Visa
Torus Building
Rankine Avenue
SETP, East Kilbride
Glasgow
G75 0QF

1st June 2021

ITSO Customer Media Compliance Certificate

Certificate Number:	C-00212
Product/Service name:	Customer Media (CMD2), VISA - Pearl - E8-S32-B48 - Mifare 4k emulation
Compliant with:	ITSO TS 1000 Specification Version 2.1.4 Corrigendum 9

ITSO received a request submitted by Visa, for the certification of the Customer Media (CMD2) (VISA - Pearl - E8-S32-B48 - Mifare 4k emulation). As indicated in Certification Test Report (ref. VISA - Pearl - E8-S32-B48 - Mifare 4k emulation.pdf), ITSO has found reasonable evidence that the submitted product/service complies to ITSO TS 1000 Specification Version 2.1.4 Corrigendum 9.

Your product/service will be included in the certified products list, published on ITSO website.

Please note that the present Certification is subject to the following general terms and conditions along with conditions/constraints as detailed in Schedule B:

i.   The present Certification is granted on the basis of the ITSO Certification & Compliance Policy and therefore is valid as of today and will expire 7 years from issue, however If the Product/service contains a sub-assembly, the above referenced product will only be valid if the sub-assembly holds a valid ITSO certificate.

ii. If the Product version number is changed, Visa <u>must</u> notify ITSO of this fact in writing by supplying the release notes. Any change in the Product that may generate a different behaviour with respect to the ITSO TS 1000 Specification version 2.1.4 corrigendum 9 standards may be considered a major modification subject to a new evaluation in order to maintain the present Certification.

iii. The present Certification granted to Visa for the above referenced Product is non-transferable to any other vendor.

iv. When request by an ITSO Licenced Operator, the ITSO Registered Supplier must supply a copy of the Test Report.

Schedule A

This customer media uses the Format Version Code (FVC) of 02 and the file structure consist of the following:

- (C1) Mutual Authentication Algorithm Support
  Algorithm Type: 0x03
  P1 Code: 0x02
  P2 Code (EXT): 0x81
  P2 Code (INT): 0x82

- (C2) Verify Command Parameter
  P1 Code: 0x00
  P2 Code: 0x40

- (C3) Storage EF Short File ID: 0x01

- (C4) Directory Size: 0x4B

- (C5) Anti-tear Mechanism: 0x01 (Type A)

- (C7) ITSO DF Path: 0xDF 0x10

Data Element values:

- Key Strategy Code (KSC): 0x03
- Storage Sector Size (B): 0x30
- Number of Sector Supported (S): 0x20
- Number of Directories Entry (E): 0x08
- Length of Sector Chain Table: 0x13

This CMD2 supports the use of File Control Information (FCI) Proprietary Template.

Certificate Number C-00212

Customer Media (CMD2) - VISA - Pearl - E8-S32-B48 - Mifare 4k emulation

Schedule B

List of conditions and/or constraints applied by ITSO:

    i.   None

Certificate Number C-00212

Customer Media (CMD2) - VISA - Pearl - E8-S32-B48 - Mifare 4k emulation

Registered address Aurora House, Deltic Avenue, Milton Keynes, MK13 8LW

ITSO Certificate of Compliance

Supplier: **Visa**

Product/service: **Customer Media (CMD2)**
Version: **VISA - Pearl - E8-S32-B48 - Mifare 4k emulation**

This is to certify that the above product/service has been tested as required by ITSO for compliance against:

ITSO TS 1000 Specification Version: 2.1.4 Corrigendum 9

Test Report Ref: VISA - Pearl - E8-S32-B48 - Mifare 4k emulation.pdf

This product supports the functions: ITSO Customer Media 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:

Name: **Darren Marshall-Sewell**

Title: **Technology Manager**

Dated: **1st June 2021**

Certificate Valid until: **31st May 2028**