Electricity Network Innovation Competition Full Submission

Supplementary Answer Form

Project: Optimise Prime

Tick if this answer has been provided verbally: ☒

Project code	UKPNEN03	Question Number	34
Question date	02/10/2018	Answer date	08/10/2018
Submission section question relates to			
Topic	N/A		
Question	Hitachi are receiving a substantial proportion of the project budget. Please explain: the 'product' (commercial or otherwise) that will be the output of this project – other than the depot optimisation tool and how the Foreground IPR created by the project, and demonstrated in the Hitachi system, will be in a sufficiently "open source" form to enable it to be transferred to other platforms; the benefit, i.e. commercial advantage, Hitachi gain from participating in the project; Given the learning Hitachi are gaining and the potential opportunity for rollout in GB please justify the proportion of project funding customers are being asked to provide relative to the risk Hitachi is taking.		
Notes on question			

Answer	*Question: Explain the 'product' (commercial or otherwise) that will be the output of this project – other than the depot optimisation tool and how the Foreground IPR created by the project, and demonstrated in the Hitachi system, will be in a sufficiently "open source" form to enable it to be transferred to other platforms*. The 'products' that will be the output of this project will be: • The largest cross-industry open datasets on commercial EV charging and use/behaviour. The replicability and significance of these datasets will be confirmed through surveys and engagement of fleets outside of the project Partners. These data will provide the most comprehensive view available on the impacts commercial electric vehicles will have on the electricity distribution networks;

	• An approach/methodology to enable DNO profiled connection offerings incorporating a profiled connection assessment tool, a depot/site planning tool and a depot optimisation system; • Improvements to existing DNO tools (such as their Active Network Management tool) that will deliver a tangible benefit to processes. • An approach/methodology for separating commercial EV loads from domestic at residential level, enabling commercial entities to charge their home based EV fleets using a commercial tariff; and • Learning, business models and reports providing valuable information to other GB DNOs, policy makers, our project supporters and other fleet operators. The foreground IPR created from this project will be in a sufficiently "open source" form by ensuring apps developed are non-proprietary through the use of open technology within the container platform. We will expect to utilise components of the "SMACK" stack comprised of open source Apache Spark, Apache Mesos, Akka, Cassandra & Kafka which are open source enabling content to be quickly extracted and utilised either in a public cloud landscape or an alternative private container platform. *Question: Explain the benefit, i.e. commercial advantage, Hitachi gain from participating in the project. Given the learning Hitachi are gaining and the potential opportunity for rollout in GB please justify the proportion of project funding customers are being asked to provide relative to the risk Hitachi is taking.* For Hitachi, the main benefits from project participation will be: • To develop thought leadership in the energy and fleet sectors as part of our digital transformation agenda; • To show how our analytics solutions and capabilities can bring value in the energy space; • To gain real world learnings about the challenges faced by our fleet customers as they transition to EVs, informing our fleet management business; and • As part of our Social Innovation strategy, to solve critical societal issues through collaborative creation. The learning that Hitachi gains, as long as it not commercially sensitive to its partners, including the site planning tool methodology and reference design, will be shared and made freely available to parties in GB to help accelerate the transition to electric. Examples of what could be considered commercially sensitive to the partners include the cost of a vehicle, their charging tariffs and future site and growth plans. The foreground IPR created from this project will not be proprietary or dependent upon Hitachi technology or further interaction. In participating in a Social Innovation project such as Optimise Prime, Hitachi is balancing the benefits that it expects to receive as part of the project with the fact that the data generated from the Project will be made "open" and the tool methodologies and reference design freely available to parties in GB, and may be used by its competitors. Hitachi is also taking innovation risk, as the case for flexibility services from EVs and profiled connections is not yet proven and a positive business case cannot currently

	be made. Hitachi's contribution (25% of their costs) has been decided based on consideration of these risks and benefits.
Attachments	