



Certificate No. C – 00079-13.1

ITSO Certificate of Compliance

To: Cubic Transportation Systems Limited
AFC House, Honeycrock Lane, Salfords, Surrey RH1 5LA, UK

For: Cubic IDP3B Outside London Gate POST v2.5.5
(TR3 Reader version V05.4.6; Gate version F74)

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 9

Test Report Ref: *27072017 – Cubic IDP3B outside London GATE POST - P_2.1.4_DR – v.1.0*

This product supports the functions: POST. It 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: CHIEF EXECUTIVE OFFICER

Dated : 4 AUGUST 2017

Certificate Valid until : 1 FEBRUARY 2022





Schedule A

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

ITSO Manufacturer Id.: 000121

The Cubic Post v2.5.5 infrastructure is unchanged since v2.5.0. The GATE Reader is a part of the Gate, and consists of:

- TR3, to which the passenger presents the card, and which interfaces to the MM6
- MM6 that interfaces to the Gate Host, and performs all of the ITSO processing.

The changes in this POST from v. 2.5.4 (certificate C -00079-13) is:

- The **POST** is compatible with the new H3 ISAMs.

The Cubic solution architecture is tiered, with the following key components;

- The reader passes the ITSO Transactions up through the Station Computer and the Data Gathering Centre before going to the HOPS.
- Host – (the GATE) contains and manages the smartcard Reader and communicates with the Station Computer to relay transactions, operational commands, status and operating data (e.g. fare tables).
- Reader – the component of the system that interacts with the card. The reader is intelligent, such that it includes processing application logic as well as the smart card RF interface.

The Host Device provides passenger feedback (displays, opening barrier paddles etc) and controls in/out of service. All ITSO processing is performed within the Reader, not within the Host.

This **POST** communicates with **CMD 2, & 7.**

The IPEs supported are represented by the following table.

IPE	Create	Modify	Accept	Delete*
TYP 14 – Entitlement			✓	
TYP 16 – ITSO ID and Entitlement			✓	
TYP 22 – Area based ticket (FR 2)	✓		✓	✓
TYP 23 – Journey Ticket (FR 2)	✓		✓	✓
TYP 24 – Pre-Defined Specific Journey Ticket	✓		✓	✓
Transient Ticket (FR 3)			✓	
Transient Ticket (FR 4)	✓		✓	

*Deletion of products is via expiry of old products, not manual deletion.

Action & Hot list support:

- Hot Lists (Block Shell and Block IPE) are supported; and
- Action Lists:
 - create IPE (TYP 22, 23 and 24);
 - Un-hotlist shell
 - Update IPE: Add stored rides or journeys (TYP 22)
 - Update IPE : Add Stored Rides or Journeys, and amend expiry date (TYP 22)
 - Update IPE (TYP 24) : Amend JourneysRemaining and TransfersRemaining.



Schedule B

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

This POST achieved ITSO benchmark timing as follows:

	Average over tests
CMD2	497mS
CMD4	N/A*
CMD7	408mS

* The POST does not support any products used on a CMD4 and therefore benchmark times could not be tested.

Device Image:

