Scheidt & Bachmann GmbH
Breite Strasse 132
41238 Mönchengladbach
Germany

21st July 2020

ITSO POST Compliance Certificate

Certificate Number: C-00074-3
Product/Service name: Platform Validator (PFV), version 1.8.4.2
Compliant with: ITSO TS 1000 Specification Version 2.1.4 Corrigendum 9

Dear Dieter,

ITSO received a request submitted by Scheidt & Bachmann GmbH, for the certification of the Platform Validator (PFV) (software version 1.8.4.2). The PFV uses CID1 in its solution and as indicated in Certification Test Report (ref. PO_0009_Scheidt & Bachmann_Card Interface Device (CID1) Test Report), 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, Scheidt & Bachmann GmbH <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 Scheidt & Bachmann GmbH 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

The CM supported is shown in the following table:

CM	CMD2	CMD4	CMD7	mCMD2
Customer Media Definition	✓	✓	✓	✓

The IPEs supported are represented in the following table:

IPE	Create	Modify	Delete	Accept
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 Ticker (space saving) – FR1	✓	✓	✓	✓
TYP 29 – Multi Journey Ticker (space saving) – FR2				
Transient Ticket Log FR 1	✓	✓	n/a	✓
Transient Ticket Log FR 2	✓	✓	n/a	✓
Transient Ticket Log FR 4	✓	✓	n/a	✓

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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**
✓			**20000kb**

Action list support		
Single (OC03)	**Multi (0603)**	**Storage**
✓	✓	**20000kb**

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**

RSPS3016 Rail Supplementary Functions							
Check in	**Check out**	**Undo Check in**	**Break of Journey**	**Inter-change**	**Pass Activation**	**Lists**	**Inspection**

Schedule A (cont.)

Benchmarking Times

Average Read Over Test – milliseconds (mS)

	PVAL
POST.0097 – Benchmark Test CMD4	82 ms
POST.0781 – Benchmark Test CMD2: IPE with Value Record Data Group Modification	332 ms
POST.0085 – Benchmark Test CMD2: IPE with Transient Ticket Record Creation	313 ms
POST.0783 – Benchmark Test CMD7: IPE with Value Record Data Group Modification	271 ms
POST.0117 – Benchmark Test CMD7: IPE with Transient Ticket Record Creation	269 ms

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Schedule B

List of conditions and/or constraints applied by ITSO:

The following are not supported by the POST:

- VGXRef=1
- Long Message with Data#=1

ITSO Certificate of Compliance

Supplier: **Scheidt & Bachmann GmbH**

Product/service: **Platform Validator (PFV)**
Version: **1.8.4.2**

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: PO_0009_Scheidt & Bachmann_Card Interface Device (CID1) Test Report

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:

Name: **Darren Marshall-Sewell**

Title: **Certification & Compliance Manager**

Dated: **21st July 2020**

Certificate Valid until: **20th July 2027**

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