

First European Trial for Multi-Award-Winning AIVR Technology

July 14, 2022



Intelligent Video specialist One Big Circle has successfully conducted European trials in Lithuania, working with LTG Link, part of Lietuvos Gelezinkeliai (LTG) group, to deliver a proof-of-concept project. The objective was to capture and assess video data from LTG's in-service fleet using One Big Circle's multi-award winning AIVR technology.

Lietuvos Gelezinkeliai, the national railway company of Lithuania, operates both passenger (LTG Link) and freight services on their fleet of electrical and diesel locomotives. Having seen how Network Rail and multiple operators benefit from the AIVR (Automated Intelligent Video Review) system in the UK, One Big Circle joined LTG Link's showcase of technologies in the rail industry.

The Bristol-based SME, that specialises in video data accessibility, created the ground-breaking AIVR technology in 2019 to help address the challenge of making critical video data rapidly available in challenging environments. The data is presented in an easy-to-use interface so engineers and other specialists can review, measure, annotate and report any issues. Machine Learning is also applied to the data to automatically detect assets or anomalies.



As part of the trial, a lightweight AIVR Go device was deployed inside the cab windscreen on one of LTG's cross-country Link trains, covering over 2,000 km of track in the six week trial. The device was supplied by the UK SME and deployed onboard by the Lithuanian team in the country. The system, developed to provide critical data for remote condition monitoring and operations, recorded video footage and other telemetry, transmitting it automatically to the cloud for immediate online access.

Using their own online dedicated AIVR Workspace as part of the trial, LTG Link was able to remotely inspect and review footage within minutes of capture. With Artificial Intelligence and Machine Learning then applied to the video data, the team in LTG Link were able to locate assets such as signals, scrap rail and graffiti, enabling them to see what they need to see the most.



One Big Circle Director Emily Kent said "We are delighted that AIVR was chosen to be part of LTG Link's showcase of disruptive technologies in the rail industry. It is testament to all involved that this capability could be delivered so quickly and efficiently with some really exciting operational results for LTG Link."

Kristijonas Sribike, Project Manager at LTG Link commented, "AIVR delivers superb video quality, user-friendly dashboard loaded with useful functionalities and the ability to create custom solutions in collaboration with the committed One Big Circle team."

With a successful trial completed the teams involved are exploring the next steps towards future deployment.

Meghan Silveira, Business Development Manager at One Big Circle who oversaw the trial with LTG Link concluded, "The AIVR technology is easily transferable to other countries and environments, as we've seen in this successful trial, so we are keen to explore where else this can add benefit to more rail owners and operators."



For more information on AIVR and One Big Circle, contact meghan.silveira@onebigcircle.co.uk.