



BankAxept EMV Certificate Authority Public Keys

Version: 1.0
Last updated: 01.07.2022

TLP:WHITE

Bits AS			
Postaddress: Postboks 2644 0205 OSLO	Visiting address: Hansteensgt 2 OSLO	Phone: +47 23 28 45 10 E-mail: post@bits.no	Org.nr.: NO 971285613

1 Introduction

For EMV offline data authentication, BankAxept provides an EMV CA service which issue Issuer Public Key (IPK) certificates. IPK are used by chip personalizer to issue ICC certificates, which are used during payments for dynamic data authentication (DDA/CDA) and offline PIN encipherment. The terminal service providers use the CA Public Keys to verify that IPK certificates have been issued by the BankAxept CA. The EMV CA for BankAxept is managed Bits AS.

This document contains the Certificate Authority Public Keys for BankAxept and how the keys shall be used in terminals.

1.1 Audience

The audience of this document is primarily terminal service providers.

1.2 Document History

Version	Status	Date	Editor
1.0	First test key published	01.07.2022	E. Bergersen

1.3 Change Log

Version	Changes from previous version
1.0	<ul style="list-style-type: none">Index '81' for test published

1.4 Latest version of the document

Latest version of this document may be obtained on: <https://www.bits.no/bankaxept-emv-ca/>

1.5 Traffic Light Protocol (TLP)

Bits AS uses TLP in accordance with "FIRST – TLP Standard Definitions and Usage Guidance". (<https://www.first.org/tlp>) og (<http://www.bits.no/tlp>)



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2 BankAxept Certificate Authority Public Keys

All Certification Authority Public Keys will have December 31 as their planned expiration date. Terminal Service Providers will have a six-month grace period to install new keys, update expiry date and revoke expired keys.

The terminal shall only use BankAxept CA Public Keys distributed by Bits.

The terminal shall have all active BankAxept CA Public keys loaded into the terminals.

The terminal shall only use active BankAxept CA Public keys

The terminal shall remove expired keys within six-months after expiry.

The terminal must be able to store six CA Public keys for BankAxept.

The length of CA Public keys are 1984-bits.

3 Format

Field Name	Format	Value Description
key_length	N	Length of CA public key modulus (number of bits) Key length is 1984 bits
expiry_date	AN	YYYY-MM-DD
rid	AN	RID for BankAxept is 'D578000002'
index	N	CA public key index Index '81' to '98' are assigned for test. Index '99' is assigned to UL Brand Test Tool.
hash_algo	N	Identify hash algorithm, '01' is SHA-1
key_algo	N	Identify public key algorithm, '01' is RSA
modulus	H	CA public key modulus
exponent	H	CA public key exponent
key_hash	H	CA public key hash

4 Production Public Keys

The active CA Public keys for BankAxept for production environment is listed below:

Index	Length	Date generated	Active from	Expiry date

4.1 Index 1

Not generated yet.

5 Test Public Keys

The active CA Public keys for BankAxept for test environment is listed below:

Index	Length	Date generated	Active from	Expiry date
81	1984	2022-06-13	2022-07-01	2032-12-31

5.1 Index '81'

```
{
  "payment_system": "BankAxept",
  "rid": "D578000002",
  "key_length": "1984",
  "expiry_date": "2032-12-31",
  "index": "81",
  "hash_algo": "01",
  "key_algo": "01",
  "modulus": "A94B15E5D7A5A9DF1A81F96C564AA0FDD2F2665213E1DA433EC8AB0DA363BC524E4DA
F552BF29A66C062693DB855870D4D88C1E44A83B1ADD6079A7223CD24920E9382424E9F5577B5D3D
C7B40D4273589CC4337346310A6A6917150E5A626F7066368410354361AC121491A1CE15F38955E4
40E2F56884DB3DE29622291EF147A1A0ED27B2F051584E8ED95EBBF3B02070E1A506BBCA5A6ED198
CFC090956AAF11D4215E41BC8596AF010A03EF559CABD55D77F19770505C4B027DD5926E5ECB3829
3DD227D8937CADBC4F790FAF0D8E41CA217DAC44307CCC17ECA8A6BA3F4EE513AA12E39A1DC1EB5E
BFA1806C4A4368B786F77026723",
  "exponent": "03",
  "key_hash": "E643B97A0877E328FD16AB868564D80CC6BB9867"
}
```