

ITT2B-Scenario: Rolling Stock Design Engineering

Question

Provision of engineering support to TfL rolling stock engineering to enable delivery of safety and reliability improvements; this will include failure/feasibility investigations, preparation of reports/business cases and design modifications.

The delivery of a successful rolling stock design or rolling stock modification requires the following activities to take place:

1. Validation of project and stakeholder requirements
2. Liaising closely with TfL specialist rolling stock engineers and maintenance staff during the design process
3. Interfacing with other TfL engineering disciplines e.g. signals, track, power engineering and operations, etc.
4. Carrying out any necessary visits to depots to investigate failure modes, examine reports, analyse results and develop innovative, cost-effective solutions in collaboration with fleet engineers and specialist rolling stock engineers (FRACAS)
5. Provision of competent rolling stock experienced engineers in underground Metro, light rail operations (DLR and Tram) and heavy rail operations (both passenger and freight) to design, check and approve modifications
6. Apply rolling stock design standards and assurance arrangements
7. Ability to use supporting tools e.g. CAD, Software Development tools, or other tools, to support the production of the designs and drawings
8. Delivering all documentation to ensure the works can be built, installed, tested, commissioned and maintained over its design life
9. Technical support and management of 1 to 8

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 provide rolling stock engineering services that include the activities described above.