

Tended Secures £1.4M project with the European Space Agency to advance its groundbreaking Positioning Technology for Rail Safety

October 12, 2023



Partnering with the European and UK Space Agency, RTKF Net, Siemens Mobility, Morgan Sindall Infrastructure, Story Contracting and RSS Infrastructure, Tended is set to revolutionise possession management within the rail industry.

Tended, a technology startup specialising in geofencing for rail and track worker safety, has secured a £1.4 million project with the European Space Agency's (ESA) Business Applications, with ESA funding 50% of the project.

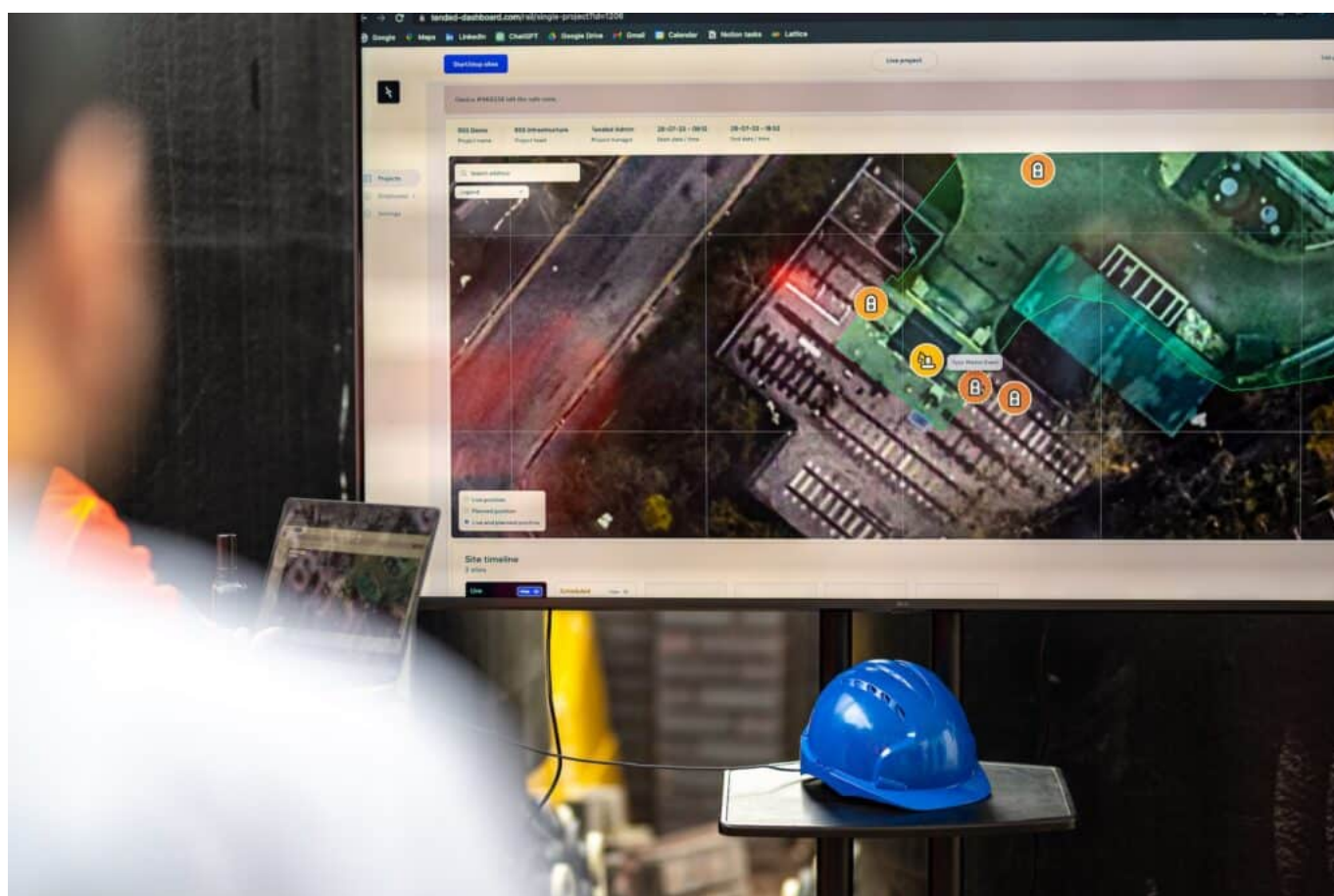
This significant project will help strengthen the company's geospatial capabilities with technology that will transform the way that rail possessions are planned, executed and managed.

