

BILL OF QUANTITIES

Item	Description	Quantity	Price per Unit/Each	TOTAL PRICE
1.0	On dash mount TCS-R kit with cradle,cables,speaker and PSU			
1.1	37 Class loco TCS	30		
1.2	34 Class loco TCS	20		
1.3	10E Class loco TCS	30		
1.4	7E Class loco TCS	25		
2.0	Driver Handsets			
2.1	37 Class loco TCS	30		
2.2	34 Class loco TCS	20		
2.3	10E Class loco TCS	30		
2.4	7E Class loco TCS	25		
3.0	Technician Handsets			
3.1	37 Class loco TCS	5		

3.2	34 Class loco TCS	5		
3.3	10E Class loco TCS	5		
3.4	7E Class loco TCS	5		
4.0	ATP of each Locomotive			
4.1	37 Class loco TCS	30		
4.2	34 Class loco TCS	20		
4.3	10E Class loco TCS	30		
4.4	7E Class loco TCS	25		
5.0	Training of the SOR (Driver training)			
5.1	Training of the School of Rail and Drivers (+- 1 Day) at Esselen Park	20 People		
6.0	Training of technicians to maintain the system (Loco portion)			
6.1	Training (+- 2days) at Esselen Park	20 People		

"PREVIEW COPY ONLY"

NB.

The tenderer must quote for a stand alone on the dash mount TCS-R type with mounting brackets, cradle, PSU, speaker and pre manufactured cable kit to operate fully in a new installation.

The on the dash TCS must not occupy more than 200D*320W*300H* space including the mounting brackets. The screen must be tilt able.

If the TCS is not approved by Transnet Freight Rail a sample unit with applicable demo software must be made available for evaluation purposes.

NO back office software TCS dispatchers or portable units are required.

The TCS must operate in the Coal line area with the existing back office software.

All the TCS's must be loaded with approved Transnet Freight Rail software before delivery.

All TCS's must comply to Specification BBC8282 version 1 & BBD4843 version 1.

Batch testing and certification by Transnet Freight Rail is required before delivery can be affected.

All GSM/GPRS SIM cards must be installed before delivery.(TFR free issue)

Any equipment not housed in the DASH Unit must be mounted in a small enclosure for easy fitment in the loco at a remote location. The housing must be light weight, strong and easily mounted. All cable connections must be accessible from the outside. The unit can be mounted horizontally or vertically directly to the Locomotive body.

All equipment cable's must be supplied and marked accordingly. The distance between the dash unit and cradle interface must be taken as 3 metres and from the Dash to PSU as 6 metre.

All antenna equipment will be supplied and installed by Transnet Freight Rail (GPS,GPRS &GSM).

The supplier is responsible to supply any special connectors required by his equipment.

The supplier is required to setup the NEW equipment to function with the existing back office software and hardware.

The supplier must quote to ATP each locomotive at above locations. Transnet Freight Rail will inform the Supplier 5 working days in advance.

The Supplier must clearly specify the delivery period, including development time.

The Supplier will test and certify his product against the Specifications in listed in the Tender Document.

The technician handsets must have a curly cord with a length of 2 metre when fully stretched. Driver handsets must fit on the existing cradles. The handset cradles must be of the re-enforced type.

SOR and Driver training must include all manuals

- A theoretical portion with the documentation.
- A practical portion with the live system.

Technical training must include all maintenance manuals for the loco portion

- A theoretical portion with documentation.
- A practical portion with a live system.

NB Prospective tenderers are to supply diagrams and drawings of their product.

A FULLY FUNCTIONAL PROTOTYPE IS TO BE SUBMITTED FOR EVALUATION AND TESTING PURPOSES.

Tenderers must fully acquaint themselves with all Transnet Freight Rail's requirements before submitting a tender.

DELIVERY PERIOD FOR ALL ITEMS TO BE STATED.....

For all technical related matters, please contact: Nick Breytenbach on 012-315-2921 or on cellular 083-286-1995.

Signature _____

Date: _____