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Guidance Note

Calculation and Analysis of Overhead Contact System Geometry

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Purpose

This Guidance Note describes the basic Overhead Contact System geometry calculations that are required to demonstrate compliance to the Company Standard NR/L2/ELP/21087 *Specification of Maintenance of 25kV Overhead Line Electrification Equipment*.

1 Scope

This Guidance Note covers the following aspects of Overhead Contact System geometry analysis:

- When analysis is required;
- Parameters required to perform analysis;
- Format and sign convention for Height and Stagger analysis;
- Parameters that require calculation;
- Procedure for analysis.

This Guidance Note applies to all persons responsible for undertaking analysis of Overhead Contact System Geometry on Overhead Line Equipment.

The calculations and princples contained within this document are applicable to all Overhead Contact System designs currently in use on Network Rail controlled infrastructure.

2 Reference Documentation

NR/L2/ELP/21087	Specification of Maintenance Frequency and Defect Prioritisation of 25kV Overhead Line Electrification Equipment
NR/SP/ELP/21088	General Maintenance Parameters for 25kV Overhead Line Electrification Equipment
NR/L2/CIV/072	Wind Loading of Overhead Line Equipment and Structures
EPF/OLE/004	TRAMS Height and Stagger Survey Sheet
EPF/OLE/005	TRAMS

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