

NPCI/NFS/OC No 69/2012-13

August 07, 2012

To

All Member Banks of National Financial Switch (NFS)

Dear Sir/Madam,

**Standards for correct identification of ATM location**

Please refer to our earlier letter dated 12<sup>th</sup> Jan, 2012 with reference no NPCI/2011-12/NFS/2102, wherein we have stated that the ATM Details in field Data Element(DE) 43 has to be populated by sending the full ATM location in this Data element. However it has been observed as follows as regards to contents in field DE 43

1. The Country Code & the City is not populated by some of the member banks.
2. Even if the city name is populated, the same (City name) is populated differently by different Banks. For instance, Mumbai is populated as MUM, BOMBAY, and GREATER BOMBAY.
3. Many banks are providing full name of their bank to fill the entire 40 characters, though a separate field "ACQUIRER ID" (DE 32) is already available for the purpose and on the basis of which bank name can also be determined.
4. Many banks are providing random numbers in this field without the location.

It has therefore, been decided in the NFS Steering committee meeting held on 16/05/2012 NPCI would propose and lay down standards for correct identification of ATM location, proper generation of MIS.

Discussions were held with major switch vendors to evaluate the feasibility of standardisation on DE 41, DE 43, and sending Pin code in online message. These message specifications were finalized in NFS technical group meeting held on 11<sup>th</sup> July, 2012.

NPCI is therefore proposing as follows:

1. DE 43 should include as follows:

Position	Length	Field Name	Description
01 – 23	23	Terminal Address	ATM Address along with Taluka name as allocated by General Post Office (GPO).
24 – 36	13	Terminal city	District Name should be populated as allocated by GPO.
37 – 38	2	Terminal state	State code should be populated as per <u>Annexure I</u> .
39 – 40	2	Terminal country	Country code should be provided as per ISO standards. 'IN' for domestic transactions.

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2. Pin code needs to be populated in DE- 61 along with some other information as detailed in Annexure-II.

It is also observed that some Banks have more than 8 digits terminal id. The Banks that have more than 8 digit terminal ids should populate it in DE42, in addition to DE41. In other words terminal ID would be populated in both DE 41 and DE 42 (DE 41 length is 8 characters and DE 42 length is 15 characters at NPCI end).

The sample data for DE-43 and DE-61 of five ATM locations is given in Annexure-III.

The standardization of the above mentioned Data Elements would be useful in getting complete accurate data which in turn would be helpful for better Fraud management.

Depending on the quality of data sent, for a particular member Bank, NPCI will apply compliance (after intimating and getting approval from member Bank), which will decline the transactions in case Pin code, State code and Country code are not populated with valid values.

After the changes are carried out at your end, the following officials can be contacted to carry out UAT before moving the changes on production environment.

1. Shri Appala Reddy [areddy@npci.org.in](mailto:areddy@npci.org.in), Mobile No: 09790932030
2. Shri Sumit Kashyap [sumit.kashyap@npci.org.in](mailto:sumit.kashyap@npci.org.in) , Mobile No:08108122872

With kind regards

  
S M Nabar

Head – Technology

M: +91 81081 08664

Enclosures:

1. Annexure-I (State Codes)
2. Annexure-II (Detailed specification of DE-61)
3. Annexure-III (Sample data for DE-43 and DE-61)

**Annexure I**

**Two Letter Code for State Names in India**

State	Two-letter Code
Andhra Pradesh	AP
Arunachal Pradesh	AR
Assam	AS
Bihar	BR
Chhattisgarh	CG
Delhi	DL
Goa	GA
Gujarat	GJ
Haryana	HR
Himachal Pradesh	HP
Jammu & Kashmir	JK
Jharkhand	JH
Karnataka	KA
Kerala	KL
Madhya Pradesh	MP
Maharashtra	MH
Manipur	MN
Meghalaya	ML
Mizoram	MZ
Nagaland	NL
Orissa	OR
Punjab	PB
Rajasthan	RJ
Sikkim	SK
Tamil Nadu	TN
Tripura	TR
Uttarakhand (Formerly Uttaranchal)	UK
Uttar Pradesh	UP
West Bengal	WB
Andaman & Nicobar	AN
Chandigarh	CH
Dadra and Nagar Haveli	DN
Daman & Diu	DD
Lakshadweep	LD
Pondicherry	PY

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**Annexure II**  
**DE 61 Format**

