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| Network Innovation Competition 2020 Supplementary Answer form | | |

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| Project Name | Constellation | | |
| Question number | #22 | Pro forma section | Section 3 |
| Question date | 29/09/20 | Answer date | 01/10/20 |
| Question summary | How many deployments are required to break even on project costs? Please state substation and DER numbers, including maximum eligible deployments for context. | | |

## 

## Answer (please retain document formatting and do not exceed 2 pages unless otherwise agreed with Ofgem)

The Project will break even in two years when deployed across GB as presented in the full submission. Please note that we have recalculated the benefits to account for the 5G delay caused by the Huawei ban and the project roll out now only begins in 2027 and is projected to pay back by 2028.

Table 1 – Number of deployments to breakeven when Constellation is deployed across GB

|  |  |  |  |
| --- | --- | --- | --- |
| # DER site deployments required to breakeven | # of maximum eligible DER site deployments | # primary and grid substation deployments required to breakeven | # of maximum eligible primary and grid substation deployments |
| 337 | 3,617 | 174 | 3,355 |

* We have estimated the number of maximum eligible substation deployments based on our own network.
* We estimated the number of maximum eligible DER site deployments based on the Steady Progression FES scenario for the breakeven year (2028).

Our results indicate that both 5.2% of GB primary and grid substations and 9.3% of DER sites need to deploy Constellation for the project to breakeven on the investment of £14.4m.

We want to clarify that those volumes of deployment are entirely achievable as part of a dedicated work programme similar to ones we use for business as usual activities. Based on our experience in large replacement programmes, we believe our estimate, for two dedicated teams within a single licence area to carry out two deployments per month, is conservative but suitable given the novelty of our solution. This means that 336 deployments should be possible annually which is sufficient to carry out the minimum number of deployments required within the two-year period presented in the table above.