

*Electricity Network Innovation Competition Full Submission*  
**Supplementary Answer Form**

**Project: OSEAIT**

Tick if this answer has been provided verbally: ☐

Project code	NGET_OSEAIT	Question Number	18
Question date	08 September 2015	Answer date	11 September 2015
Submission section question relates to	Submission Spreadsheet		
Topic	Benefits		
Question	Please provide a cost breakdown of the "proposed innovation programme" used in your CBA calculations.		
Notes on question			
Answer	<p>The portfolio is subject to final approval and prioritisation by the Technical Advisory Group. However, the cost breakdown for overall portfolio as it stands currently is shown in the tables below. These are split into:</p> <ul style="list-style-type: none"><li>• NIC funded projects, which are those that will be funded and carried out within the period of this NIC project. These are split into 3 phases according to when the appropriate facilities become available at the centre.</li><li>• Separately Funded projects, which will be implemented after the end of the NIC project, and will be funded by other means.</li></ul> <p>The separately funded projects are due to take place further into the future (beyond 2021), and the portfolio is not yet finalised. Therefore, these costs represent estimated values.</p>		

	NIC Funded Projects (Costs included in the NIC bid)									
	Project		Labour		Equipment		Total			
	Phase 1									
	SF6 Leak Management & Repair Techniques									
	Hot joint thermal model for remote operation									
	RFI Sensitivity and Characterisation									
	Curved MOSS Screens									
	Digital Data & Visualisation									
	Phase 2									
	Degradation curve of a hot joint									
	Conductor Audible Noise Evaluation									
	Overhead line Condition Monitoring / Evaluation									
	Circuit Breaker Monitoring									
	Low & Medium Voltage Switchgear Panel Monitoring									
	Phase 3									
	Architecture for Substation Secondary Systems									
	HV Harmonic Impact on Transformers									
	Insulation Defect Detection in Gas Insulated Substations filled with SF6 gas									
	Backfilling of Current GIS with Alternative Gases									
	Tap Changer Monitoring									
	Separately Funded Projects (costs not included in NIC bid)									
	Project		Estimated Costs							