



FUGRO

ASSET CONDITION ASSESSMENT

Roames provides enhanced asset management including detailed inspection, analysis and condition assessment.

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.

ASSET CONDITION ASSESSMENT

Roames Asset Condition Assessment provides high resolution imagery capture,

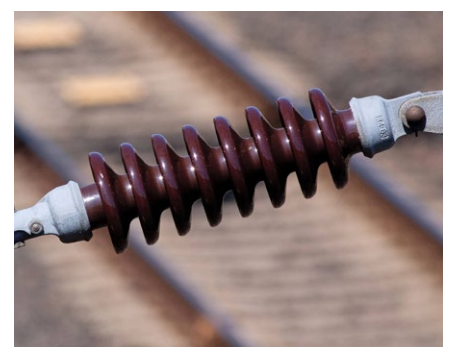
analysis and detailed condition reporting of the electrical distribution network. This enables verification of the integrity of network assets (such as poles) and related sub-components (including cross-arms and insulators) to drive maintenance prioritisation to meet safety, risk, and regulatory compliance standards.

Client specific asset maintenance standards are incorporated into the analysis, to provide seamless integration of the reporting with existing defect management processes.

Roames provides a complete solution, from managing the aerial capture program through to the expert analysis of asset condition and delivery of defect reporting and supporting visualisations.



Pole Top Detail.



Asset condition assessment of insulators.



HOW ROAMES WORKS

Using airborne sensors, high-resolution digital imagery is collected over a network's assets. The imagery provides the current state of pole structures, sub-components (including cross-arms and insulators), and attached equipment (e.i. transformers). As part of the service Roames engages experienced and qualified line inspectors for analysis and categorization of defects identified from the imagery. From the analysis, reports are prepared of assets with defects and those prioritized for maintenance actions. The analysis is tailored to specific utility requirements for defect classification and reporting.

Roames reduces the risk and significant investment required by asset managers to perform ongoing, detailed, and large-scale asset inspections that typically require:

- Planning, regulatory, and safety management aspects of managing aerial capture operations.
- Capital investment in high volume and large-scale data processing and storage.
- Operational expenses for sourcing, training and managing skilled staff to performing asset analysis.
- Alignment of Roames asset imagery against existing corporate asset records (such as pole labels).

BENEFITS OF VIRTUAL WORLD ASSET MANAGEMENT

- Improved and prioritised workforce mobilisation for maintenance and defect rectification activities.
- Potential to eliminate thousands of kilometers of ground travel per year for asset inspection.

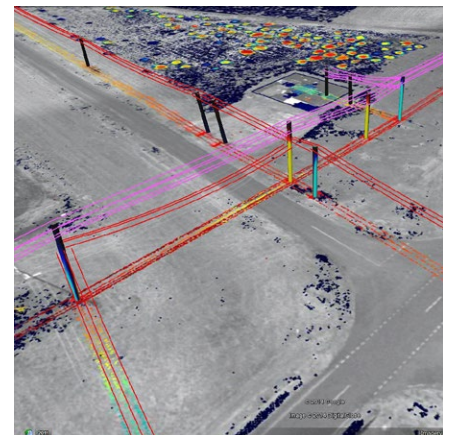


Improved and prioritised workforce mobilisation for maintenance.

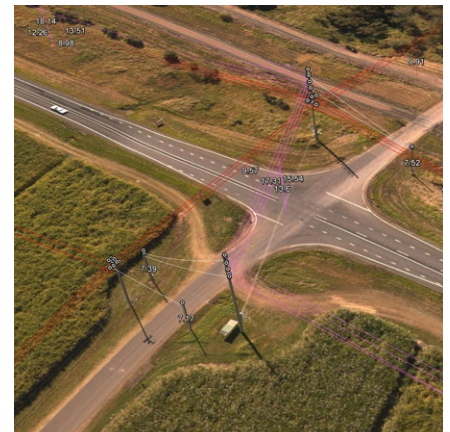
- Significantly reduce the risk exposure relating to traditional ground based inspection practices.
- Immediate action from condition assessments against client specific defect standards.

Roames services promote and enable a collaborative approach to asset management through:

- Multi-owner cost sharing of primary inspection tasks.
- Inter-owner collaboration improving alignment in critical infrastructure planning.
- Multi-agent incident response alignment allowing a single trusted view of an incident response area.



Locations of pole defects on a terrain map.



Roames virtual world asset management system.