قطارات الاتحاد
Etihad Rail

DeterCam

DeterCam Case Study

Etihad Rail — Abu Dhabi, UAE

Target Animals: Camel, gazelle, sheep, and .

Project Overview

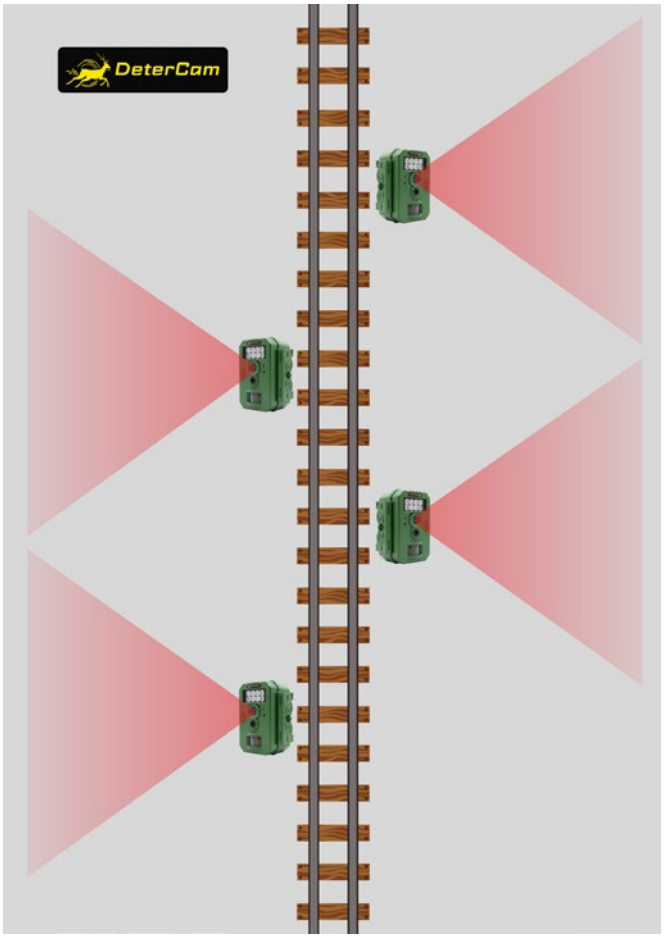
DeterCam units have been deployed along more than 3 km of an identified animal-crossing hotspot on Etihad Rail's network in Abu Dhabi. The ongoing project focuses on detecting and deterring camels, sheep, gazelles and foxes approaching the railway in a desert environment.

Challenge

Animals entering railway infrastructure create collision risks and potential disruption to train operations. During installation, the team observed large gaps and damaged sections of boundary fencing, alongside extensive animal footprints indicating frequent movement around the railway.The deployment also faces demanding environmental conditions, with reported site temperatures exceeding 60°C, dusty conditions and humidity levels above 90%.

Solution / Deployment

DeterCam units were positioned along the selected railway section, focusing on identified crossing hotspots and potential access points near damaged fencing. The system uses on-device AI to detect approaching animals and automatically activate audible and visual deterrents while recording detection events.
The deployment provides an additional protective measure alongside existing railway fencing.



Installation Layout

Objective

The project aims to reduce animal access to the railway through automated, non-lethal deterrence, while assessing DeterCam's performance under desert conditions. Recorded events also support a better understanding of animal movement, crossing patterns and responses to deterrence.

Key Findings / Observations

Since installation, the deployment has reportedly deterred more than 250 animals. DeterCam units have continued operating through the harsh site conditions, providing practical evidence of their performance in this environment.

Gaps in fencing and extensive animal tracks highlighted the importance of positioning units around frequently used access points. Continued monitoring is helping the team assess animal responses and identify areas where coverage may need adjustment.

DeterCam Milestones

** Figures from August 2026 to October 11, 2026**

Going Forward

The ongoing deployment will provide further data on detection, deterrence responses and system reliability. These findings can inform adjustments to unit positioning and coverage, and support discussions with Etihad Rail about potential deployment at additional animal-crossing hotspots.

