

Certificate No. C – 00195

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# ITSO Certificate of Compliance

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**To: Transmach Systems Ltd**  
**Unit D1, Phoenix Industrial Estate, Rosslyn Crescent**  
**Harrow HA1 2SP**

**For: TM920 Handheld POST**  
**Software: HL2 v5.0.1.1 Housekeeping v2.1.4.62**  
**Card Reader: PCD-11-920-HW v2.0**  
**Console TT v2.1.4.32435**

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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.

**Test Reports Ref: *PO\_0005\_Transmach\_TM920 Handheld POST\_Test Report***  
***Dated: 3<sup>rd</sup> July 2019***

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 Licensed Members complying with the conditions and constraints listed in Schedule B.

**Signed for and on behalf of ITSO:** \_\_\_\_\_



**Title:** \_\_\_\_\_ **Executive Chairman** \_\_\_\_\_

**Dated:** \_\_\_\_\_ **3<sup>rd</sup> July 2019** \_\_\_\_\_

**Certificate Valid until:** \_\_\_\_\_ **2<sup>nd</sup> July 2026** \_\_\_\_\_

## Schedule A

**ITSO Manufacturer ID: 000381**

The Transmach TM920 is a handheld ticket machine to be used on most public transportation. It uses Unicard certified POST kernel software<sup>1</sup>.

**This POST is touch screen and communicates with CMD2, CMD4 and CMD7.**

**The IPE's supported are represented in the following table:**

ipe	Create	Modify	Accept	Delete
TYP 2 – Stored Travel Rights	✓	✓	✓	✓
TYP 14 – Entitlement	✓	✓	✓	✓
TYP 16 – ITSO ID and Entitlement	✓	✓	✓	✓
TYP 22 FR1 – Area Based Ticket	✓	✓	✓	✓
TYP 22 FR2 – Area Based Ticket	✓	✓	✓	✓
TYP 23 FR1 – Journey Ticket	✓	✓	✓	✓
TYP 23 FR2 – Journey Ticket	✓	✓	✓	✓
TYP 24 – Journey Ticket with Reservations and Special Restrictions	✓	✓	✓	✓
TYP 27 – Period Pass (space saving)	✓	✓	✓	✓
TYP 28 – Carney (space saving)	✓	✓	✓	✓
TYP 29 FR1 – Multi Journey Ticket (space saving)	✓	✓	✓	✓
TYP 29 FR2 – Multi Journey Ticket (space saving)	✓	✓	✓	✓
Transient Ticket Log FR1	✓	✓	✓	n/a
Transient Ticket Log FR2	✓	✓	✓	n/a
Transient Ticket Log FR3	✓	✓	✓	n/a
Transient Ticket Log FR 4	✓	✓	✓	n/a

<sup>1</sup> Certificate C-00163 Unicard POST Kernel, HL2CE.dll version: 5.0.1.1/HousekeepingCE.dll version: 2.1.4.62

## Benchmarking Results

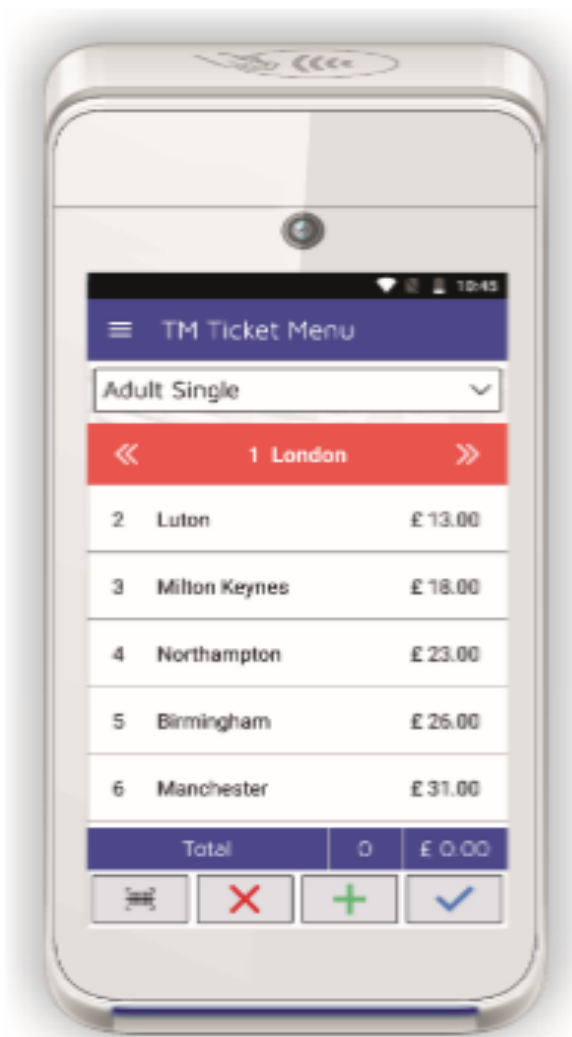
### Value Record Data Group Modification

CMD Type	Average
CMD2	531ms
CMD4	187ms
CMD7	396ms

### Transient Ticket Record Creation

CMD Type	Average
CMD2	490ms
CMD7	352ms

## Device Image



## **Schedule B**

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

**n/a**