

## Project Specification Template

### Tender details – the opportunity

Company name	Balkerne Ltd
Company address	4B, Parkside Office Village, University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3AD
Description of company activity/SIC code	<p>Balkerne develops an enterprise digital platform for the collaborative and transparent management of risk between Insurer, Broker and Customer.</p> <p>SIC 62012 SIC 62020 SIC 62090</p>
Objective of the proposed innovation project– this MUST involve activity that results in the development of or introduction to the market of a new product or service (max 300 words)	<p>The Balkerne Director has spent six months researching the concept with stakeholders across the Insurance Industry and most recently, through the efforts of the company’s team, an initial demonstrator of a prototype platform has been achieved. This has allowed articulation of the proposed innovation with insurance stakeholders and the gaining of vital feedback and insights.</p> <p>The research phase has established that there is an innovation opportunity for the development of a new digital platform for the insurance industry. This proposed platform will enable the collaborative management of risk between the issuing Insurer and the customer. The platform will integrate, structure and process a wide range of data sources, both static and dynamic, to provide a detailed and location specific, understanding of the value at risk and the sources of the risk at that time. Risk mitigating actions will also be algorithmically proposed, with automated information dissemination through functionality of the platform, to a range of appropriate and accredited solution providers.</p> <p>The core objective of the project is to advance the initial prototype, research the additional scope of functionality and use cases and develop a robustly, scalable, digital risk management platform that can be applied globally, across the insurance industry.</p> <p>Supporting objectives are to ensure that the platform;</p> <ul style="list-style-type: none"> <li>- Meets regulatory compliance requirements, such as GDPR.</li> <li>- Includes a module for identifying, structuring and exploiting data from data, metadata and aggregated data from social networks.</li> </ul>



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	<ul style="list-style-type: none"><li>- Provides connectivity with IoT devices, integrating, visualising and analysing data from these sources.</li><li>- Has robust data extraction, transformation and loading.</li><li>- Has a module for data monitoring, storage and analytics.</li><li>- Includes API management.</li><li>- Includes Geospatial Intelligence System (GIS) integration.</li><li>- Achieves insight on risk across business functions, derived from algorithms.</li><li>- Has advanced data analysis and visualisation.</li><li>- Offers automated information dissemination.</li></ul>
<p>Company's current situation – existing project team and innovation project development stage (max 400 words)</p>	<p>Balkerne was formally incorporated in mid-September 2018 and is self-funded. There are currently three full time team members, one part time and an occasional consultant from the University of Essex. Building on the six months of research undertaken by the Director and his initial technical work, the team have been able to create a working prototype digital platform. This has been demonstrated to large insurance companies, including the Head of Innovation at both Ecclesiastical Insurance and Allianz, as well as to Venture Capital companies. These presentations have achieved very positive feedback and consistent observations that robust scalability to the digital platform and the ability to apply globally, is absolutely vital.</p> <p>The Director is in the midst of negotiations with Angel Investors, for initial seed funding that will provide the company with appropriate resources and runway for the company's ambitions.</p> <p>Concurrently, the team have been researching and planning the range of product functionality and establishing the detailed nature of the technical resources required to develop a commercial platform. This has been accompanied by acquisition and verification of data sources, both static and dynamic, which are vital to the planned scope of the platform.</p> <p>Engagement with potential end customers has occurred, with direct commercial interest expressed by Tesco and Ecclesiastical Insurance, which has contributed to the task of establishing and gathering functional requirements for the commercial version of the digital platform.</p>



	<p>A broad project plan has been developed, with very detailed specifications for the first stages of additional research and technical development.</p> <p>From a Technology Readiness Level (TRL) perspective, Balkerne has achieved a TRL 6 through the initial prototype demonstrated to Innovation Directors from the Insurance Industry. The culmination of this project has to be the achievement of an actual, proven, scalable and robust platform, immediately ready for deployment into a commercial setting.</p>
<p>Business need – what expertise and support is required from a Knowledge Base to reach the objective(s) above? (max 400 words)</p>	<p>The company acknowledges that it has taken a number of technical short cuts to achieve an initial prototype at TRL 6, for the purposes of demonstrations with Insurance Companies, in order to receive detailed feedback and observations.</p> <p>Feedback received has consistently highlighted the requirement for the commercially deployable platform, to be as robust as possible and capable of scaling to support the global extent of insurance operations. To achieve this, Balkerne has identified that it requires support from individuals with certain technical skills and knowledge, in particular to achieve the development of a robust, scalable digital platform, with the range of required functionality.</p> <p>The principal requirement is for an Enterprise Software Development Consultant. This individual must have the following skills:</p> <ul style="list-style-type: none"><li>- Systems design and programming / software development.</li><li>- Experience of event driven architecture and client side Model View Controller Frameworks.</li><li>- Data integration, structuring and analysis.</li><li>- Experience of the integration of Geospatial Intelligence Systems.</li><li>- Knowledge of HTTP-based REST services.</li><li>- Understanding of cloud environments and deployment strategies.</li><li>- Advanced SQL scripting capability and general robust database knowledge.</li><li>- Secure software development in line with standard Information Security frameworks.</li><li>- Collaborative open source development and integration techniques.</li></ul>