<i>DE – 61 PoS Data Code</i>																																																													
Type	ans...999																																																												
Format	LLVAR																																																												
Description	<p>This determines the data input capability</p> <p>Subfield 1: Card Data Input Capability</p> <table border="1"> <thead> <tr> <th><i>Value</i></th> <th><i>Description</i></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Unknown</td> </tr> <tr> <td>1 *</td> <td><b>Magnetic Stripe Read capability</b></td> </tr> <tr> <td>2</td> <td>ICC Capability</td> </tr> <tr> <td>3</td> <td>Magnetic stripe and key entry capability</td> </tr> <tr> <td>4</td> <td>Magnetic stripe and ICC capability</td> </tr> <tr> <td>5</td> <td>Manual, no terminal</td> </tr> <tr> <td>6</td> <td>Key entered</td> </tr> </tbody> </table> <p>Subfield 2: Cardholder Authentication Capability</p> <table border="1"> <thead> <tr> <th><i>Value</i></th> <th><i>Description</i></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Unknown</td> </tr> <tr> <td>1</td> <td>No electronic authentication</td> </tr> <tr> <td>2 *</td> <td><b>PIN</b></td> </tr> <tr> <td>3</td> <td>Biometric</td> </tr> </tbody> </table> <p>Subfield 3: Card Capture Capability</p> <table border="1"> <thead> <tr> <th><i>Value</i></th> <th><i>Description</i></th> </tr> </thead> <tbody> <tr> <td>0 *</td> <td><b>Unknown</b></td> </tr> <tr> <td>1 *</td> <td><b>No capture capability</b></td> </tr> <tr> <td>2 *</td> <td><b>Capture Capability</b></td> </tr> </tbody> </table> <p>Subfield 4: Terminal Operating Environment</p> <table border="1"> <thead> <tr> <th><i>Value</i></th> <th><i>Description</i></th> </tr> </thead> <tbody> <tr> <td>0 *</td> <td><b>Unknown</b></td> </tr> <tr> <td>1</td> <td>On premises of card acceptor, attended</td> </tr> <tr> <td>2 *</td> <td><b>On premises of card acceptor, unattended</b></td> </tr> <tr> <td>3</td> <td>Off premises of card acceptor, attended</td> </tr> <tr> <td>4 *</td> <td><b>Off premises of card acceptor, unattended</b></td> </tr> <tr> <td>5</td> <td>On premises of cardholder, unattended</td> </tr> <tr> <td>6</td> <td>No terminal used</td> </tr> </tbody> </table> <p>Subfield 5: Cardholder Present Data</p> <table border="1"> <thead> <tr> <th><i>Value</i></th> <th><i>Description</i></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Unknown</td> </tr> <tr> <td>1 *</td> <td><b>Cardholder present</b></td> </tr> <tr> <td>2</td> <td>Cardholder not present, unspecified reason</td> </tr> <tr> <td>3</td> <td>Cardholder not present, Mail</td> </tr> </tbody> </table>	<i>Value</i>	<i>Description</i>	0	Unknown	1 *	<b>Magnetic Stripe Read capability</b>	2	ICC Capability	3	Magnetic stripe and key entry capability	4	Magnetic stripe and ICC capability	5	Manual, no terminal	6	Key entered	<i>Value</i>	<i>Description</i>	0	Unknown	1	No electronic authentication	2 *	<b>PIN</b>	3	Biometric	<i>Value</i>	<i>Description</i>	0 *	<b>Unknown</b>	1 *	<b>No capture capability</b>	2 *	<b>Capture Capability</b>	<i>Value</i>	<i>Description</i>	0 *	<b>Unknown</b>	1	On premises of card acceptor, attended	2 *	<b>On premises of card acceptor, unattended</b>	3	Off premises of card acceptor, attended	4 *	<b>Off premises of card acceptor, unattended</b>	5	On premises of cardholder, unattended	6	No terminal used	<i>Value</i>	<i>Description</i>	0	Unknown	1 *	<b>Cardholder present</b>	2	Cardholder not present, unspecified reason	3	Cardholder not present, Mail
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	transaction
4	Cardholder not present, telephone transaction
5	Cardholder not present, standing instruction
6	E-Commerce transaction
7	IVR transaction
<b>Subfield 6: Card Present Data</b>	
<i>Value</i>	<i>Description</i>
0	Unknown
1	Card not present
2 *	Card Present
<b>Subfield 7: Card Data Input Mode</b>	
<i>Value</i>	<i>Description</i>
0	Unknown
1	Manual Input, no terminal
2 *	Magnetic Stripe read
3	Online Chip
4	Offline chip
5	Ecommerce
6	IVR
7	Key entered
<b>Subfield 8: Cardholder Authentication method</b>	
<i>Value</i>	<i>Description</i>
0	Unknown
1	Not authenticated
2 *	PIN
3	Signature
4	Biometric
5	OTP
6	E-Commerce Type1 Pin
7	E- Commerce Type1 OTP
8	E-com Type 2
9	IVR Type 2
<b>Subfield 9: Cardholder Authentication Entity</b>	
<i>Value</i>	<i>Description</i>
0 *	Unknown
1	ICC
2	CAD
C	Type 3 (3D if issuer opted for ICS 1 services)
D	Type 4 (3D if issuer opted for ICS 2 services)
A	Type 1 (RuPay E-Commerce Implementation)
I	Type 2 (3D if issuer opted for RuPay)