Traditional methods of possession management, such as paper-based processes, diagrams and magnetised markers, are inefficient and prone to error, which can significantly compromise safety and

project efficiency. After identifying an opportunity to modernise these antiquated processes, Tended is partnering with industry leaders to create the next generation of geospatial technology.

Over the next 12 months, Tended will work alongside Siemens Mobility, Story Contracting, RSS Infrastructure and Morgan Sindall Infrastructure to design and pilot this new possession management technology and spearhead the development of transformational rail safety and efficiency solutions.

With the support of the European and UK Space Agencies, Tended will leverage space-based assets to build on its existing solution and deliver the next stage of their product development.



Through an online dashboard, Tended will provide organisations with a highly accurate digital representation of their worksite. With high-resolution imagery, site managers can safely navigate people and plant around large and complex worksites with multiple lines and hazards. Real-time alerts will notify them of any unsafe events, such as a worker or vehicle exiting safe working limits, moving above a set height limit or travelling in the wrong direction as well as alerts for points run through and runaway risks, so that incidents can be prevented.

The aim is to prevent safety incidents in trackside environments such as the incorrect placement of protection equipment, plant and assets operating in the wrong location and collisions with moving trains, which can result in near misses and fatalities.

“It’s really exciting to have the backing of the European Space Agency and concerted effort from our partners on such a ground-breaking product,” said Leo Scott Smith, CEO and Founder of Tended. “This project represents an important milestone for Tended that will catalyse further innovation and development, enabling us to explore new ways to deliver safety improvements that have never been done before, and ensure everyone can return home safely.”

“Since 2017, there have been 15 workforce fatalities on the rail network, which have had a truly devastating impact on all involved. These tragedies are what motivates us to keep innovating and develop cutting-edge solutions to help protect people on the railway. Through innovation, we can create safer rail environments and ensure that no one else loses their life on the tracks.”

Eddie Bell, Lead Possessions Planning Engineer at Siemens added: “At Siemens, we’re very excited about our involvement in the development of Tended’s worksite management program. As a global leader in technology and innovation, we recognise the paramount importance of workforce safety in today’s dynamic and evolving rail industry landscape.

“This collaboration presents a unique opportunity for us to combine our expertise with that of other industry leaders and the European Space Agency, pooling our collective knowledge and resources to drive meaningful advancements in safety protocols and practices.

“We look forward to the challenges and opportunities that lie ahead. Together, we will set new standards for workforce safety, pushing boundaries with first-of-a-kind technologies and reaffirming our commitment to the wellbeing of our workforce.”

Dan Jones, Operations Director at Story Contracting commented: “We are proud to support Tended in this exciting collaboration to drive safety innovation in the most important aspect of delivering work on the railway network. We believe that accelerating the impact of tech disruptors can drive significant improvements in the way we keep our people safe.”

Pieter Esbach, Operations Director – Rail from Morgan Sindall Infrastructure said “Morgan Sindall Infrastructure supports the use of technology to provide overall safety improvements which in turn reduces the risk to our workforce, suppliers and stakeholders.

“The geofencing technology has been trialled on a number of our projects to ensure our people do not lose situational awareness. Based on the positive results from the trials we wish to help further develop the products to reduce the risk of plant related events across our industry.”



Of the project, Jason Fido, Technical Manager at RSS Infrastructure commented: “At RSS Infrastructure, our expertise in track warning services has always been about ensuring the highest safety and efficiency standards on the UK’s rail network. Partnering with Tended on this geofencing project allows us to use our deep knowledge in track safety and worksite management. Our collective aim is to deliver an innovative solution centred around the end-user that is intuitive and simple to use, ensuring that safety remains uncompromised at all times.”

Tended’s flagship product combines geofencing technology, wearables and behavioural science to enhance worker safety. By augmenting worksites with virtual zones, Tended helps workers maintain a safe distance from hazards with instant alerts when boundaries are crossed. It also supports organisations with vehicle and asset tracking, ensuring protection equipment is placed in the correct location and removed at the end of projects.