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	NETWORK RAIL - SIGNAL ENGINEERING Intelligent Infrastructure Data logger – Test Plan
Relevant Standard: TI149	

Purpose

This Technical Instruction details the test plan for Installation and Commissioning of Intelligent Infrastructure Compliant Data Loggers.

Scope

The installation of permanent data loggers that are part of the rollout of Intelligent Infrastructure. It shall only be used where work is carried out in accordance with the process described in TI149.

II Logger Installation Test Plan

Includes: Data loggers approved for connection to the Intelligent Infrastructure system.

Excludes: All other types of data logger.

NOTE: This test plan is for the initial installation of loggers in accordance with this Technical Instruction. The 'like for like' replacement of loggers is covered by the appropriate SMTH test plan.

Before Installation Work

1. *Check* equipment is not damaged and is of the *correct* type.
2. *Check* location wiring and layout complies with the site installation overlay diagram.
3. *Check* relay contacts to be used are spare.
4. *Check* fuse / terminal positions to be used are spare.
5. *Check* identified positions for installing equipment are spare and there is sufficient room.
6. *EARTH TEST* affected signalling supplies.
7. *Check* existing wiring has *safe insulation*.
8. Where existing wiring is to be rerouted or renewed via current transducers each wire shall be hand traced to confirm that it correlates with the diagram.
9. *Check* existing wiring is *correctly labelled*.
10. *Check* the logger is isolated from the power supply.

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Installation Work

Install the following in accordance with the site installation overlay diagram:

- The logger and current transducers
- Monitoring cables and wiring
- Disconnect / reconnect / replace existing wiring to reroute through current transducers in accordance with the appropriate SMTH test plans
- Install logger antenna or FTN connection

After Installation Work

11. *Check* new equipment and wiring is correctly installed.
12. *Check* new equipment & wiring is *correctly labelled*.
13. *WIRE COUNT* and *correlate* monitoring wiring and all other affected circuits to the site installation overlay diagram and site wiring diagrams.
14. *CONTINUITY TEST* new cables and wiring with reference to site overlay diagram with affected links and fuses disconnected.
15. *Check* terminations are secure and suitably protected.
16. *Check* cables are sleeved and tidy & where required, glands are fitted and effective.
17. *Install* logger fuse and check unit powers up correctly.
18. *EARTH TEST* affected signalling supplies.
19. *Check* logger configuration is loaded and correct. (Further guidance can be found within this TI)
20. *Check* each logger input state corresponds to the correct output.
21. For each monitored asset, arrange for a *function test* of the logger to the remote monitoring point.

End

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