

## Network Innovation Allowance Progress Report

*Notes on Completion:* Please refer to the appropriate NIA Governance Document to assist in the completion of this form.

Network Licensees must publish the required Project Progress information on the Smarter Networks Portal by 31st July 2014 and each year thereafter. The Network Licensee(s) must publish Project Progress information for each NIA Project that has developed new learning in the preceding relevant year.

### Project Progress

**Project Title**

Sustainable Commercial Model For Networks

**Project Reference**

NIA\_SHET\_0001

**Project Licensee(s)**

Scottish Hydro Electric Transmission

**Project Start Date**

Jun 2013

**Project Duration**

22 Months

**Nominated Project Contact(s)**

George Cobb

**Scope**

The scope of this project is to develop and implement methods and an analytical framework to quantify the value the social, environmental and wider economic impacts of Transmission Line Developments (the SCM), and demonstrate the use of the SCM with a specific case study.

**Objective(s)**

The key objectives of the project are outlined below.

Provide a method and software model for quantifying the contribution of Transmission projects to the wider Scottish and UK economy from direct, indirect and induced expenditure on network projects (demonstrated with a specific case study).

Provide a method and software model for quantifying the social and environmental impact value to stakeholders from the construction of Transmission projects, by providing an effective commercial approach to stakeholder engagements at early stages with transparent case study of examples.

Provide a method and software model for quantifying the incremental social, environmental and economic impacts of optioneering so that more information can be provided to stakeholders to support commercial decisions and their rationale (demonstrated with a specific case study).

**Success Criteria**

The success of the project can be measured by the financial quantification of the selected methodologies in the SCM by April 2015.

**Performance Compared to the Original Project Aims, Objectives and Success Criteria**

**Objective: Provide a method and software model for quantifying the contribution of Transmission projects to the wider Scottish and UK economy from direct, indirect and induced expenditure on network projects (demonstrated with a specific case study)**

The software model and associated method have been created. The economic impact of the Beaulieu-Denny project has been quantified using the Excel-based model, in two main stages:

- The Beaulieu-Denny project expenditure incurred up to October 2012 (i.e. prior to NIA funding for NIA\_SHET\_0001) was mapped using the Excel-based economic model.
- An updated version of the model was run in February 2014 for a higher-resolution expenditure dataset for the Beaulieu-Denny project up to November 2013 (approximately two thirds of the expected total Beaulieu-Denny expenditure). An initial mapping of the outstanding Beaulieu-Denny project has also been completed in anticipation of running the model to quantify the total economic impact of the Beaulieu-Denny project.

**Objective: Provide a method and software model for quantifying the social and environmental impact value to stakeholders from the construction of Transmission projects, by providing an effective commercial approach to stakeholder engagements at early stages with transparent case study of examples**

The software model and associated method have been created. Primary research in the following three areas for the Beaulieu-Denny project was completed in December 2013:

- Market Impacts of Cultural Heritage and Visual Amenity
- Non Market Impacts of Cultural Heritage
- Non Market impact Visual Amenity
- Traffic Disruption
- Air pollution from Traffic
- Greenhouse Gases

Initial findings started to be integrated into a Beaulieu-Denny case study. Final refinement of the SCM will begin in October 2014.

The four remaining areas to be assessed within this objective are:

- Health and Safety
- Waste
- Land Use
- Human Capital

These are in the process of being modeled and will be integrated into the Beaulieu-Denny case study before being integrated into the final development of the SCM which will begin in October 2014.

**Objective: Provide a method and software model for quantifying the incremental social, environmental and economic impacts of optioneering so that more information can be provided to stakeholders to support commercial decisions and their rationale (demonstrated with a specific case study)**

Started to review incremental impacts within the wider impact areas discussed above to enable them to be modeled separately, in order to identify which areas provide the greatest social benefit at the lowest financial cost. This is expected to reduce mitigation costs from performing core tasks with greater consideration of the environment and social implications of Transmission developments.

**Required Modifications to the Planned Approach During the Course of the Project**

None.

**Lessons Learnt for Future Projects**

1. **Economic Modeling** - The process of completing a full economic modeling process for a transmission network has been developed to enhance the ability of network owners to quantify their economic impact in a wider sustainable commercial process.

**Managing primary research for Transmission projects** – Improved estimates of the design and duration required to complete stakeholder surveys have been established as a result of work completed in this project. This will allow more effective replication of the Sustainable Commercial Model.

**Awareness of innovative modeling techniques** – Knowledge of specific primary research techniques applicable to the network industry have increased within the Beaulieu-Denny Project team. This knowledge will be transferred through presentations and final publication to interested parties.