

# PMpro & German fiscal solutions

Explanation of Efsta implementation in PMpro and POS+

Available in PMpro from version 10.3.146.x

Available in POS+ from version 6.5.26.0027

## Index

- 1..... Introduction 3
  - 1.2 What does this mean? ..... 3
- 2..... Glossary 4
- 3..... How to configure in PMpro 4
- 4..... How to configure in POS+ 5
- 5..... How does it work in PMPro? 6
  - 5.1 Make a payment and closing the invoice immediately: ..... 6
  - 4.2 Make a pre-payment and close the invoice later ..... 9
- 6..... How does it work in POS+ 11
- 7..... The Efsta local component (EFR) 12
  - 7.1 Local component **Status**..... 12
  - 7.2 Local component **Steuerung** ..... 13

Document control				
Security level	Confidential & Restricted			
Company	Amadeus Hospitality			
Department	R&D			
Author	Mieke Jacobs			
Reviewed by	Jan Kelderman	Date	22/11/2022	
Approved by	Jan Kelderman	Date	22/11/2022	
Version	Date	Change	Comment	By
1.0	22/11/2022	Creation		MJ
1.1	24/11/2022	Modify	Update after latest tests	MJ

R&D

Last update: 22/11/2022

Page 2 of 13

# 1. Introduction

Lack of Fiscal regulation in Germany resulted in growing number of tax-related frauds, which, after years of hesitation, forced German government to take actions.

The first fundamental step forward ensuring the immutability of cash register data was the Act on Protection against Manipulation of Digital Records (Kassensicherungsverordnung) adopted back in 2016, enters into force on January 1st, 2020. According to this law, it is mandatory that electronic record-keeping systems must be additionally equipped with a so-called “Technische Sicherheitseinrichtung” – TSE. In addition to that, all existing cash registers in operation must also be reported to the respective German tax authorities.

Technical security device – TSE is consisting of three components: a security module, a storage medium and a digital interface, with three main functions: it transfers, protects and stores cash register transactions.

The TSE must be certified, which is the responsibility of TSE manufacturers. Certification of the actual point of sale system or POS application is not necessary. The TSE certification is valid for five years. Respective certificates may be renewed after expiration.

Immediately after goods are sold or services provided the receipt must be issued to a customer, but the customer is not obliged to take the receipt. Receipts can be issued in paper form or be made available electronically via an app or mail<sup>1</sup>.

## 1.2 What does this mean?

This means that all receipts/invoices must be digitally signed by the TSE. Effectively, this means that every receipt has a digital signature in the form of a QR code.

This TSE keeps journals in addition to the financial transaction journals, both of which must be produced during certain types of tax audits, and consequentially must be archived (implied but not mandatory). Mandatory retention period for both is 10 years, plus 5 years for data involved with a tax audit, or court proceedings. On request, financial transaction journal data has to be provided to a tax auditor in a specific format called DSFinV-K (Digitale Schnittstelle der Finanzverwaltung für Kassensysteme, or digital interface of fiscal authority for cashier systems)<sup>2</sup>

---

<sup>1</sup> <https://www.vatupdate.com/2021/10/24/fiscalization-in-germany/>

<sup>2</sup> EFSTA\_usermanual\_1.22\_EN.pdf

## 2. Glossary

- TSE - “Technische Sicherheitseinrichtung”: The TSE is a so-called technical safety device. This is responsible for capturing the individual recordings in such a way that no manipulation is possible afterwards. It's like a secure container and all data that ends up in this container can no longer be changed. TSE is consisting of three components: a security module, a storage medium and a digital interface, with three main functions: it transfers, protects and stores cash register transactions. Only TSEs certified by BSI (Bundesamt für Sicherheit in der Informationstechnik) may be used (trying to use a non-certified device is illegal, and will be treated as attempted tax fraud, if found out).
- EFR: Electronic Fiscal Register. This is where the financial transactions are digitally registered and signed.

## 3. How to configure in PMpro

As soon as PMpro has been updated to the latest version (from 10.3.146), which will be done by your PMPro consultant, Efst configuration becomes available. Your PMPro consultant will link the TSE to your Amadeus PMpro system. Once installed, you can double check the payments (most likely already linked):

1. Go to Setups → Financial → Pay methods and select the correct setting in DSFinV mapping:

The screenshot shows the 'Paymethod' configuration window. Key fields include:

- Number: 1
- Description: Cash
- Code: CA
- Decimals: 2
- Payment Type / CC Range: Standard
- DSFinV mapping: Cash

## 4. How to configure in POS+

As soon as POS+ has been updated to the latest version (from 6.5.26.0027), which will be done by your PMPro consultant, Efsta configuration becomes available. Your PMPro consultant will link the TSE to your Amadeus POS+ system. Once installed, you can double check the payments (most likely already linked):

