Transportation Security Administration

NOTE: This Technical Advisory describes an issue which may impact your product.

TWIC Technical Advisory TA-2014-TWIC002-V1.0

TWIC CARD CHANGE IN ISSUANCE PLATFORM

Introduction

This Technical Advisory details a change in the issuance platform used to issue cards for the Transportation Worker Identification Credential (TWIC) program.

Background and Definition

This Technical Advisory advises that TWIC will soon begin issuing TWIC cards using a new card production process. The process change impacts data on the TWIC card and its appearance.

Problem Statement

The new issuance process will employ a new Certificate Authority (CA) to populate keys, certificates, and sign data objects. (A separate Technical Advisory detailing the new CA service provider has been issued by TWIC). A few areas on the front and back of the card are printed in a manner different from the current Version 2.0 TWIC card.

Description of New or Unique Process

TWIC cards issued under this new card production process shall be identified by the TWIC version number “TWIC v2.3”.

The data model and card application behavior remains unchanged. The card applet version remains unchanged. For Version 2.3 the card supports new Answer To Reset (ATR) values. Some data values have changed as detailed below.

BACK OF CARD ->

The TWIC versioning “TWIC v2.3 mm.YY” has been moved to above the magnetic stripe. The smaller 1D barcode above the magnetic stripe will no longer appear and instead will be replaced by a card stock identifier sequence. The label “ID One PIV (1107253)” has been added and shall appear above the magnetic stripe. The printing below the larger 1D barcode now includes the System Code of the Card Holder Unique ID (CHUID) immediately following the Agency code “7099”. Example: **70991234**.

FRONT OF CARD ->

The expiration date of the TWIC on the front of the card will now appear in a YEAR MONTH DAY format which is reverse of the Version 2.0 TWIC card. Example: **2016APR22**.

Use of New or Unique Process

The unique process described in this Technical Advisory should be considered as soon as practical as TWIC cards will begin issuance under this new card production process in 2014.

Design Features of New or Unique Process

What is unique about this process is the changes to surface printing of the TWIC card and incorporation of a new CA service provider which impacts data stored on the TWIC card.

Comments

Questions on this Technical Advisory should be addressed to the TSA TWIC PMO TWIC Reader Hardware and Card Application Specification Project Editor, Gerald.Smith@associates.dhs.gov .

Subject References

(Clarified) TWIC Reader Hardware and Card Application Specification, Version 1.1 Amendment 1, May 2012.

Keywords

TWIC
Version
New Issuance Platform

Standard Details

Refer to Section 2 *References* in the Subject Reference document.

Specifications or Special Provision

(Clarified) TWIC Reader Hardware and Card Application Specification, Version 1.1 Amendment 1, May 2012.

Supersedes Dates

There is no previous Technical Advisory issued that addresses this unique process.

This Technical Advisory shall be active until further notice.

Obtain more Information

More technical information on TWIC can be obtained at:

http://www.tsa.gov/stakeholders/reader-qualified-technology-list-qtl

END

VERSION 2.3 CHANGES FROM EARLIER VERSIONS OF TWIC

The Version 2.3 card shall support a COLD Answer To Reset (ATR) and a WARM ATR. These values are distinct from earlier card versions of TWIC.

Specifically the ATR values are:

ATR Type	Value
COLD	**3BDF960081B1FE451F83 80 73 CC 91 CB F9 A00000030800001000 79**
WARM	**3BDF970081B1FE451F83 80 73 CC 91 CB F9 A00000030800001000 78**

Note the WARM ATR supports a higher negotiable transfer speed from the COLD ATR. Specifically:

