

Project Specification

Tender details - the opportunity

Company name	Senti Tech Limited
Company address	57 Jordan Street, Liverpool, L1 OBW
Description of company activity/SIC code	26600, 82990 Design, development, and manufacture of intelligent medical wearable devices for the diagnosis, monitoring, and management of illness.
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)	The aim of this innovation project is to further the development of a novel wearable medical device (Senti-Wear: details below), through expert consultancy focused on ensuring the safety and conformity of the medical device (including electromagnetic compatibility and electrical safety) through new feature development to finish the development of Senti-Wear.
	Objectives include:
	Improving ingress protection and washabilityImproving manufacturabilityImproving design for safety
	The consultant shall be focused on providing expert advice to the project team (either directly or through their network), plus practical prototyping and testing, to ensure the safety and conformance of the device through this research and development work.
Company's current situation – existing project team and innovation project development stage (max 400 words)	Senti Tech is developing Senti-Wear, an innovative wearable medical device for people with Long Term respiratory illnesses. Our device, combined with artificial intelligence algorithms which we are developing, will enable people with conditions such as COPD and Asthma to receive targeted treatment recommendations. This innovation has the potential



to improve quality of life and reduce hospitalisations for respiratory illnesses.

Senti have a developed a working prototype of the device system's hardware, including electronic and textile components. In order to take this device through to commercialisation, we will need to complete safety and compliance testing (including ISO 60601-1 and 60601-1-2), maintain the safety of the device whilst enabling the device to be machine washed, and ensure readiness for manufacture.

The project team currently comprises Dr Phil Alton (Founder, emergency medicine doctor), Dr Miguel Hernandez (CTO, Al engineer/electronics engineer), Charlotte Corke (Project manager), Paul Rimmer (electronics engineer), Dr Ed Ang (Firmware engineer), Simon Levi (Senior Product Design Engineer), Niamh Cusack (Garment Designer), and Gulaly Ahmad (User Experience researcher).

Business need – what expertise and support is required to reach the objective(s) above? (max 400 words) Key expertise required is specialist engineering expertise on electromagnetic and electrical safety. Medical device sector experience is preferable, and consultant capabilities should include the ability (either directly or through network) to develop prototypes.

We anticipate that the project will involve working with the existing project team to first scope out the additional features to be developed above existing functionality. (This may include ingress protection and improved PCB design to reduce cost/increase manufacturability). Secondly, the consultant shall support the project team to develop these new functions whilst persevering or improving the safety and compatibility of the device.

The consultant may be involved with developing and testing prototypes in order to feedback requirements to the project team, and advising on



	the writing of technical documentation associated with the project.
Please list six key words that describe your potential project, i.e. ICT, engineering, biotech etc.	Wearable, Medical-Device, Health Tech, ISO 60601- 1, EMC
Required timescales (if any) for Project Start and duration, and if applicable anticipated product launch date	Anticipated project start: 15 th of August 2022, 8-12 weeks duration.
Optional - company budget available to match fund KEEP+ grant (if known) please see 'Further details' for maximum funding amounts	Up to £10,000 available to match KEEP+ grant.
Company Contact for further information	Phil.alton@senti.care
Required tender response date (10 working days from posting of advert)	12/08/2022
Criteria for Decision making	Assessment criteria are as follows • Expertise fit • Timing & availability fit • Geographically local preferable
Date for Contract Decision	Minimum of 10 working days from date of advertisement
Tender response templates	Please approach the company for the exact format of your response.