- Go to File → Setup tables → Payment → Paymethods. Edit each payment method and select the correct setting in DSFinV mapping:

The screenshot shows a 'Paymethod' configuration window with the following fields and values:

Number	1
Description	Cash
Currency	British Pound Sterling
Minimum amount	0.01
Paymethod type	Standard
Paymethod group	Cash
Print copies	1
Open cash drawer	Cash drawer 1
Surcharge article	
Sur. Amount	
Sur. Percent.	
<input checked="" type="checkbox"/> Active	
<input type="checkbox"/> Ask for description	
<input type="checkbox"/> Credit card interface	
<input type="checkbox"/> No handheld paymethod	
Front office paymethod	01 Cash
<b>DSFinV mapping</b>	<b>Cash</b>

Buttons: OK, Cancel



If you want to print the fiscal receipt separately, you can by right **clicking the payment** (clicking anywhere else won't produce a receipt) of the reopened invoice clicking on **Print** → **Reprint payment receipt**

## Receipt

**Test**  
**Germany**

**BILLNR** 2017000564  
**DATE** 09/12/2021  
**ROOM** 213  
**ARRDATE** 09/12/2021  
**DEPDATE** 10/12/2021  
**GUEST** Test

Test Hotel - BRILF, Breda

Paymethod	DESCRIPT	SUPPLEMENT	AMOUNT
Cash			-200,00
			-200,00



Ersttransaktion:2021-12-09 09:18:00

The QR code is exactly the same.

Posting and payment for a creditcard payment:

This is like the cash payment as the result of the signature can be BAR or UNBAR, depending on configuration (in this example, payment has been configured as Unbar).

**Bill** 2017000565 **Test**  
**Date** 09/12/2021 **GERMANY**  
**Room** 213  
**Arrival** 09/12/2021  
**Departure** 10/12/2021  
**Guest** Test  
**Company**

**Test Hotel - BRILF, Breda**

Date	Description	Supplement	Qty.	Price	Amount
09/12	Accommodation		1	100,00	100,00
09/12	Mastercard/Euro Card				-100,00
				Total	100,00
				Paid	-100,00
				Balance	0,00



	Gross	Vat	Net
VAT 19%	100,00	15,97	84,03

Ersttransaktion:2021-12-09 09:22:00

Information in QR code:

V0;PMS/REC;Kassenbeleg-  
V1;Beleg^100.00\_0.00\_0.00\_0.00\_0.00^100.00:Unbar;108;260;2022-11-  
17T08:23:06.000Z;2022-11-17T08:23:06.000Z;ecdsa-plain-  
SHA384;unixTime;C4M3ZNAuxFWE3VrOrh0yOk9aY8LcQfFXUxya6uPQfV5dEEYHrZUDn29dG8  
uUXq/5nFqpmxtRSpXiw2SSNtE65Izn/cO4Aw==;AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
AA  
AA  
AA==

#### 4.2 Make a pre-payment and close the invoice later

When a guest is making a payment that is not meant to settle the bill, but just an in between payment, this is considered a pre-payment according to the fiscalisation. When you post the payment, you'll get the following message:



NL: Deelbetaling uitvoeren?

EN: Make a partial payment?

When you click **Yes**: Payment receipt is printed and can be given to the guest. This is the correct procedure for a payment that is not meant to close the folio.

When you click **No**: Payment receipt is not printed, and it is assumed that this payment is for the check out of the folio. When you check out the folio, the QR code printed will include this payment (and any other payments made on check out).

To conclude, you

Whenever you make a payment, a fiscal receipt is printed. This receipt is always printed and must be given to the customer:

## Receipt

Test  
Germany

**BILLNR** R000000046  
**DATE** 09/12/2021  
**ROOM** 213  
**ARRDATE** 09/12/2021  
**DEPDATE** 10/12/2021  
**GUEST** Test

Test Hotel - BRILF, Breda

Paymethod	DESCRIPT	SUPPLEMENT	AMOUNT
Cash			-100,00
			-100,00



Ersttransaktion:2021-12-09 09:25:00

This fiscal receipt is not the invoice. When the customer eventually receives the invoice, the QR code is printed on the invoice as well:



**Bill** 2017000519  
**Date** 09/12/2021  
**Room** 114  
**Arrival** 27/11/2021  
**Departure** 09/12/2021  
**Guest** Mr A Test  
**Company**

**Mr A Test**  
**Street 1**  
**G55 London**

**CRS Confirmation** 1234321

Test Hotel - BRILF, Breda

Date	Description	Supplement	Qty.	Price	Amount		
09/12	Accommodation		1	100,00	100,00		
09/12	Cash				-100,00		
					100,00		
					-100,00		
					0,00		
				<b>Gross</b>	<b>Vat</b>	<b>Net</b>	
				VAT 20%	100,00	15,97	84,03



