



VIX Technology UK Limited

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29th February 2024

ITSO VIX GADEPT Sub-Assembly Compliance Certificate

Certificate Number: C00232
Product/Service name: GADEPT POST Sub-Assembly, version 214.12
Compliant with: ITSO TS 1000 Specification Version 2.1.4 Corrigendum 9

Dear Craig,

ITSO received a request submitted by VIX Technology UK Limited, for the certification of the GADEPT POST Sub-Assembly (software version 214.12). As indicated in Certification Test Report (ref. Test Report POST-1694504924 – VIX GADEPT POST Sub-Assembly – New Certification), 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 based on the ITSO Certification & Compliance Policy, with its validity specified on the Certificate page. For a product or service that utilises a valid ITSO certified sub-assembly, the certificate's validity will correspond to the sub-assembly's expiry date.
- ii. If the Product version number is changed, VIX Technology UK Limited must 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 VIX Technology UK Limited for the above referenced Product is non-transferable to any other vendor.
- iv. When requested by an ITSO Licenced Operator, the ITSO Registered Supplier must supply a copy of the Test Report.

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Schedule A

The VIX GADEPT is a POST sub-assembly for the Assure range of validators and gate. The gate consists of a pair of VIX Assure Adept-based devices, which run the same application as the Assure Adept and Rugged Platform validators.

The POST establishes a connection with CAST using a proprietary VIX data format. CAST then converts this data into an XML format compatible with the HOPS system.

The CM supported by this device is shown in the following table:

CM	CMD2	CMD4	CMD7	mCMD2
Customer Media Definition	✓		✓	✓

The IPEs supported are represented in the following table:

IPE	Accept	Create	Modify	Delete*
TYP 0 – Private Application				
TYP 2 – Stored Travel Rights	✓	✓	✓	✓
TYP 3 – Loyalty (Type 1)				
TYP 4 – CTA (Mode 1)				
TYP 5 – CTA (Mode 2)				
TYP 14 – Entitlement	✓	✓	✓	✓
TYP 16 – ITSO ID & Entitlement	✓	✓	✓	✓
TYP 17 – Loyalty (Type 2)				
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 25 – Travel 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				
TYP 29 – Multi Journey Ticket (space saving) – FR2				
Transient Ticket Log FR 1	✓		n/a	n/a
Transient Ticket Log FR 2	✓		n/a	n/a
Transient Ticket Log FR 3	✓		n/a	n/a
Transient Ticket Log FR 4	✓	✓	n/a	n/a

*IPE Data Group modification via Actionlist only.

**IPE Deletion via ActionToTake 15 (0xF).

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Schedule A (cont.)

The optional functionality supported by this device is shown in the following tables:

Hot listing support			
Multi (0602)	Manually Block	Manually Unblock	Storage
✓			100,000 items

Action list support		
Single (OC03)	Multi (0603)	Storage
✓	✓	30,000 items

Action list Action to Take (ATT) support															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓

Interoperability/parameter list support/multi record receipt of multiple types				
ListFR1 Receive 0Axx	List FR1 Receive 0Bxx	List FR2 Receive 0Axx	List FR2 Receive 0Bxx	Receive multiple types 0600

Miscellaneous						
POST HOPS queries	Additional Shell Data 0807	Log 1	UD Frames Generate 0Exx	UD Frames Receive 0Exx	UD Frames Generate 0Fxx	UD Frames Receive 0Fxx

RSPS3002 Rail Supplementary Functions							
Check in	Check out	Undo Check in	Break of Journey	Inter- change	Pass Activation	Lists	Inspection
✓	✓	✓	✓	✓	✓	✓	

Schedule A (cont.)

Benchmarking Times

POST.0085 - CMD2: IPE with Transient Ticket Record Creation

Trace 1	Trace 2	Trace 3	Average
261.4ms	186.4ms	262.9ms	236.9ms

POST.0781 - CMD2: IPE with Value Record Data Group Modification

Trace 1	Trace 2	Trace 3	Average
275.2ms	281.5ms	267.4ms	274.7ms

POST.0117 – CMD7: IPE with Transient Ticket Record Creation

Trace 1	Trace 2	Trace 3	Average
216.3ms	216.3ms	213.3ms	215.3ms

POST.0783 - CMD7: IPE with Value Record Data Group Modification

Trace 1	Trace 2	Trace 3	Average
189.3ms	189.3ms	191.3ms	190.0ms

Image of VIX GADEPT Sub-Assembly Components



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Registered address 302 Witan Gate West, Milton Keynes, MK9 1EJ



Schedule B

List of conditions and/or constraints applied by ITSO:

- TransactionReversal not supported.
- POST does not support manual IPE creation, deletion and IPE Data Group modification.
- CompanionAllowed not supported.

RSPS3002: ITSO in National Rail Standard

The GADEPT POST sub-assembly was tested with RSPS3016 version 03-00 for compliance against RSPS3002 version 04-00. This accreditation is valid for a year and will expire on **25th October 2026**.



Certificate No. C00232

ITSO Certificate of Compliance

Supplier: **VIX Technology UK Limited**

Product/service: **GADEPT POST Sub-Assembly**
Version: **214.12**

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: Test Report POST-1694504924 – VIX GADEPT POST
Sub-Assembly – New Certification**

This product supports the functions: ITSO VIX GADEPT Sub-Assembly 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: **29th February 2024**

Certificate Valid until: **23rd November 2028**

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