

## Appendices

## A Types of Terminal / Owner IDs / Personalizer IDs

## 1 – 3 byte representation

The 1 - 3 byte representation of terminal types is used by terminals using the 2-TDES security concept and by terminals without cryptography which don't use initializations to transfer the terminal type, but rather call user data or assigned ports TCP/IP ports (see chapter 3.1).

Terminals using the AES security concept and terminals without cryptography using initializations to transfer the terminal type tell their terminal type in BMP 60 of initializations (see chapter 8.1.1) using the 1 byte representation of terminal types (see next table). If these terminals work with call user data they shall there use the 1 - 3 byte representation general terminal types ZZA (with cryptography) or ZZa (without cryptography). For TCP/IP terminals the NSP will accordingly assign port numbers to these general terminal types.

In the following table the 1 - 3 byte terminal type representation is listed in the column "TS-Type". The abbreviations (column "Abbr.") may be used at NSP site to identify the respective terminal types.

ZVT-H will issue new terminal types upon request.

The following types of terminals are currently defined.

TS-Type	Abbr.	Company Name	Remark		
"	XML	FEP internal application			
!	POZ	FEP internal application			
\$	GIX	FEP internal application			
+	SIS	FEP internal application			
%	IFS	IFSF	Proprietary interface		
0	GVT	VÖB	mod. GICC interface for distributed terminal		
5	GAO	Giesecke & Devrient	ZVT with cryptography		
6	FOR	Fortronic	ZVT with cryptography		
7	GIC		GICC-incoming interface for connecting other net-		
			work operators		
9	TRI	Trintech	ZVT with cryptography		
	twt	priv.	Proprietary interface		
A	DOS	DOS	ZVT with cryptography		
а	rea	REA	ZVT with cryptography		
В	SNI	Siemens / Nixdorf	ZVT with cryptography		
b	REA	REA	ZVT with cryptography		
C/c	ICP / icp	ICP	ZVT with / without cryptography		
d	Ats	Actosoft	Cashier without cryptography		
е	ets	Electronic Ticketing St.	ZVT without cryptography		
F/f	KTW / ktw	KTW	ZVT with / without cryptography		
G/g	SBZ / sbz	Scheidt & Bachmann	ZVT with / without cryptography		
	ICL	ICL Data (NOKIA)	ZVT with cryptography		
i	api	priv.	ZVT without cryptography		
J/j	ELM / elm	ELME GmbH	LME GmbH ZVT with / without cryptography		



TS-Type	Abbr.	Company Name	Remark		
K/k	KRO / kro	VeriFone	ZVT with / without cryptography		
		(previously Hypercom, for-			
		merly Krone)			
L/I	LOW / low	Logware	ZVT with / without cryptography		
M/m	ING / ing	Ingenico (EPOS)	ZVT with / without cryptography		
N	NAB	FEP internal application			
n	sta	priv.	ZVT without cryptography		
0	OLS	Olivetti / Sixcomm	ZVT with cryptography		
0	sbg	Schlumberger	ZVT without cryptography		
Р/р	PRD / prd	Prodata	ZV1 with / without cryptography		
Q	IFI		IFSF with cryptography		
q D ( r	mti		ZVT without cryptography		
K/r	CAR / car	C.A.R.U.S	2 V I with / without cryptography		
5	SPG	FEP Internal application			
т	tri	Triptech	ZVT without cryptography		
t	mak	misc manufacturers	MAKATEI		
U/u	HUW / huw	Höft und Wessel	ZVT with / without cryptography		
<u>V/v</u>	VER	VeriFone (old)	ZVT with / without cryptography		
W/w	ICV / icv	ICVerify	ZVT with / without cryptography		
X	ips	equensWorldline SE:	ZVT without cryptography		
		Poseidon IPS			
Х	GKT	misc. manufacturers	GeldKarte terminal		
Y	TSY	Telesincro	ZVT with cryptography		
Z	TSZ	FEP internal application	Link to the next character		
Z	gdz	DZ GmbH	ZVT without cryptography		
Z0	INI	Ingenico International	ZVT with cryptography, without german DK admis-		
71	tla	Tologo	SION		
Z1 72		Telego	ZVT with or prography		
72			$n \ge v + with cryptography$		
74		Clover POS-Solution	ZVT with cryptography		
$\frac{24}{74}$		Poseidon Site Agent	ZV I WITH Cryptography ZVT with (without cryptography		
2772a 7h	Bhs	Poseidon BBS	ZVT without cryptography		
 	APA	Misc manufacturers			
ZC / Zc	POC / poc	Point / CKD	ZVT with / without cryptography		
ZD / Zd	DSK / dsk	Desko	ZVT with / without cryptography		
ZE / Ze	ESY / esv	Easycash GmbH ZVT with / without cryptography			
ZF / Zf	PAS / pas	Elara Software GmbH	ZVT with / without cryptography		
		(PayStream)			
ZG	MCX	MCX Systems	ZVT with cryptography		
Zg	pam	Computop (Paymaster)	ZVT without cryptography		
ZH / Zh	HUT / hut	Huth Software Systeme	ZVT with / without cryptography		
ZI/Zi	DIO/dio	Dione, England	ZVT with / without cryptography		
ZJ / Zj	TEC / tec	TECs	ZVT with / without cryptography		
ZK/Zk	SAG/sag	Sagem, Denmark	ZVT with / without cryptography		
ZL / ZI	ITZ / Itz	Loading terminal ZKA	ZKA with / without cryptography		
ZM / Zm	SMP / smp	Smart Approach	ZVT with / without cryptography		
ZN / Zn	BAS / bas	Banksys	ZVT with / without cryptography		
ZO / Zo	PPA / ppa	POS Partner	ZVI with / without cryptography		
ZP / Zp	HYP / hyp	Hypercom	ZVT with / without cryptography		
ZQ / Zq	PAY / pay	PayTec	ZVI with / without cryptography		



