Electrical Safety Delivery
Industry Engagement Update

August 2023

Improving traction power electrical safety - a priority for the industry

We should **never** have an accident on the railway.
We should **never** have an accident through contact with electricity.
To achieve this, we need to **eliminate the industry belief that accidents just happen.**

Life-changing incidents

Godinton
20 December 2018

Kensal Green
25 December 2019

Wolverton
14 May 2021

These have to be industry-changing!

Electrical Safety Delivery – key changes

1. **Single Approach to Isolations (SAI) –** embedding changes in process and ways of working associated with planning and implementing isolations of the traction power supply.

2. **Technology improvements –** to enable safer, faster isolations through remote securing, earthing and shorting, enabling safety and financial benefits.

Our culture underpins these key changes

The same principles should be applied to new electrification projects to enable further safety and productivity improvements

Why are we introducing changes to process and standards?

To increase workforce safety by:

a. Improving identification of electrical hazards, and an increased focus on removing or mitigating those that remain after isolations are in place (residual electrical hazards) when working on or near traction power systems;

b. Equipping the workforce to apply the rules by increasing their electrical knowledge and competence;

c. Increasing the emphasis on the isolation and earthing of all tracks, and requiring written justification to be provided where this is not used. The only exception is for tasks considered to be low electrical risk and covered by task risk control sheets or other suitable risk assessment;

- ✓ Improve workforce electrical safety risk
- ✓ Increase electrical competence of the workforce
- ✓ Enable Network Rail to meet regulatory commitments

SAI OLE Phased Implementation

✓ COMPLETE

Phase 0
Test Before Touch Refresh
- NR/L3/ELP/27720
- Compliance 04 Jan 2023

✓ COMPLETE

Phase 1
AP / NP Pre-Requisites & Onsite Assessments
- Report complete Dec 2022
- No action required - Industry engagement through ISLG

✓ COMPLETE

Phase 2
Terminology Updates
- NR/L3/ELP/29987 Issue 8
- Publication Sep 2022
- Assists Phase 3 changes

Available early CP7

Phase 4.5
Remote Securing
- NR/L3/ELP/SAI25 Issue 3
- Publication TBC
- Compliance TBC

Business impact underway

Phase 4
Distribution Interfaces & Supporting Changes
- NR/L3/ELP/SAI25 Issue 2
- Publication FY 23/24
- Compliance Sep 2025

Business impact underway

Phase 3 *(1.6m not in scope)*
Risk Assessment & Supporting Changes
- NR/L3/ELP/SAI25 Issue 1
- Publication Jun 2023
- Compliance Sep 2025

Later in CP7

Phase 5
Optimised Earthing & NS / RC Earthing
- NR/L3/ELP/SAI25 Issue 4
- Subject to W&W trial

Phase 6
Implementation of 25000
- NR/L3/ELP/25000 Issue 2
- Publication TBC
- Compliance TBC

