



CELTIC-NEXT Proposers Day



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Pitch of the Project Proposal

£20M for the development of 3DIEE

dhp11

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Teaser



What is the main benefit of the proposal, and what makes the added value?

Currently, Mobile Network Operators have over 40,000 sites in the UK - some of these broadcast only 2G. In order to provide adequate 5G coverage to the UK, between 500,000 and 1,000,000 sites must be upgraded or created - the cost for this development could range from between £22bn and £44bn - to design even one of these sites can take up to six weeks.

Using the same data that is already collected, our approach can produce the same, if not better results - in just a sixth of the time. Using Epic Games' Unreal Engine 4, the software behind the recent phenomenon Fortnite, we create an accurate, lifelike, and reusable 3D model of the area, allowing engineers to visit the site from the comfort of their office.

Why should I participate in the project?

By investing in our proposal, you'll become a part of the only company in the **world** to take this innovative approach to a challenging and prominent issue facing the future of mobile networks.

The systems MNOs use currently are outdated, and struggle to cope with the existing strain on their infrastructure; these systems will not be able to cope with the development of 5G, and they are running out of time to develop an integrated solution. Someone needs to act fast if 5G is to go ahead as planned.

Our solution has already been put into practice by KTL, an Irish telecommunications company, to reduce their design costs by an average of 25%, and we've proved ourselves with over 60 sites across Vodafone, EE and Musco already.

Organisation Profile



Who are we?

dhp11 is a small, independent software house with over 25 years of experience in the development of engineering design and asset mapping systems for the infrastructure and utility sectors. A compact, accomplished team with over a thousand successful projects, we provide catered software solutions and offer ongoing maintenance and support; some of our biggest customers, both past and present, include Network Rail, Vodafone and EE.

Our recent experience as a partner in Innovate UK's 'Digitally Enabling Electrification' project has shown us that with the right mix of supporting skills, we're capable of implementing radical and innovative solutions to counter challenging problems. Our current project, 3DIEE, aims to support engineering infrastructure projects by improving the efficiency and speed surrounding the creation of project designs.

Proposal Introduction (1)

The current method of acquiring and designing a site is too time-consuming and isn't sustainable. We set out to refine this process. Our main goal was to remove computerised CAD from the whole process, and trim down the time taken by as large a margin as we could, while keeping the new method simple and easy to pick up.

We came up with **3DIEE**.

3DIEE stands for 3-Dimensional Integrated Engineering Environment. With this software, Radio Engineers can model a site and add any proposed changes, and see the impacts of them as they go. Components such as Antennas, Masts, Generators and more can be added to a model to create as realistic a representation of the site as possible. Antennas can be angled and tilted to show their area of effect and reach, and 360° images can be added to show the real-life location around you.

What before would have been drawn by hand can be captured in a single image, as, if not more accurately than ever before.



Proposal Introduction (2)



We believe that 3DIEE could have worldwide impacts.

The software's Telecoms version, TIDBO (Telecoms Infrastructure Design Build Operate) has been used extensively across the world to model and design over 100 sites already, and we don't plan on stopping there. We plan to add functionality to aid the design and development of projects in the railway industry, and we believe 3DIEE in a great deal of sectors across more than just the engineering industry.

Our solution has already optimised the process of acquiring and designing a site to the point that as an eight-man team, we're **six times faster** than the largest Mobile Network Operators in the UK, and we're just as accurate, if not more.

The telecoms industry has a history of missing deadlines. The UK Government's Mobile Infrastructure Project barely managed to deliver 60 of the planned 600 sites by the end of the 2016 financial year; With the right investment, we plan to upscale TIDBO to be able to create a site in as little as 3 hours, leading into over 500 sites a month.

Partners



3DIEE is the culmination of months of work and effort, but it's been a team effort.

DHP11, working in Barlow, and KTL, outside of Naas, Ireland, are the two main collective minds behind the product as a whole.

3DIEE's Telecoms version has been showcased around the world – involved parties include Musco, an American Sports Lighting company, MAFI, a steelwork-focused engineering company based out of Sweden, and it's even been demonstrated to Nokia, at a meeting in Switzerland.

If you see potential in our solution or you'd just like to know more, please feel free to contact us via the information on the following slide.

*“How do you do that?
It's cooler than Fortnite.”*



*See the solution for yourself at:
www.3diee.com*

Contact Info



For more information and for interest to participate please contact:

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Presentation available via:
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