



Certificate No. C – 000118-1

ITSO Certificate of Compliance

To: Ecebs Limited
The Torus Building, Rankine Avenue,
Scottish Enterprise Technology Park, East Kilbride, G75 0QF

For: Ecebs Paragon RTD (Remote POST) (v3.3)

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 5

Test Report Ref: *260913 – ECEBS Remote POST -
P_2.1.4_COR5_DR – v.0.1*
dated 26 September 2013

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: GOVERNANCE MANAGER

Dated : 1 OCTOBER 2013

Certificate Valid until : 30 SEPTEMBER 2020



Schedule A

The Ecebs RTD POST is a 'Remote' POST where the Remote POST Server is hosted in a secure facility (multiple shared ISAMs can be accommodated at the Remote POST server). The Customer Media Interface is local to the customer and takes a number of forms, including, but not limited to the following:

- Java applet utilising a PC/SC card reader
- Android device with NFC capability
- EPOS terminal or other embedded device

This POST communicates with CMD2, 4 & 7.

The IPEs supported are represented by the following table.

IPE	Create	Modify	Accept	Delete
TYP 2 – Stored Travel Rights	✓		✓	✓
TYP 14 – Entitlement	✓			✓
TYP 16 – ITSO ID and Entitlement	✓			✓
TYP 22 – Area based ticket (FR1 and FR2)	✓			✓
TYP 23 – Journey Ticket (FR1 and FR2)	✓		✓	✓
TYP 24 – Journey Ticket	✓			✓
TYP 27 – Period Pass (space saving)	✓			

The device supports Hotlists and Action Lists. The following action to take codes are supported:

- 1 (Create IPE)
- 4 (Disable STR Auto-Top-Up)
- 6 (Unblock Shell)
- 8 (Disable Auto-Renew)
- 10 (Add Stored Rides or Journeys)
- 11 (Add Stored Rides or Journeys and amend expiry date)
- 12 (Add STR)
- 15 (IPE Fulfilment)
- 16 (Amend one or more value group count and reservation elements).



Schedule B

The Ecebs RTD POST is used primarily as a retail POST, where the media is updated in a public or private environment. However, the device also supports the acceptance of TYP 23 IPEs, including deduction of journeys, in which case the card transaction activity must be performed by a member of the transport operators staff, effectively running in a private environment.

The RTD POST supports both online and offline modes:

- Online – in this mode of operation the POST shall act as a server, and the HOPS shall push messages to the POST; and
- Offline – in this mode of operation the POST shall request messages from the HOPS using the message download request protocol

The POST has been tested with a standalone PC/SC reader/writer (Omnikey Cardman 5321 RFID, SCM SCL011 Contactless Desktop Reader & Writer). Other alternative PC/SC readers may work acceptably, but are not endorsed by ITS.

List of the conditions and/or constraints applied by ITS:

None