

ITT2B-Scenario: Depots Engineering, Plant and Equipment

Question 1

In no more than 1500 words contained in a maximum of 4 sides of A4 (pictures, diagrams etc. may be included in the sides of A4 limit) describe the E & M systems in use within the metro railway depot environment and any specialized equipment being used in these locations, and what new technology could be used for energy efficiency and what improvements could be made to present systems in order to reduce the effect on the environment.

Question 2

Plant (including on track) and equipment provides a means of mechanising manual tasks and reducing time taken to complete a task whilst improving the achieved quality of the task. The stated intention of LU to run services for 24 hours on Fridays and Saturdays from Autumn 2015 on five LU lines day means that LU has to be in a position to introduce and approve plant (including on track) and equipment swiftly and efficiently. To do so the following skill sets will be utilised:

1. assessment of requirements to be resolved before plant (including on track) and equipment can be approved;
2. interfacing with other disciplines eg rolling stock;
3. carrying-out necessary checks and inspection;
4. use of competent track engineering resource which has sufficient metro railway domain knowledge to prepare robust and timely plant (including on track) and equipment documentation for approval;
5. demonstration of risk management and analysis techniques to swiftly identify concerns which will prevent plant (including on track) and equipment being approved;
6. working knowledge of track engineering standards and assurance arrangements, particularly plant (including on track) and equipment approval;
7. understanding of industry wide track plant (including on track) and equipment engineering standards to allow LU track engineering standards/specifications to be updated and made more effective;
8. technical management (including quality) of 1 to 7 above;
9. delivery all documentation to ensure the benefits of using better track plant (including on track) and equipment are realised across whole of LU.

In no more than 1500 words contained in a maximum of 4 sides of A4 (pictures, diagrams etc. may be included in the sides of A4 limit) describe your company's capability to undertake Permanent Way Plant (including on track) and Equipment assessment and approval utilising the skill sets 1 to 9 described above.