



Certificate No. C – 00163

ITSO Certificate of Compliance

To: Unicard Limited
Pear Tree Business Centre, Cobham Road,
Wimborne, Dorset BH21 7PT

For: Unicard POST Kernel
HL2CE.dll version: 5.0.1.1/HousekeepingCE.dll version: 2.1.4.62

This is to certify that the above product has been tested as required by ITSO for compliance against ITSO TS 1000 Specification Version: 2.1.4 Corrigendum 6

Final Test Report Ref: *15042016 – Unicard_POST- P_2.1.4_DR – V.1.0*

Dated: 15th April 2016

This product supports the functions: 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: Paul Stovold
Governance Manager

Dated : 13th June 2016

Certificate Valid until : 12th June 2023



Schedule A

ITSO Manufacturer ID.: 000320

The objective is to test the Unicard POST kernel latest version (Unicard POST kernel HL2CE.dll version: 5.0.1.1) with an updated reader the **CX21 (Orbit-SAM-USB HW version –V2RA)** to ITSO specification version 2.1.4 Corrigendum 6.

List of all Customer Media, IPE's and functions that were included in the testing procedure.

This POST communicates with CMD1, 2, 3, 4, 7 & 8.

The IPEs supported are represented by the following table.


IPE	Create	Modify	Accept	Delete
TYP 0 – Private IPE		N/A	N/A	
TYP 2 – Stored Travel Rights	✓	✓	✓	✓
TYP 3 – Loyalty Type 1				
TYP 4 – Charge To Account Mode 1				
TYP 5 – Charge To Account Mode 2				
TYP 14 – Entitlement	✓	✓	✓	✓
TYP 16 – ITSO ID and Entitlement	✓	✓	✓	✓
TYP 17 – Loyalty Type 2				
TYP 22 - Area based ticket (FR 1 – 2)	✓	✓	✓	✓
TYP 23 FR 1 – Journey Ticket (FR1 – 2)	✓	✓	✓	✓
TYP 24 – Journey Ticket With Reservations and Special Restrictions	✓	✓	✓	✓
TYP 25 – Travel Related Voucher				
TYP 26 – Open system tolling				
TYP 27 – Period Pass (space saving)	✓	✓	✓	✓
TYP 28 – Carnet (space saving)	✓	✓	✓	✓
TYP 29 - Multi Journey Ticket (space saving) (FR1 – FR2)	✓	✓	✓	✓
Transient Ticket Log FR 1, 2,3 & 4	✓	✓	✓	N/A

This POST supports Action Lists and Hotlists for all of the products selected, although Action to Take code 1 (creating IPEs with embodiments) is not supported.



Schedule A

Device	Versions	ITSO Version
Unicard POST with the reader cx21 (Orbit-SAM-USB HW version – V2RA)	ITSO console Test Terminal version: 2.1.4.32435 Unicard HousekeepingCE.dll version: 2.1.4.62 Unicard POST kernel HL2CE.dll version: 5.0.1.1	2.1.4

Equipment under test	Image
Unicard POST with the reader cx21 (Orbit-SAM-USB HW version – V2RA)	



Schedule B

List of the conditions and/or constraints applied by ITS0.

This unit has been tested as a software module plus standalone GemTAG cx21 reader (Orbit-SAM-USB HW version –V2RA). Use with other hardware will require the repeat of Interoperability and Benchmark Testing and the issue of a separate Certificate.

This POST meets the full ETM benchmark timing standard for CMD4 and the off-line bus ETM benchmark timing standards for CMD1, 2, 3, 7 and 8:

	Average over tests
CMD1	307mS
CMD2	547mS
CMD3	392mS
CMD4	181mS
CMD7	419mS
CMD8	455mS

Message type 0807 (generation of additional shell data) is not supported by the POST.

Action to take 1: Creating IPEs with embodiments are not supported.

Benchmark readings for CMD2: TTL & Value Record Data Group Modification are over 600ms.