] and protocols [examples: OCHP, OHCPdirect, OICP, eMIP, OSCP] which aren't necessary or especially useful for VGI or for utility VGI pilots.
- 4. Elaad is proposing a very European scheme, which is partial and speculative (as Elaad admits) and not widely adopted even in Europe, nor as proven as current North American networks. We don't see it as being very relevant or particularly helpful for the VGI working group's work plan.

Please let me know if you have any questions about these points.

Sincerely,

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