

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	27
Question date	20/09/2018	Answer date	24/09/2018
Submission section question relates to	2.2.1 DNO systems and Figure 3		
Topic	(b.i) the proportion of benefits of the projects highlighted under (a) which would accrue to customers of the relevant network, as opposed to elsewhere in the supply chain (eg suppliers, other networks or the system operator). Where possible, the consultants should provide quantitative analysis.		
Question	Can you please provide greater detail of the contents of the "Common Data and IoT platform" (hardware and software) and how this platform can be replicated nationally. Can you also please clarify what another DNO will be able to "lift" from this Hitachi "black box" and which aspects of it will be proprietry.		
Notes on question			
Answer	<p>The Common Data and IoT Platform provides three basic elements to the project:</p> <ul style="list-style-type: none"> • Data ingestion and data set management; • Data Innovation Lab with Model Management enabling production deployment of the models; and • An integrated application enabling Demand Response. <p>Hitachi will implement this within their standard Hitachi Enterprise Cloud Container offering. The system will be implemented as a dedicated platform for the Project on Hitachi's Unified Compute Platform hardware.</p> <p>This establishes, with no additional engineering requirements on the project and therefore minimal cost, both a modern DevOps (DevOps is a software engineering culture and practice that aims at unifying software development and software operation) Platform and a Data Services Platform based on</p>		

	<p>Hitachi's existing technologies. It provides the robust cyber security and data protection functionality required for a project of this type and scale.</p> <p>The architecture and major components of this system are shown in Figure 17 of the FSP and key functionalities are explained in Appendix 10.2.3.1.</p> <p>The Common Data and IoT Platform used in this project is designed as a tool to gather and manage the large volume of data that will be created during the trial. It will provide the project with the necessary environment to develop and run non-proprietary apps (including the depot planning tool) and to enable the necessary data science, analysis and modelling to develop the fleet flexibility and forecasting functionalities. It will also host the learning lab, i.e. the Data Innovation Lab.</p> <p>It is not intended that the platform itself will be replicated after the completion of the project as this project will create a definitive commercial van / private hire EV dataset for the industry. The applications (such as the depot planning tool) and data that are outputs by the project, will be designed so that they can be used by other GB DNOs on their own IT infrastructure, or on a public cloud system, after the trial. If requested, Hitachi could continue to provide the platform to a DNO in a Software-as-a-Service framework with pricing to be agreed.</p> <p>Project Deliverable D6 will disseminate the datasets gathered by the Project and Deliverable D7 will provide DNOs with the necessary information to replicate the tools and methodologies developed by the Project.</p>
Attachments	