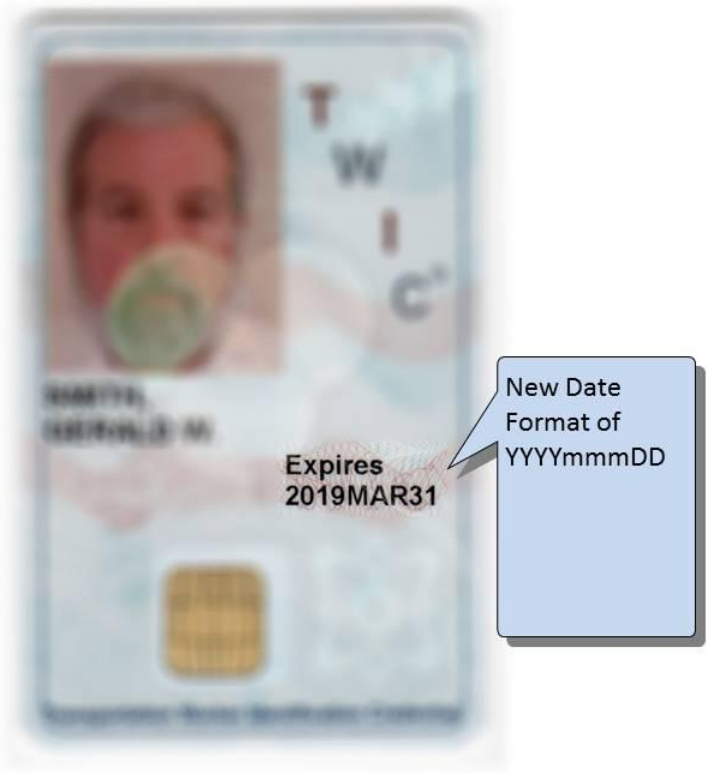
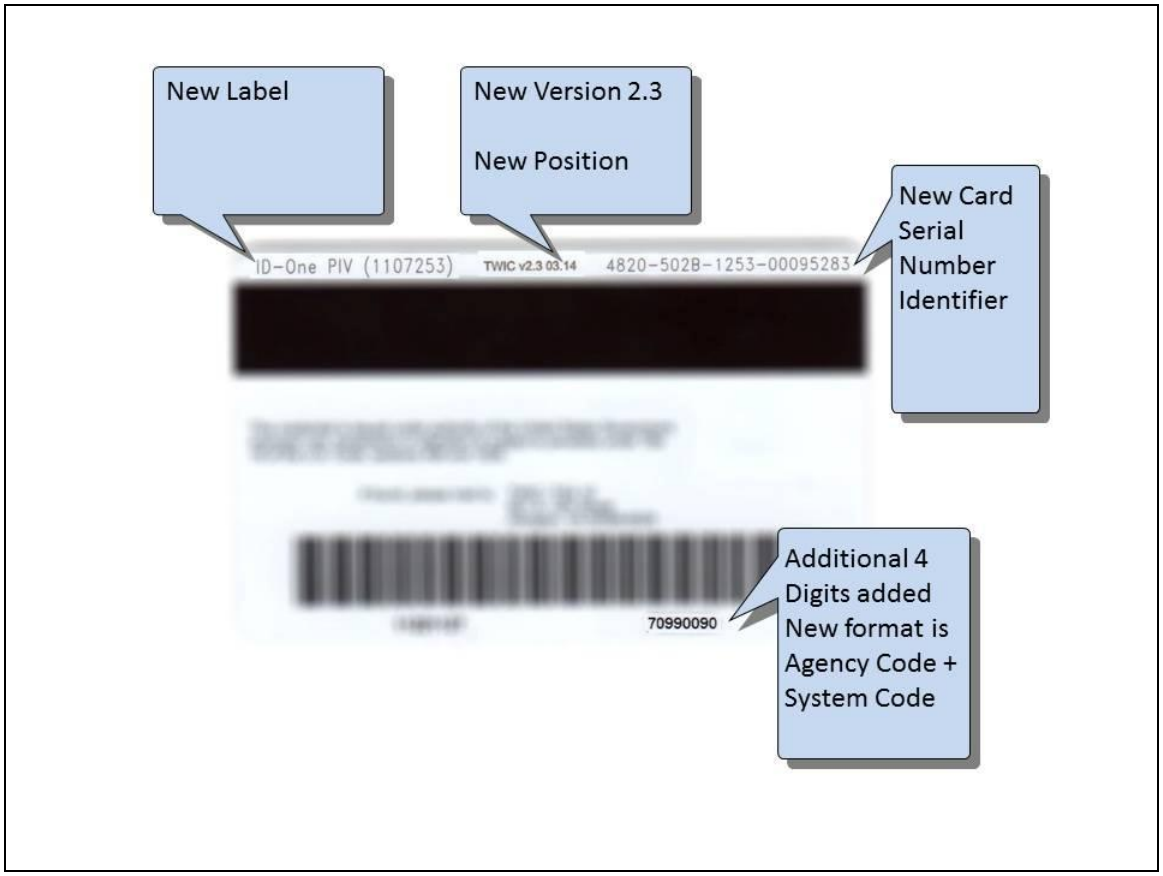
For COLD ATR -> **250000 bits/s at 4.00 MHz**
For WARM ATR -> **500000 bits/s at 4.00 MHz**

The Response to SELECT contains for both the TWIC and PIV applications an additional (concatenated) tag following tag ‘61’. This tag, ‘7F 66’ is defined in ISO/IEC 24727 as a Service Description. For TWIC this description relates to the Extended Length Information Data Object (DO). The format of this tag is identical for both PIV and TWIC card applications. The current data model does not use this tag at present; only tag ‘61’ of the TWIC card application Response to SELECT is required to be processed in accordance with the TWIC Reader Hardware and Card Application Specification.

Tag	*Length*	Value			Description
		Extended Length Information DO			
		Tag	*Length*	Value	
‘7F 66’	*‘08’*	**‘02’**	*‘02’*	‘8000’	Maximum number of bytes in a Command APDU (positive number)
		‘02’	*‘02’*	‘8000’	Maximum number of bytes in a Response APDU (positive number)

The signed CHUID for the PIV card application no longer supports (deprecated) tags ‘31’, ‘32’, and ‘33’. In earlier TWIC card versions these tags each had a zero length. The TWIC signed CHUID is unchanged.

FRONT OF CARD DIFFERENCE illustration



BACK OF CARD DIFFERENCES illustration