



FUGRO

CONDUCTOR GROUND CLEARANCE

The Roames conductor ground clearance service enables operators to measure conductor proximity to the ground and identify clearance breaches and at-risk conductors.

The Roames virtual world asset management system creates a highly detailed representation of the real world used for asset inspection, matching, and condition assessment without the need to send inspection workers into the field. Assets are modeled with their relevant structural, mechanical, electrical, and thermal characteristics, enabling analysis of asset behaviors and management activities.

CONDUCTOR GROUND CLEARANCE

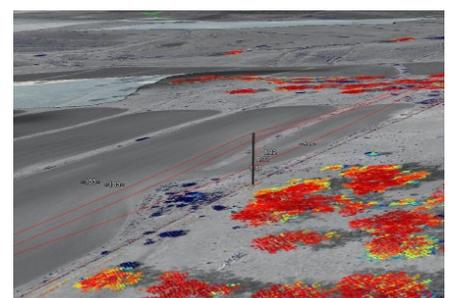
Roames conductor ground clearance product provides an affordable means for electrical utilities to assess and manage risk regarding conductor proximity to the ground.

Achieving and maintaining conductor ground clearance is an important safety and compliance issue.

By precisely managing and monitoring the location of assets, maintenance programs can be effectively managed to mitigate risk. Energy assets can often create a natural boundary, with terrain features and vegetation regularly moved and positioned under the wires, reducing the clearance and increasing the likelihood of contact with people, equipment, and other infrastructure. Roames analyses clearances of all conductors, reporting their proximity to ground, roads, rivers, and structures.



Roames provides reports of ground clearances with classification against client defined standards.



Roames virtual world with labels displaying conductor proximity to the ground.



HOW ROAMES WORKS

Roames provides reporting of ground clearances with classification against client defined clearance standards and regulatory requirements.

Roames can provide an initial and ongoing snapshot of the location of all network conductors and report minimum ground clearance in relation to corresponding and current ground (terrain) models.

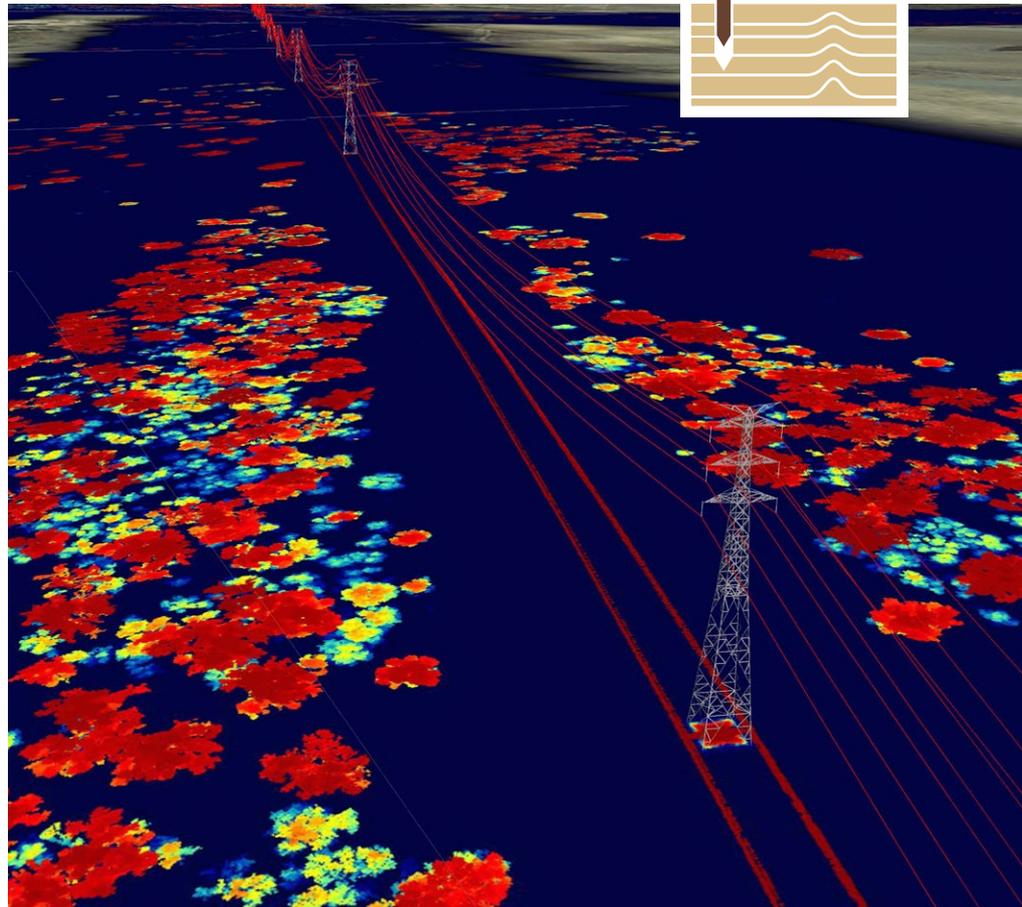
The conductor clearance is reported against a terrain model generated from the same capture snapshot. This provides the current state of both the network and surrounding environment.

