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Certificate No. C – 00031-1

ITSO Certificate of Compliance

To: ERG Transit Systems (UK) Limited

**For: TP5000 Ticket Machine (release 10.03.100120)
and TRACS Depot Software (release 5.5.0.4)
and TRACS (.NET) Software (release 1.2.0. 2)**

This is to certify that the above product has been tested as required by ITSO for compliance against ITSO TS 1000-0 Specification Version: 2.1.3

Final Test Report: ERG/CER_001/10 dated 07 July 2008

ERG_POST_2.1.3_TP5000 dated 16 November 2009

This product supports the functions: ITSO POST and communicates within an ITSO environment as listed in Schedule A of this Certificate.

This product may only be used by ITSO Licenced Members complying with the conditions and constraints listed in Schedule B.

Signed for and on behalf of ITSO : 

Title: COMPLIANCE MANAGER

Dated : 04 DECEMBER 2009

Certificate Valid until : 03 DECEMBER 2016



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Schedule A

This POST communicates with CMD1-8.

The POST consists of an ETM and depot PC.

The IPEs supported are represented by the following table.

IPE	Create	Modify	Accept	Delete
TYP 0 – Private Application			✓	
TYP 2 – Stored Travel Rights		✓	✓	
TYP 3 - Loyalty (Type 1)		✓	✓	✓
TYP 4 – Charge to Account (value)	✓	✓	✓	✓
TYP 5 – Charge to Account (journeys)	✓	✓	✓	✓
TYP 14 – Entitlement		✓	✓	✓
TYP 16 – ITSO ID and Entitlement		✓	✓	✓
TYP 17 – Loyalty (Type 2)		✓	✓	✓
TYP 22 – Area based ticket	✓	✓	✓	✓
TYP 23 – Journey Ticket	✓	✓	✓	✓
TYP 24 - Journey Ticket (incl Reservations)	✓	✓	✓	✓
TYP 25 - Travel Voucher	✓	✓	✓	✓
TYP 26 - Tolling	✓	✓	✓	✓
TYP 27 – Period Pass (space saving)	✓	✓	✓	✓
TYP 28 – Carnet (space saving)	✓	✓	✓	✓
TYP 29 – Multi Journey Ticket (space saving)	✓	✓	✓	✓
Transient Ticket	✓		✓	



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Schedule B

List of the conditions and/or constraints applied by ITSO.

This POST meets the off-line bus ETM benchmark timing standards for CMD1, 3, 4, 6, 7, 8:

	Average over tests
CMD1	480mS
CMD2	1160mS
CMD3	540mS
CMD4	250mS
CMD5	470mS
CMD6	250mS
CMD7	520mS
CMD8	430mS