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	services)																						
	Subfield 10: Card Data Output Capability																						
	<table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0 *</td> <td>None</td> </tr> <tr> <td>1</td> <td>Magnetic Stripe write</td> </tr> <tr> <td>2</td> <td>ICC Write</td> </tr> </tbody> </table>	Value	Description	0 *	None	1	Magnetic Stripe write	2	ICC Write														
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	Subfield 13-21: Zip Code																						
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	Subfield 22-41:POS Additional Merchant Address data																						
	<table border="1"> <thead> <tr> <th>Sr No.</th> <th>Additional Address data</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Address/merchant telephone/mobile number Ans 20(right padded with spaces/zero's)</td> </tr> </tbody> </table>	Sr No.	Additional Address data	1	Address/merchant telephone/mobile number Ans 20(right padded with spaces/zero's)																		
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	<b>Values with "*" should be used for ATM</b>																						
Field Edits/ Compliance	This field remains the same for a particular transaction.																						
Constraints	This is not to be echoed back in response.																						
Validations	This field should be of the format as described in the above description																						
Compliance	This is mandatory field and acquirer has to populate values in this field as per the values mentioned above.																						
Presence	Mandatory-Should be present for all messages Conditional-None Optional-None																						

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Subfield 1	Card Data Input Capability	1
Subfield 2	Cardholder Authentication Capability	2
Subfield 3	Card Capture Capability	0/1/2
Subfield 4	Terminal Operating Environment	0/2/4
Subfield 5	Cardholder Present Data	1
Subfield 6	Card Present Data	2
Subfield 7	Card Data Input Mode	2
Subfield 8	Cardholder Authentication method	2
Subfield 9	Cardholder Authentication Entity	0
Subfield 10	Card Data Output Capability	0
Subfield 11	Terminal Data Output Capability	3
Subfield 12	PIN Capture capability	1/3
Subfield 13-21	Zip Code	ZIP code left padded with 0
Subfield 22-41	Additional Address data	Additional Address (Right Padded with 20 zeros)

Sum



**Annexure III**

**Examples for DE 43 and DE 61**

Member Banks are requested to send the ATM location. Please find some of the examples for DE-43 and DE-61 given below that are to be populated by Member Banks.

**ATM location:-**

Complete ATM location	PIN Code
HITEC CITY, MADHAPUR, HYDERABAD Andhra Pradesh India	500081
Shahdara, DELHI EAST EAST DELHI Delhi India	110032
Mayasandra, CHANNAPATNABANGALORE Karnataka India	562107
FORT MUMBAI, RBI PREMISMUMBAI Maharashtra India	400001
Prakasam Road, T Nagar CHENNAI Tamilnadu India	600017

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**DE 43 in detail:**

DE 43			
1 - 23	24 - 36	37 - 38	39 - 40
HITEC CITY, MADHAPUR,	HYDERABAD	AP	IN
Shahdara, DELHI EAST	EAST DELHI	DL	IN
Mayasandra, CHANNAPATNA	BANGALORE	KA	IN
FORT MUMBAI, RBI PREMISES,	MUMBAI	MH	IN
Prakasam Road, T Nagar	CHENNAI	TN	IN

Note: There is no need to populate the bank name in Terminal Address and Terminal City, as a separate field "ACQUIRER ID" (DE 32) is already available for the purpose and on the basis of which bank name can also be determined.

**DE 61 in detail:**

Subfield d 1	Subfield d 2	Subfield d 3	Subfield d 4	Subfield d 5	Subfield d 6	Subfield d 7	Subfield d 8	Subfield d 9	Subfield d 10	Subfield d 11	Subfield d 12	Subfield 13	Subfield 14
1	2	0	0	1	2	2	2	0	0	3	1	000500081	00000000000000000000
1	2	1	2	1	2	2	2	0	0	3	1	000110032	00000000000000000000
1	2	2	4	1	2	2	2	0	0	3	1	000562107	00000000000000000000
1	2	1	0	1	2	2	2	0	0	3	1	000400001	00000000000000000000
1	2	1	2	1	2	2	2	0	0	3	3	000600017	00000000000000000000

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