Appendix Cover Sheet

We have included a series of appendices to complement the Proforma. The appendices:

1. Provide further depth in key areas of the project (referenced in the Proforma text)
2. Highlight what makes this project unique
3. Show the foundations that are in place to accelerate project delivery if funding is received

Each of the appendices is covered below with a short description of the content.

1. The MK*Smart*2020 Project

The MK*Smart*2020 Project document provides greater depth to our submission. The document will give the citizens of Milton Keynes and other UK customers a view of what we intend to do and will encourage customers' involvement in MK*Smart*2020, enhancing the project and making it more insightful. The document conveys our commitment and passion for low carbon networks and the importance of the Low Carbon Networks Fund. It provides an overview of the project and gives customers the confidence that their money is being well spent.

2. Milton Keynes Low Carbon Living Programme Prospectus

MK*Smart*2020 is intimately linked to and will support Milton Keynes' Low Carbon Living Programme. The Prospectus has been included in the appendix to showcase Milton Keynes' commitment to its low carbon vision.

3. Research Themes Knowledge Capture and Dissemination

MK*Smart*2020 will generate, capture and disseminate new knowledge that will apply to the UK's network companies and other industry participants. This appendix shows how we will achieve this by drawing on the specialist capabilities and assets of our project partners. In designing this project we started with the knowledge we wanted to generate by developing a series of hypotheses to test. We then made sure that what we designed tested these hypotheses in a robust way.

4. DPCR6 Linkages and Capability Development

We will maximise the customer benefit derived from MK*Smart*2020 by ensuring our DPCR6 submission reflects what we have learned. This appendix describes Central Network's view of the expected MK*Smart*2020 DPCR6 impact, the process by which project learning will feed into DPCR6 planning and the approach for maximising the development and retention of key capabilities.

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5. Smart Metering and Customer Empowerment

Smart meters will be an important network sensor and a powerful means to influence customer behaviour in line with the needs of the low carbon network. MK*Smart*2020 will include a scale smart meter deployment across the municipality which will allow customers to better understand their consumption and participate in new commercial arrangements. This section outlines how the project's smart metering deployment and customer enablement activities will deliver MK*Smart*2020's objectives.

6. Commercial Propositions and Supporting Technology

Customers are at the heart of MK*Smart*2020 whether they are driving electric vehicles, benefiting from demand response contracts or choosing to install their own generation. Accordingly, new commercial arrangements with customers will facilitate many aspects of the low carbon network. These will be joined by commercial arrangements with other industry parties – retailers, aggregators and the GB System Operator. This section describes how customers will be involved, the commercial arrangements that will be trialled and the practical process for cost effective delivery on a pilot scale.

7. Technical Design and Delivery

MK*Smart*2020 will involve a variety of integrated technology. These appendices outline the project's high-level technical design.

7.1. Aligning Technical Design with Customer Value

MK*Smart*2020 will not deliver technology for technology's sake. This section demonstrates and explains how we have gone about ensuring that the technology we invest in is focused on creating knowledge that will accelerate the development of a low carbon energy system and deliver benefits to current and future customers.

7.2. IT

IT will be an essential component of future low carbon networks. IT will provide the data handling, analytics, visualisation and decision support necessary to run a low carbon network. This section outlines the high-level IT solution, including enhancements to current network control systems and a new, low-carbon IT architecture

7.3. Communications

Information from, understanding of and potentially control of different points across the distribution network, businesses and homes are integral to low carbon networks. This section outlines the high-level communications solution that will make MK*Smart*2020 work.

7.4. Network Engineering and Operational Delivery

Network engineering assets include sensors at primary and secondary substations, the means to enhance control and the boxes that collect and route data and provide a platform for distributed intelligence. This section describes the assets that will be installed and how they will be installed, the functionality they provide, the areas of the network they will cover and the basis for their selection.

8. Project Readiness and Delivery

If MK*Smart*2020 secures funding, Central Networks will immediately commence work to allow customers to benefit as quickly as possible while minimising project risks. The project readiness appendix reflects this goal by outlining the comprehensive approach MK*Smart*2020 will use to ensure controlled, informed and on-time benefits realisation. This section covers the project plan with dependencies, risks and contingency planning, the governance approach, reporting and quality management, financial management and the project management office approach and structure.

9. Benefits Case

This appendix provides the reasoning and analysis that has fed in to the MK*Smart*2020 benefits case, which calculates the GB-wide benefits attributable to deploying MK*Smart*2020 across the whole country.

10. External Collaborators

MK*Smart*2020 brings Central Networks together with a number of external collaborators who bring funding, proven tools and assets, relevant experience and global reputations. This section outlines what each External Collaborator brings, including funding under the terms of LCNF. It also includes the legal agreements that Central Networks has reached with each External Collaborator.

11. Letters of Support

We have received letters of support for MK*Smart*2020 from a number of key stakeholders, which are presented in this appendix.

12. Mk*Smart*2020 - Derogations

This appendix meets Ofgem's requirements for derogations associated with the project.