

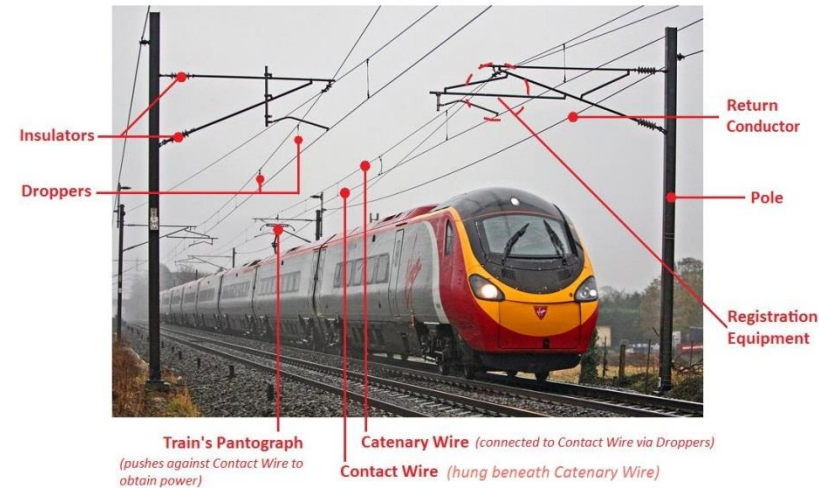
# Maintenance Modelling of Overhead Line Equipment

## Background

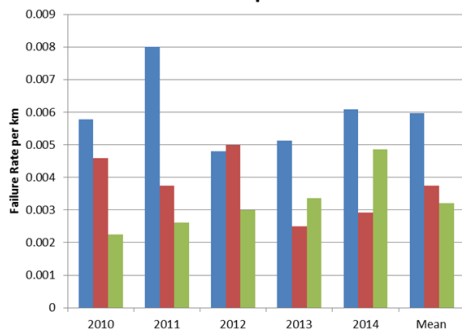
- Overhead Line Equipment (OLE) provides trains with electrical traction power.

## Objectives

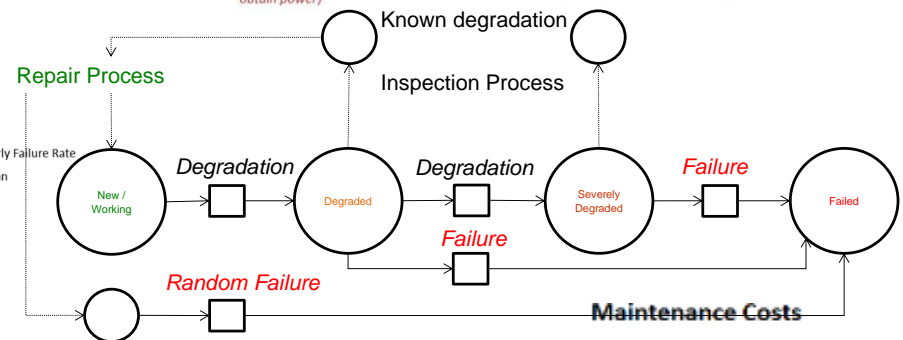
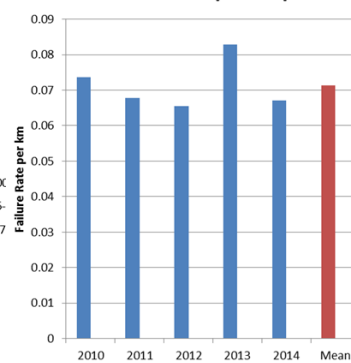
- With new electrification projects planned it is required to improve the OLE modelling capabilities to more accurately predict the whole life costs associated with different asset maintenance strategies.



Dropper Failure Rate per km for Different Line Speeds



OLE Trip Rate per km



## Methodology

- A Petri Net is used to model OLE component degradation, failure and maintenance.
- Various maintenance and failure databases have been investigated to determine component degradation and failure rates.

