



FAO Argy Soudi, TfL  
Submitted by e-Tendering Portal

Date: 7<sup>th</sup> December 2015

Our Ref: 684/DEG/001/15

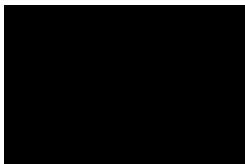
Task 53 - Signalling Design Package

Dear Sir,

Further to the issue of CFT: Task 53, Signalling Design Package, please find attached our proposal for the provision of services.

If you require any clarifications or additional information please do not hesitate to contact me.

Yours faithfully,



Engineering Director, Metrosig Ltd trading as DEG Signal

## **Experience of producing technically complex documents Design Submissions, Design Risk Assessments, Document Review Notices, interdisciplinary design reviews and workshops**

DEG Signal have extensive skills, knowledge, experience and training of LU signalling systems including that deployed on the Central line. [REDACTED] and [REDACTED] were previously the competent authority for signalling standards by undertaking the role of Signal and Control Asset Engineer in Tube Lines for a combined total of 8 years. Part of this time was spent on the introduction of the Surelock point machine to the LU infrastructure so we are very familiar with the product. At DEG Signal we have undertaken signalling design via a sub-contract to Atkins for the S7 Signalling solutions Project where we provided scheme design for the introduction of S7 stock on the sub-surface lines and the conversion of 200 33 1/3 Hz track circuits to FS2550 on the Metropolitan Line. In the 1990s we also worked with Westinghouse Signals, now Siemens, developing the standard circuits for the introduction of the current signalling on the Central Line. Furthermore, [REDACTED], went on to lead the testing for the project. We have also undertaken signalling design work direct to LU in connection with the Neasden Depot Upgrade Project producing 'red inks' to recover various depot assets.

We have a working knowledge of the LU design process, undertake risk assessments, rework following DRNs and support IDCs and workshops.

In addition to [REDACTED] and [REDACTED] who will undertake an overarching role, we have engineers to undertake the design roles required for the delivery of the 22 Style 63 to Surelock point conversions on the Central Line.

Staff for the delivery of the services:

[REDACTED] – F/W Grade Principal Consultant	- Role: Attendance at IDCs and Workshops
[REDACTED] – F/W Grade Principal Consultant	- Role: CAT S Approver
[REDACTED] – F/W Grade Principal Consultant	- Role: CAT S Approver (contingency) <sup>#</sup>
[REDACTED] - F/W Grade Senior Consultant	- Role: Checker
[REDACTED] – F/W Grade Senior Consultant	- Role: Checker
[REDACTED] – F/W Grade Consultant	- Role: Designer
Apprentices – F/W Grade Junior Consultant	- Role: Assistant Designers

<sup>#</sup> [REDACTED] is a long standing Technical Associate of DEG Signal

For further details, refer to Appendix 1 for CVs.

## **Communication and Interface Management**

At DEG Signal we work collaboratively with all stakeholders to ensure project objectives are achieved. Our senior team are known throughout the LU Signalling family as being pragmatic and professional engineers who will do all within their gift to ensure a programme is met. Our policy is to have early engagement and set expectations at an early stage such that all parties are aware of requirement to achieve the objective.

## **MS Office Suite including Excel**

At DEG Signal we use MS Office 2013 and Microstation v8i throughout the organisation.

## **Availability of Staff**

The plan is for [REDACTED], who is based in our London office, to lead the work and attend LU premises as required. The remainder of our staff are UK based in our Warminster office, where detailed designs will be produced. We have the availability to undertake the work based on a mutually agreed programme.

## **Assumptions**

- CDS will be produced by the client and therefore not included in price
- Compliance Statement will be produced client and therefore not included in price
- Correlation Packs will be produced on a per-site basis and limited to affected circuits only
- Points Heaters are already fed from a suitably isolated 110V AC
- All point ends already have monitoring
- All site correlation activities will be carried out by client
- Client to identify suitable positioning for new CTBs
- All records are available and no allowance has been made for parallel working
- Space available in the existing SERs to mount new relays and terminate new cabling to new supplementary detection CTBs
- No stagework design

## **Commercial**

For fixed price elements of the work and day rates please refer to Appendix 2.

## **Appendices**

### **Appendix 1 – Staff CVs**

Please refer to separate PDF, filename 'DEG Signal – CVs'.

### **Appendix 2 – Fixed Price Element and Day Rates**

Please refer to separate PDF, filename 'DEG Signal – Commercial Response'.