TS-Type	Abbr.	Company Name	Remark		
ZR / Zr	FDT / fdt	First Data	ZVT with / without cryptography		
ZS / Zs	POB / pob	Point / Banksys	ZVT with / without cryptography		
ZT / Zt	OSN / osn	Terminals without serial no.	ZVT with / without cryptography		
ZU / Zu	AUS / aus	Austrosoft	ZVT with / without cryptography		
ZV / Zv	VPW / vpw	ValuePos / WaySystems	ZVT with / without cryptography		
ZW	WAY	Wayne-Dresser	ZVT with cryptography		
Zw	ogo	Ogone (Internet SW)	ZVT without cryptography		
ZX / Zx	OXA / oxa	Poseidon OXA	OXA-Interface with / without cryptography		
ZY / Zy	TAS / tas	Poseidon TAS	TAS-Interface with / without cryptography		
ZZ	internal		Pointer to the next character		
ZZA	AES		General terminal type: ZVT with AES cryptography		
ZZa	iok		General terminal type: ZVT withount cryptography,		
			with initialization		
ZZC /	CTP / ctp		General terminal type for specific TLV incoming		
ZZc			protocol with / without cryptography		
ZZB	BAE	Banksys	EPAS XML with cryptography		
ZZH	HYE	Hypercom	EPAS XML with cryptography		
ZZI	INE	Ingenico	EPAS XML with cryptography		
ZZT	<u>TSV</u>	BP	ZVT with cryptography, terminal server		
			mode (BP specific)		
ZZw	wck	Migros	Checkout for whitelist server requests, NON-ZVT without cryptography		



## 1 byte representation

The 1 byte representation of terminal types is used by terminals using the AES security concept and by terminals without cryptography using initializations to transfer the terminal type. These terminals tell their terminal type in BMP 60 of initialization related transactions (see chapter 8.1.1).

Simultaneously this 1 byte representation (column "ID") is used as BDK Owner ID and Personalizer ID (see chapter 12.1.2). Therefore the following table contains IDs for Terminal Manufacturers (marked in column "TM") and Network Service Providers (column "NSP").

Entries for TMs contain an abbreviation (column "Abbr.") which may be used at NSP site to identify the respective terminal types (retrieved from the 1 - 3 byte representation table). In column "crypt." it is marked for TM entries whether the respective ID is assigned to terminals with ('+') or without ('-') cryptography. The respective ID has to be sent in BMP 60 of initialization related transactions of terminals with or without cryptography, respectively.

ZVT-H will issue new terminal type IDs / Owner IDs / Personalizer IDs upon request.

The following terminal type IDs / Owner IDs / Personalizer IDs are currently defined: (More IDs are added upon request)

ID	Abbr.	ТМ	NSP	Crypt.	Company Name	Remark
<u>0x00</u>	<u>T00</u>	X	X			Reserved for test purposes
<u>0x01</u>	<u>AES</u>					Reserved for internal purposes
<u>0x23</u>	<u>(#)</u>					Reserved for internal purposes
<u>0x4A</u>	<u>ELM</u>	X		±	CCV Group B.V.	
<u>0x4B</u>	<u>KRO</u>	X		<u>+</u>	Verifone GmbH	
<u>0x4D</u>	<u>ING</u>	X		<u>+</u>	Ingenico GmbH	
<u>0x81</u>	<u>iok</u>					Reserved for internal purposes
0xA0			Х		Ingenico Payment Services GmbH	
<u>0xA1</u>			X	<u>+</u>	epay – transact	
<u>0xA2</u>			X	<u>+</u>	REWE-Informations-Systeme GmbH	
0xB3	FEI	х		+	FEIG ELECTRONIC GmbH	
0xCE	BAS	х		+	Worldline Germany GmbH (formerly Banksys)	
0xEE	bas	x		_	Worldline Germany GmbH (formerly Banksys)	
<u>0xFF</u>	<u>TFF</u>	X	X			Reserved for test purposes