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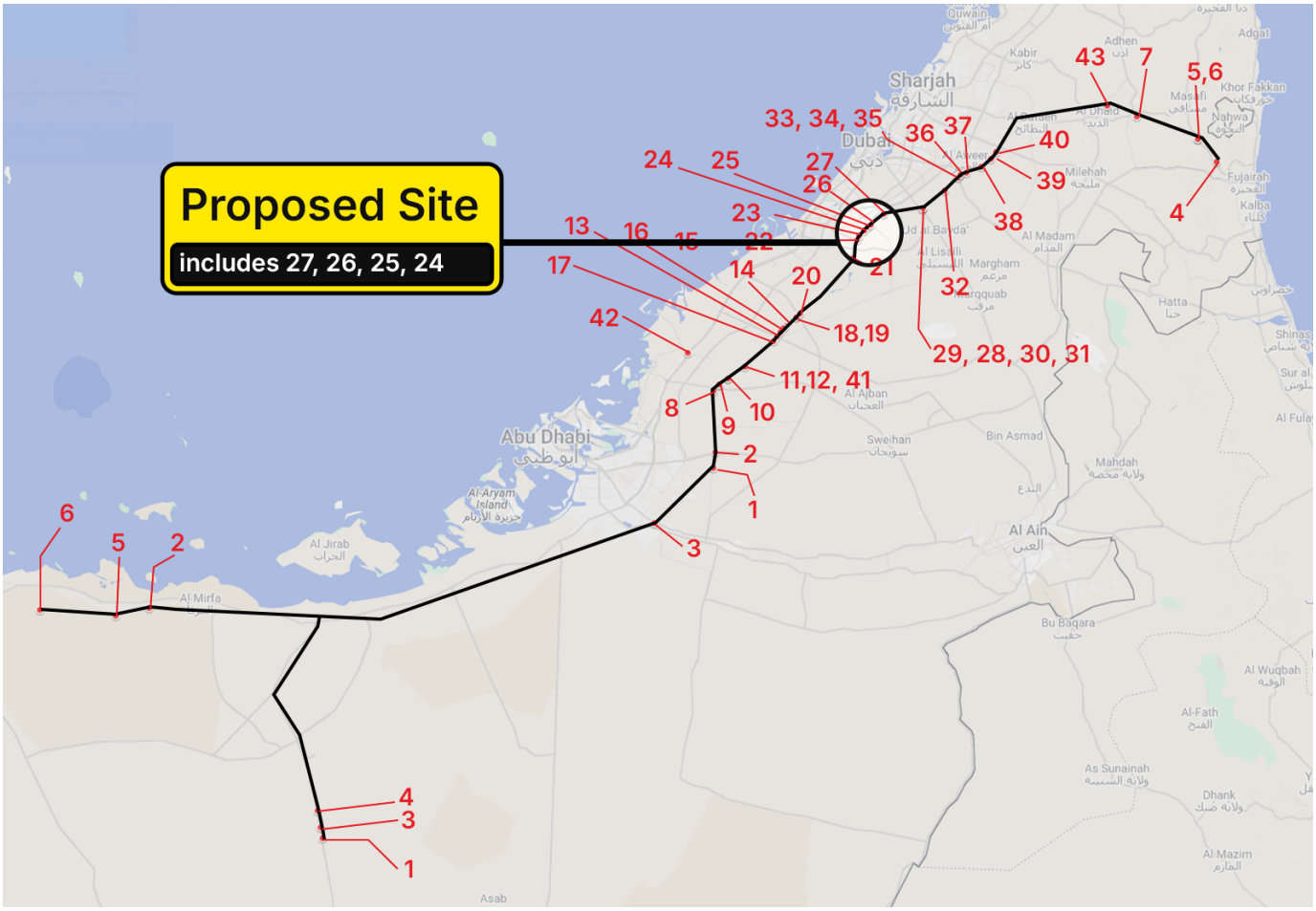

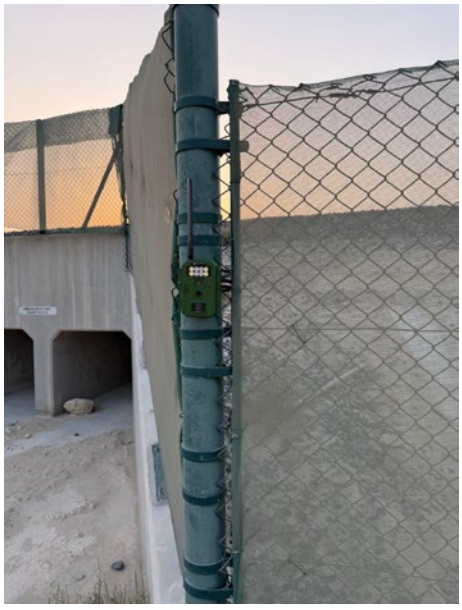

Deployed by Leading Organisations