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	<ul style="list-style-type: none"> <li>- Delivering highly modular, testable, scalable code with continuous integration and deployment to a cloud environment, following agile methodologies and a Git workflow.</li> </ul> <p>In regards to academic assistance, Balkerne requires an academic who can advise on asynchronous messaging technologies, process modelling, rule base systems, network architectures and object oriented development.</p>
<p>Please list six key words that describe your potential project, i.e. ICT, engineering, biotech etc.</p>	<p>ICT Software Data Analysis Risk Insurance</p>
<p>Required timescales (if any) for Project Start and duration, and if applicable anticipated product launch date</p>	<p>Project Start: 2<sup>nd</sup> January 2019 Duration: 9 months Anticipated Product Launch: 20<sup>th</sup> September 2019 Project Completion: 2<sup>nd</sup> September 2019</p>
<p>Optional - company budget available to match fund KEEP+ grant (if known) please see 'Further details' for maximum funding amounts</p>	<p>Company will be able to match KEEP + funding from its own resources for the duration of the project. In addition, the company is engaging with Angel Investors for initial funding</p>
<p>Company Contact for further information</p>	<p>Mr Harish Pesala <a href="mailto:hp@balkerne.com">hp@balkerne.com</a> 07965761767</p>
<p>Required tender response date (min 20 working days from posting of advert)</p>	<p>Advert posted on 16<sup>th</sup> October Response by 13<sup>th</sup> November</p>
<p>Responses are sought from organisations classified as Knowledge Bases, defined under the ERDF Definition of the Knowledge Base: Higher Education, Further Education and Research Entities which are: UK Public Sector Research Establishments, Research and Development Organisations, Research and Technology Organisations.</p> <p>The Company is seeking a Knowledge Base partner to work with them to develop a project which, dependent on a successful Grant Application, will be supported by the KEEP+ ERDF project using one of the three types of intervention described below. Please also see KEEP+ website – link.</p> <p>The Company would like to work with a Knowledge Base partner under a two stage contract.</p> <p>In Stage 1 they need the expertise of a Knowledge Base partner to develop and design the project which will deliver the solution for their business need and support their grant application to KEEP+. The Company have already secured a Grant from KEEP+ of up to £1k to fund 50% of the cost of this activity, subject to them procuring a suitable KB partner.</p>	

In Stage 2, if the grant application to KEEP+ is successful, the Company requires the expertise of the Knowledge Base partner, to work with them to deliver the solution i.e. the project intervention supported by the KEEP+ grant.

Criteria for Decision making	Assessment criteria are as follows <ul style="list-style-type: none"> <li>• Expertise fit</li> <li>• Timing fit</li> <li>• Suitability of proposed methodology</li> </ul> Weighting is determined by the SME partner
Date for Contract Decision	Minimum of 20 working days from date of advertisement
Tender response templates	Please approach the company for the exact format of your response.

### Further details for potential respondents

You are responding to a tender for an activity which is eligible for part funding by the European Regional Development Fund, specifically under the KEEP+ Programme.

The KEEP+ Programme aims to support SMEs to develop new products and services by fostering long term collaborative relationships between Knowledge Bases – Universities and research institutions – and SMEs who need expertise and support for innovation.

Please see KEEP+ website for further information [www.keepplus.co.uk](http://www.keepplus.co.uk) or contact the KEEP+ project team 0845 196 4310 [carole.randall@anglia.ac.uk](mailto:carole.randall@anglia.ac.uk) or 0845 196 4207 [cheryl.cook@anglia.ac.uk](mailto:cheryl.cook@anglia.ac.uk)

KEEP+ provides maximum allowable grants for its specific types of intervention. Those intervention types and maximum grant levels are as follows;

- Innovation Internship (max 12 week duration) – this intervention involves a graduate intern working on a relatively short term activity, they are based within the beneficiary company - grant allowance 50% of eligible costs to a maximum of £2,828.00 (please note, NO stage 1 grant).
- KEEP Knowledge Exchange Embed Partnership (12 month duration) - this intervention involves a graduate working on a mid- to long-term activity with the support of a specific academic staff member, the graduate is based within the beneficiary company - grant allowance 50% of eligible costs to a maximum of £30,275.00 revenue (including maximum Stage 1 grant) and £6,000 capital.
- KEEP Research and Innovation Collaboration (no fixed duration) this intervention involves an academic colleague working on a short- to long-term activity, they are based at the Knowledge Base but with regular face-to-face interaction with the beneficiary company - grant allowance 50% of eligible costs – these grants have an average cost of £19,250.00 revenue (but may range from £5,000-40,000, including maximum Stage 1 grant) plus a strict maximum of £6,000 capital.
- Capital grants are only available for the KEEP or Research and Innovation Collaboration projects, not Innovation Internships and any capital items must be procured separately.



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The following is a guide to the types of cost that you should expect to occur should your application be successful;

- Innovation Internship (max 12 week duration) – intern wage, administrative support
- KEEP Knowledge Exchange Embed Partnership (12 month duration) – project development, associate wage, academic wage, administrative support, training and travel (on the part of the knowledge base employees), minor equipment (please note there is a potential separate grant for major capital purchases), recruitment
- KEEP Research and Innovation Collaboration (no fixed duration) – project development, academic wage, administrative support, consumables (please note there is a potential separate grant for major capital purchases)