Data & Monitoring

Rail Vision

Israel Railways Orders 10 Rail Vision Main Line Systems

Israel Railways has ordered 10 Main Line Systems – and related services – from Israeli-based tech company Rail Vision.

The contract, valued at 1.4 million USD (1.3M EUR), is Rail Vision's largest to date and heralds the first major commercial deployment of AI-based vision technology for main line rail industry operations.

Shahar Hania, Co-founder and CEO Rail Vision, said: "This is our biggest contract to date, opening the

door for more business in the future by solidifying the industry's trust in Rail Vision's solutions.

"It's a major milestone for us, and the first time ever a railway operator will commercially use a novel artificial intelligence (AI) powered solution."

AI-Based Vision Technology for Main Line Rail Operations

Rail Vision's **Main Line System** is a cutting-edge

solution that detects and identifies objects and obstacles near, between or on the railway.

This can help reduce downtime and delays, increase safety and improve traffic volume and to date it is the only system on the market that will be installed on commercial passenger and freight trains.

The system combines sensitive imaging sensors with artificial intelligence and deep learning (DL) technologies to quickly and accurately detect and classify obstacles within its extended visual range of up to two kilometres in diverse weather conditions and any light conditions.

This includes obstructions such as humans, vehicles, large animals such as cows, horses, wild boars and more.

The system then generates real-time visual and acoustic alerts for the train operator and as an option to the command-and-control centre. And it doesn't end there. Rail Vision's advanced image processing capabilities can also enable image-based navigation, predictive maintenance and GIS mapping.
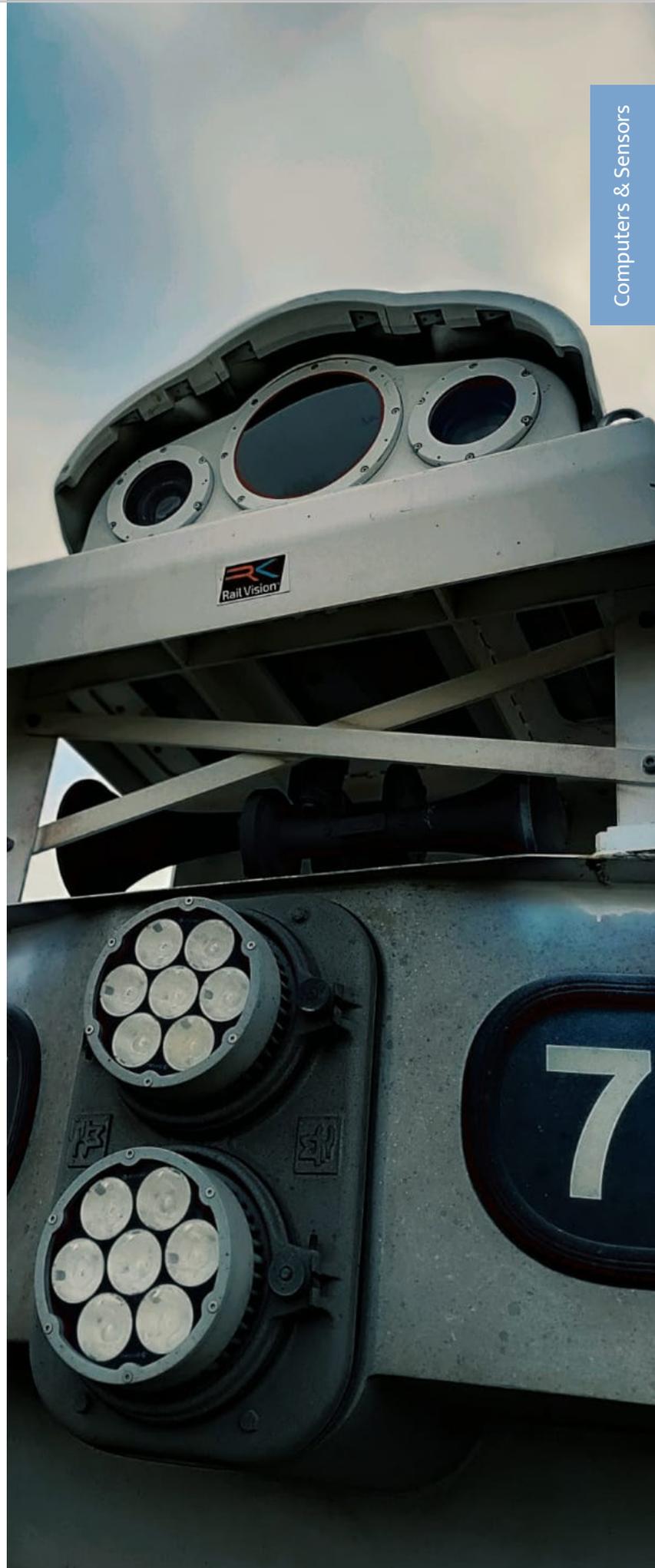
Pilot Proves Solution Meets Israel Railways's Requirements

Israel Railways currently operates around 700 trains daily, travelling along 1,138 kilometres of track and Rail Vision's Main Line System will be deployed on intercity passenger trains and freight trains.

The Israeli railway operator ran a pilot of Rail Vision's Main Line System on a freight rail locomotive operating in southern Israel, which tested the system in a wide range of weather conditions.

Drivers were taught how the system works and provided feedback throughout the trial, which proved the system met all of the operator's necessary requirements.

Noam Peleg, VP Rolling Stock at Israel Railways,

said: *"It was a pleasure working with Rail Vision on the pilot, we received all the support we asked for from installation and training through to operation management.*

"We'd had a few collisions with objects and animals in the past and were looking for a solution that would help prevent these happening in the future by enabling the driver to see far enough ahead that they could stop the train in an emergency."

System Validation

Rail Vision's Main Line System outperformed in all aspects of testing during the proof-of-concept with Israel Railways, which **CEO Shahar Hania** believes is a strong validation of the system and bodes extremely well for other **pilot programmes** underway or recently completed.

This includes a four-month pilot on Rio Tinto Iron Ore's AutoHaul network – the world's first automated, long-distance, heavy-haul rail network.

Shahar Hania, CEO of Rail Vision, concludes by saying: *"We currently have several main line and switch yard pilot programmes underway globally and the conversion of these pilot programmes into commercial contracts is expected to accelerate and drive sales growth momentum in the quarters ahead."*

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Shahar Hania, Co-founder and CEO Rail Vision