

Supplementary Answer Form

Project: OSEAIT

Tick if this answer has been provided verbally: ☐

Project code	NGET_OSEAIT	Question Number	15
Question date	08 September 2015	Answer date	11 September 2015
Submission section question relates to	Section 3.3		
Topic	Benefits		
Question	Projects have been split into projects that would not be possible without the facility and projects that would be possible. Please can you tell us how many projects would not be possible and for what reasons?		
Notes on question			
Answer	<p>It is not possible to identify the complete project portfolio at this early stage, as the intention is for the facility to host projects from multiple organisations.</p> <p>The project portfolio used to carry out the cost benefit analysis is the set of projects as it currently stands and derived from our stakeholder engagement events. This is subject to change if deemed appropriate by the Technical Advisory Board.</p> <p>The representative portfolio includes 11 projects that would not be possible without the facility, such as:</p> <ol style="list-style-type: none">1. Projects that have a high risk profile – for example, technologies and techniques that may have been tested under lab conditions, but are not considered representative enough for implementation on the live network. This is particularly acute where the project effects safety critical equipment, or other equipment where a failure on the live network would have significant impacts. These include:<ul style="list-style-type: none">▪ Wireless substation protection and control.▪ Live robotic/ unmanned inspection and maintenance technologies.		

	<ul style="list-style-type: none"> ▪ Unmanned Aerial Systems applications using automated inspection paths. ▪ Roll-out of IEC61850 into legacy substations ▪ Alternative busbar protection methodologies <p>2. Projects that have stalled due to requirements for certain conditions for installation or testing – for example, when test conditions are needed such as network events or environmental conditions. The uncertain and lengthy time delay caused by waiting for these conditions cause significant delays in the implementation into Business as Usual.</p> <p>3. Projects that accelerate learning – learning gained through operating a network and its assets over an extended period allows us to continually develop and improve our operating and maintenance procedures for the assets. However, this is a very slow and incremental process and in practise, much of this learning is so slow it cannot be used. The facility will make it possible to perform tests such as whole life testing, and testing of aged equipment, as well as accelerated aging testing and testing under specific conditions. This will enable the acceleration of learning and policies to be developed more quickly. Some of the projects that fall into this category are those related to:</p> <ul style="list-style-type: none"> ▪ Run-to-failure testing to understand degradation mechanisms and symptoms of existing assets. ▪ Run-to-failure testing and asset management of new assets with novel insulation materials. ▪ Live-line refurbishment techniques.
Attachments	