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Filer:	Spencer Kelley
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1) Would this type of event support the timely and cost-effective commercialization of advanced products, a diverse and competitive market for these products, and an interoperable charging ecosystem?

a) What is the need for or benefit of public funding of such events?

KERI: If CEC make the main objective of this event to find the interoperability issues with testing and provide them to public for improving the international standard or developing test procedure, yes, it is definitely the common benefit for all stakeholders and then the public funding is needed. For instance, in Korean DC combo festivals, which were organized by KERI, KERI had the same concept. There was no participant fee and all expenses were supported by Korean government R&D project funding. All found issues were shared to the participants and KERI provided the report to CPO and other manufactures. Before the event, KERI requested the field issues during charging to participants and made the test procedure to figure out them.

It depends on what parts CEC support for this event, but anyway, the participants can directly save their time and money for implementation. Theoretically, it is very difficult that interoperability testing event substitutes the conformance testing because no one can make all the interoperability test combination against all EVs and EVSEs, but the participants can check their implantation status before conformance testing.

b) What should be included to enhance or improve the solicitation concept to better achieve the solicitation's goals?

KERI: Three things

- Developing the test procedure for this event from the feedback of the participants and the achieved field issues: The participants can expect what tests should be fulfilled during the event so that the preparation will be smooth, and the technical organizer can get very useful and consistent type of test results. By improving test procedure, CEC is able to focus on the specific issue.
- Thinking about the potential benefit for the participants: Regarding Korean DC combo festivals in 2019, 6 EV OEMs and 6 EVSE manufacturers participated the event, and they could get a great chance to test at least 6 EVs or EVSEs each other in one spot. Unfortunately, in 2020, there was no such an event due to COVID-19, but the previous manufacturers requested this event for the minimum level of interoperability before they release a new model in the market. Additionally, in Korea, OEMs encourage EVSE manufactures to participate the event and they put more preference on EVSE model type, which has been tested in the testvial when they have a chance to purchase EVSE.
- Considering post-process of the found issues during the event: If some issues have been found during the event, what's going to do in terms of organizer? In case of KERI, some activities have been followed to figure out the resolution against issues. This is an important point to organize the sustainable event.

2) What should a successful and effective annual event include? For example:

a) Representation—What types of participants, and how many, would be necessary for success? How can broad participation and inclusion be encouraged? How should an agreement ensure these goals are met?

KERI: Regarding participants, there is no restrictions; EV OEMs, EVSE manufacturers, testing lab, the government department/agency, CPOs, testing system vendors, charging solution developers and so on. The promotion is

another objective of this event. If CEC support participant expenses including shipment as well as food, more stakeholders will participate. I think 1)-b) is one of the most important part to encourage.

b) Technical requirements –What experience is required of an event organizer for success? What facility needs would be required? What other technical considerations should be included?

KERI: See 1)-b). Power rating for test is dependent on the participant. Some manufacturer tries to bring 400 kW charger, then CEC might prepare 400 kW power grid supply. In case of Korean DC combo testival, 6 testing spots have been prepared and each spot can supply 100 kW rating power. It is better if host facilitates some testing devices such as EV or EVSE simulators, PLC sniffer, and so on.

c) Format–What should be the duration of a testing event? How should events be structured to maximize success? How should the standards, hardware, etc. to be tested at each event be determined? How should matches between participants be determined?

KERI: In testing symposium or CharIN Testival, each testing session was 1.5 or 2 hours. In Korean DC combo testival, 3.5 or 4 hours. To my experience, 2~2.5 hours is enough for each testing session. Based on 2 hour testing session, only 4 combinations can be executed per day. If considering test for 3 days, each participant can perform 12 test sessions. I believe the total period of testing might be 4 days at maximum. All engineers need to get back to work.

In order to make the match-up table for testing, the standard should be given. For instance, if the event has the targeting on two communication protocols with ISO 15118 and DIN Spec. 70121, basically two groups for the match-up table should be made. According to the implementation of participants, each participant can be categorized into the groups. I recommend assigning work about technical organizer(person or agency) and it takes a job to make match-up table from the given information.

d)Outcomes–Are there any key outcomes that these events should strive to achieve (e.g., facilitate the industry adoption of a new standard)?

See 1)-a), b)

3) Is a maximum of \$1 million sufficient to host 3 annual interoperability testing events?

a) If not, what is feasible with this amount of funding?

KERI: It depends how many participants are invited and how long it will be held. But, based on KERI's experience, including catering, \$1 million is sufficient for 20~30 companies and 300~400 people.

b) If this amount of funding is more than sufficient, would there be a benefit to more or more-frequent events? How many annual events could feasibly be executed with this budget?

KERI: If CEC take all expenses including the human resource cost for organization, 4 events are maximum. If CEC has its own facilities and human resource for organization, more than 10 events are possible. But, I don't recommend those number of events. Even if there is no participant fee, no one wants to take too much time for this event.

c) Should participant fees or other sources of funding (e.g., sponsorships) be allowed or required to supplement CEC funding? What is the best use of public funding in these events?

KERI: Korean DC combo festival didn't try to have the solicitation for sponsorship since the event has been organized by the government funding. For CharIN festival and testing symposium, sponsorships have been accepted. In my personal opinion, if CEC doesn't have any impartiality and fairness issue, sponsorships are OK. If sponsors can have the promotional opportunity during events, some of participants or companies might be interested in.

d) What project cost categories should be eligible for CEC funding or match share?

KERI: No feedback for this question

e) What are your estimates for the budget allocations for organizing these events (e.g., securing venues, renting equipment, facility requirements), reimbursement for shipment costs of vehicles and charging equipment, and administrative/labor fees?

KERI: No feedback for this question. According to countries and organizers, hosts, there are big differences.

4) Should there be requirements for applicant eligibility?

KERI: Basically, no applicant eligibility is recommended. If CEC would like to give more chances for local manufacturers, then, CEC can make.

5) What would you like to see in the conference component? For example:

a) Format—Is the preference for a mix of keynote speakers, panel discussions, and presentations? Is there anything else that should be included?

KERI: It will be helpful for people to attend this event. Technical workshop or conference is one of good ideas.

b) Content—What topics are most important for the annual conferences in order to cover and discuss the latest trends and challenges in the EV charging industry?

KERI: Please listen the voice from the market. To my knowledge, business and market experience, pilot project about new feature of charging/feasibility check, new standard demonstration such as ISO 15118, ACD, MCS, V2G and so on will be attractive for audience.