Roames analysis incorporates client specific clearance defect categorisation. This results in actionable reporting provided directly to operational staff. The use of client clearance standards removes the additional cost and time required for additional analysis and interpretation after the Roames reporting has been delivered.

BENEFITS

Roames conductor ground clearance reporting provides users with multiple benefits including:

- Reduction in network incidents caused by low clearance conductors by targeting high risk locations with appropriate risk mitigation strategies. This can include deploying warning apparatus/signage or a change in conductor configuration.
- Redeployment of field conductor clearance assessments to higher priority maintenance activities (such as navigable waterways or over road and navigable terrain).
- Ongoing monitoring of network clearance compliance with subsequent imagery capture, analysis and reporting.

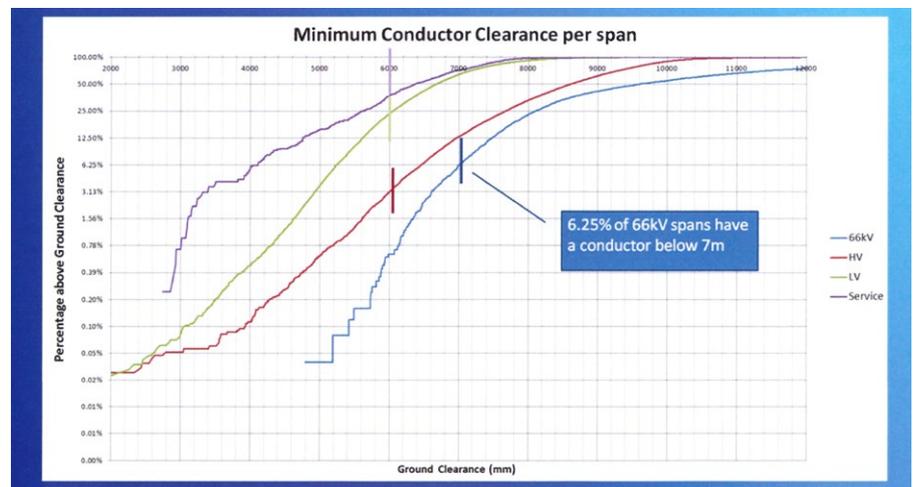


Detailed analysis against individual conductors can be performed with 3D models to provide context.

- Mitigate possible risk from construction or weather events between network commissioning and last inspection that reduce clearance.
- Reduce contact of farm machinery with long term latent low conductors.
- Eliminate excessive conductor sag due to attachment point failure or damage.



Reduce risk of excessive conductor sag.



Interactive graphs provide the smallest ground clearance for each circuit spanning between two poles.