



# FUGRO

## CONDUCTOR GROUND CLEARANCE

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

### ENHANCED ASSET MANAGEMENT

The Roames Virtual World Asset Management System creates a representation of the real world of such fidelity that it can be used as a source of asset inspection, matching and condition assessment without the need to send inspection workers into the field. Within the Asset Management Virtual World, assets are modelled with their relevant structural, mechanical, electrical and thermal characteristics, enabling a deeper understanding of the behaviour of assets and supporting many asset management activities.

### CONDUCTOR GROUND CLEARANCE

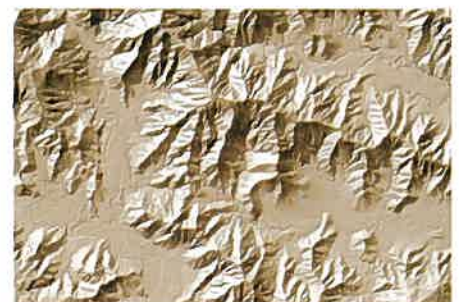
The Roames conductor ground clearance

product provides an affordable means for electrical utilities to assess and manage risk in relation to conductor proximity to 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.

The nature of energy assets is such that they create a natural boundary and it is often the case that earth is 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.*



*Laser generated terrain models are used report minimum ground clearance.*



## OUR SERVICE

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

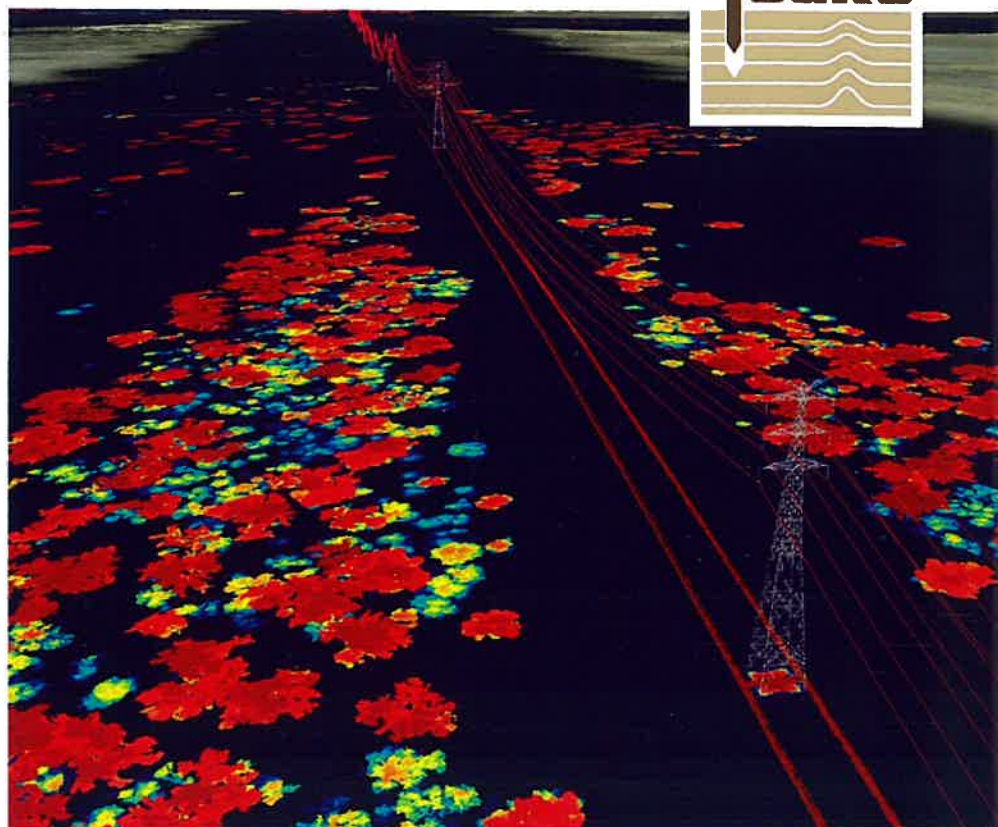
Roames can provide an initial and ongoing snapshot of the location of all of the network's conductors and report minimum ground clearance in relation to corresponding and current ground (terrain) models.

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.

## THE BENEFITS

- 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 Roames capture and analysis.



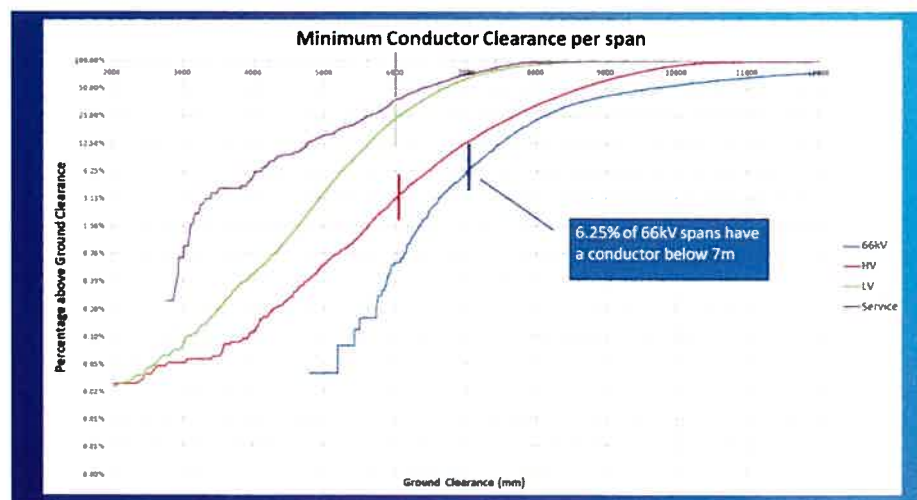
Detailed analysis can be performed against individual conductors, using 3D models to provide context in the familiar.

## KEY RISKS MITIGATED

- Local construction and weather events since network commissioning and last inspection that reduce clearance.
- Contact of farm machinery with long term latent low conductors
- 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.

## Fugro Roames

Email: [info@fugro-roames.com](mailto:info@fugro-roames.com)  
 Telephone: +61 1800 ROAMES  
 (Australia)  
 /+31 (0) 70 31 70788 (Europe)  
[www.fugro-roames.com](http://www.fugro-roames.com)