## 6. How does it work in POS+

When you close a check and process a payment, the QR code is added to the receipt (print screen not available as that only comes out on the POS printer):

Date & Time: 12/3/2017 16:49:25			
Bill: 2017018553			
Table: 7 (1) Guest:		Room:	
Amadeus Support			
Description	Q	Price	Total
Diet Coke 330ml	1	3.00	3.00
7up 330ml	1	3.00	3.00
Biddenden Large	1	5.25	5.25
Total:			11.25
Cash			11.25
VAT 20%	19.0%	(11.25- 9.45)	1.80
Ersttransaktion:2022-11-21 16:35:54			
Anfang: 2022-11-21T15:35:59.000Z			
Ende: 2022-11-21T15:35:59.000Z			
TransaktionsNr:10			
<u>Signaturcount:</u> 59			
<u>Algorithmus:</u> ecdsa-plain-SHA256			
<u>Signatur:</u> wVg9XjnGj5mhtkIGCMhMO/1ZI W1mvUuZQ4qjVerbPmaL1MX00I 0y7+INTHs1IGq/LY15oMD+3CH cj7+j8cYiDA==			
<u>Zeitformat:</u> unixTime			
<u>Seriennummer:</u> b99b2974e4584938b2155d670 a6afe8d5ebadd6e0d88607373 15c2fba7de15c8			
<u>Publickey</u> BGHI35ohD/7OTil+85DCoiLi+ GuoLX4LUB+YWj1slarflRCrtD J0d7Y2Ckcd0BChMKtToFexLCL g1ighhdRkvUY=			
			

## 7. The Efsta local component (EFR)

The local component of Efsta allows you to check the settings and export the fiscal files.

You can open the local component on any internet browser on a pc in the network.

1. Open an internet browser
2. Enter the following URL in the address:
  - a. On the server: <http://localhost:5618>
  - b. On a workstation: <http://10.31.1.6:5618> (where the number in green is the ip address of the server).

Please do not make any changes in the settings! Any changes might disable your connection the TSE.

### 7.1 Local component Status

Once the local component is opened, the first screen you see is the status:

Mandant: **def** **Status** Steuerung Basisdaten Profil Journal Lizenz Badge: 1111111111111111 EFR: 0000003QTM

State	
version	EFR.zip 2.2.5 <span style="float: right;">program version (<a href="#">change log</a>)</span>
uptime	22:50:03 <span style="float: right;">uptime of application</span>
D	2022-11-22 11:43:06+01:00 <span style="float: right;">local time (Online: synchronized)</span>
Recorder	<b>online</b> <span style="float: right;">connection state cloud</span>
RecSent	62 <span style="float: right;">records sent / in queue</span>

**Log** [download \\*.log files](#)

```
listen
HttpServer GET /control/exportDSFinVK?open=true&RN=BRILA_POS&from=&till=&iid=1669103655879&button=exportDSFinVK
IO init C:/ProgramData/EFR/rn/BRILA_POS/dat/jouindex.dat
control download OK
HttpServer GET /control/exportDSFinVK?open=true&RN=BRILA_POS&from=&till=&iid=1669103655879&button=exportDSFinVK
control download OK
HttpServer GET /viewer?RN=BRILA_POS
HttpServer GET /control?RN=BRILA_POS
HttpServer GET /base?RN=BRILA_POS
HttpServer GET /cfg?RN=BRILA_POS
HttpServer GET /profile?RN=BRILA_POS
HttpServer GET /finder?RN=BRILA_POS
HttpServer GET /lic?RN=BRILA_POS
HttpServer GET /finder?RN=BRILA_POS
HttpServer GET /profile?RN=BRILA_POS
HttpServer GET /control?RN=BRILA_POS
HttpServer GET /control?RN=def
HttpServer GET /viewer?RN=def
HttpServer GET /profile?RN=def
HttpServer GET /profile?RN=BRILA_PMS
HttpServer GET /profile?RN=def
```

The status should indicate 'Online' with a green color.

## 7.2 Local component **Steuerung**

In the **Steuerung** tab, you can export the fiscal files which are needed by the tax auditor here.

If you have both POS+ and PMpro, first select the correct system by clicking on **Mandant**:

Then open the tab **Steuerung**.

1. **TSE** - Export.tar: Transactions since last night audit, directly from TSE hardware (according to [Technical Guideline BSI TR-03153](#))
2. **Backup** - Tse\_backup.zip: TSE backup data from journal
3. **GoBd** - GOBD.zip: legacy data format according to Bundes Finanz ministerium: [GoBD](#)
4. **DSFinV-K** – Export.zip: Export according to: [BZSt](#): Digital interface of the financial administration for cash registers from the local cash register transaction journal
5. **Journal** – jou.zip: Full local JSON journal export

By clicking on the buttons, the exports are immediately added to your downloads folder:

All other tabs are managed by your PMpro consultant.