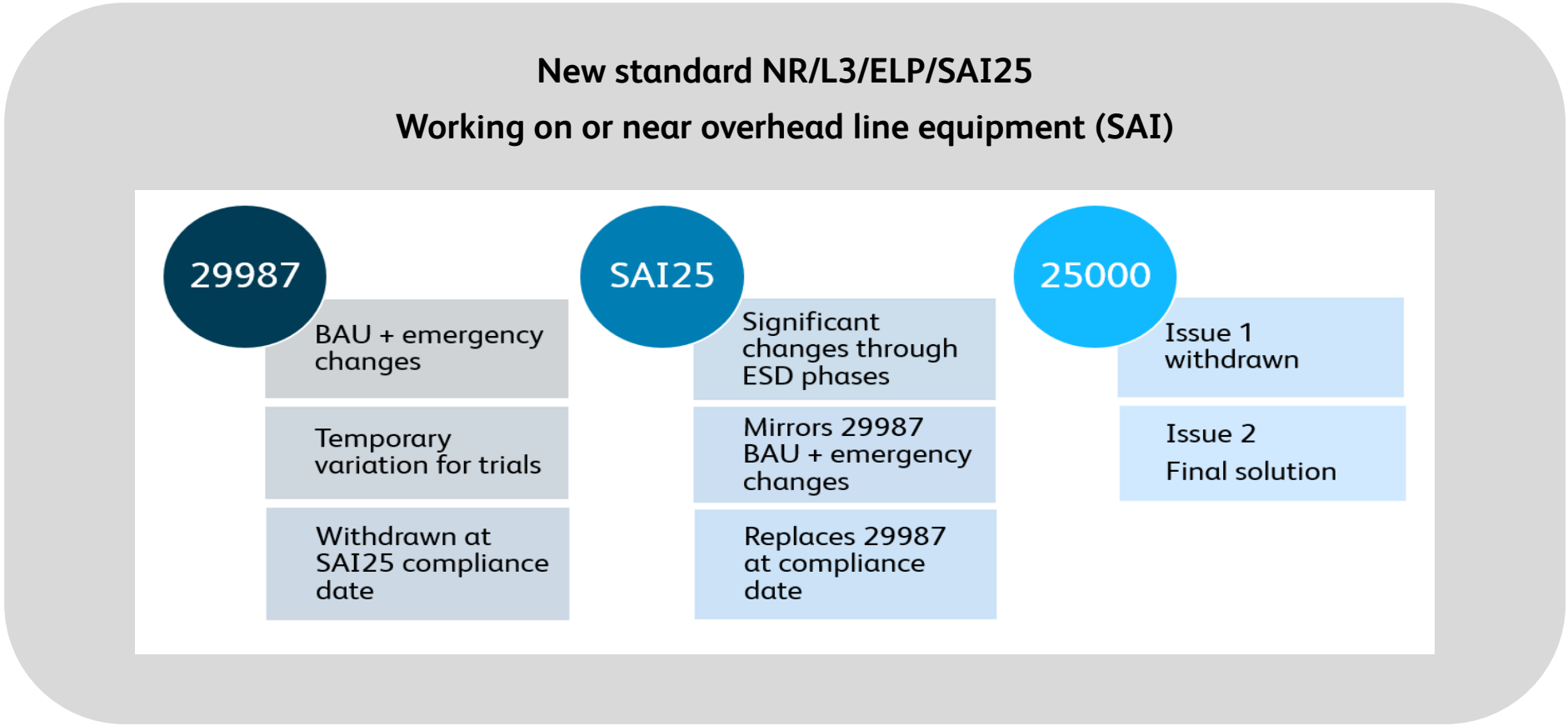
Phase 7
Intro of Core Training
- TBC

Phase 8
Post Implementation Review of 25000
- NR/L3/ELP/25000 Issue 2
- TBC

SAI OLE Standard Alignment

The visual represents the alignment of standards utilized in relation to the phased implementation of Single Approach to Isolation on OLE through its lifecycle towards the full implementation of NR/L3/ELP/25000 Issue 2.

Point to note: - NR/L3/ELP/29987 is currently at Issue 9 at August 23.



NR/L3/ELP/29987 vs. SAI25 high-level change comparisons

29987 Issue 9 – Current Practices

- Module 2 & 3 detailed separately
- States that an Electrical Risk Assessment (ERA) should be completed, but does not clearly advise how
- ERA to be carried out by a competent person
- The use of RoLE equipment against residual electrical hazards utilised in isolation planning
- Isolation type planned by distance from OLE, availability and local knowledge

SAI25 Issue 1 – New / Updated

- Module 2 & 3 combined
- Provides a clear formalised process with accountabilities against isolation categories for the ERA completion
- ERA to be completed by an Electrical Risk Assessor (ERAs) and approved by an Electrical Risk Approver (ERAp) – new competences
- Enhanced control measures suite highlighted for use along with RoLE in the ERA process and planning documentation
- Electrical Safe System of Work (ESSoW) in place to justify isolation category selections, provides detail for differing category types

Round up

- We'll be setting up these sessions every 6 weeks between now and the end of the control period
- Each session will be focused on the latest updates and/or 'hot topics'
  - 14 September – Risk assessment
  - 26 October – Process flow for complex jobs
  - 7 December
  - 18 January
  - 29 February
- Are there any hot topics you would like to share? Email ESDSAIsupport@networkrail.co.uk

Roll out

Roll out will be by region

- Deployment will happen at a local level – your usual regional contact will support you with this

Changes to how you access Network Rail standards

- The current IHS website will close on 31 August
- To register to continue to access standards, click on the following link Network Rail (ihs.com) and follow the instructions

End

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