



To: **Integrated Payment Providers, Enablers, and VARS**

Date: **October 2024**

Subject: **4Q2024 IPP North America – Compliance Update**

To provide a seamless payment experience across all channels with Discover® Global Network, we are providing information and tips on how to offer value to you and your merchants by supporting all IIN (BIN) ranges and Application Identifiers (AIDs). Additionally, we are highlighting new technology and recent changes to accommodate the current payments landscape. Please provide the below information to your agents, gateways, software developers, shopping carts, and integrated payment service providers that support payment acceptance. The information contained in this document applies to Merchants located in North America and governed under the Discover Network Operating Regulations as outlined in our official Program Documents.

**IIN (BIN) Range Summary**

Supporting all Discover® Global Network IIN (BIN) ranges provides you and your merchants the ability to honor all cards, tokens, and products with Discover Network in North America. These cards include Diners Club International®, Discover® Debit, mobile digital wallets, and Network Alliances such as UnionPay from China, JCB from Japan, Elo from Brazil, and BC Card from South Korea. All IIN (BIN) ranges on this list should be routed to Discover® Global Network for authorization decisions by the Issuers. Merchants, Acquirers, and Processors must support between a minimum 14-digit (for the 36xx IIN Range) and up to 19-digit Primary Account Numbers (PANs). Merchants, Acquirers, and Processors also **must support up to 8-digit Personal Identification Numbers (PINs)**. IIN Ranges supported on the Discover® Global Network in North America:

Discover® Global Network IIN (BIN) Range Routing Table					
IIN Ranges 14-19 digits		IIN Ranges 16-19 digits		IIN Ranges 16-19 digits	
Start	End	Start	End	Start	End
3600 0000 <sup>b</sup>	3699 9999 <sup>b</sup>	3000 0000	3059 9999	6210 9400 <sup>c</sup>	6210 9499 <sup>c</sup>
		3088 0000 <sup>a</sup>	3094 9999 <sup>a</sup>		
		3095 0000	3095 9999		
		3096 0000 <sup>a</sup>	3102 9999 <sup>a</sup>		
		3112 0000 <sup>a</sup>	3120 9999 <sup>a</sup>		
		3158 0000 <sup>a</sup>	3159 9999 <sup>a</sup>		
		3337 0000 <sup>a</sup>	3349 9999 <sup>a</sup>		
		3528 0000 <sup>a</sup>	3589 9999 <sup>a</sup>		
		3800 0000	3999 9999		
		6011 0000	6011 0999		
		6011 2000	6011 4999		
		6011 7400	6011 7499		
		6011 7700	6011 7999		
		6011 8600	6011 9999		
		6221 2600 <sup>d</sup>	6237 9699 <sup>d</sup>		
		6240 0000 <sup>d</sup>	6269 9999 <sup>d</sup>		
		6282 0000 <sup>d</sup>	6288 9999 <sup>d</sup>		
		6440 0000	6589 9999		
		8100 0000 <sup>d</sup>	8171 9999 <sup>d</sup>		

- a. These JCB IIN Ranges shall be enabled only by Merchants, Acquirers, or their Processors in connection with Merchant relationships, POS Devices or otherwise, within the Merchant’s, Acquirer’s and/or Processor’s Authorized Jurisdictions in accordance with the designated Operating Regulations (section: Transaction Processing and Card Acceptance Requirements), subject to Agreements, where applicable.
- b. The minimum PAN length for this IIN Range (3600 0000 to 3699 9999) is 14 digits.
- c. These IIN Ranges 6210 9400 to 6210 9499 (UnionPay of China) are for production **testing only** and are not permitted to consumers for purchasing purposes.
- d. These UnionPay IIN Ranges shall be enabled only by Merchants, Acquirers, or their Processors in connection with Merchant relationships, POS Devices or otherwise, within the Merchant’s, Acquirer’s and/or Processor’s Authorized Jurisdictions in accordance with the designated Operating Regulations (section: Transaction Processing and Card Acceptance Requirements), subject to Agreements, where applicable.

**NOTE:** For special handling and card product features of Discover® Global Network IIN Ranges, please consult the DGN Data Table.

**[Support Chip Cards and Payment Devices](#)**

The Discover® D-Payment Application Specification (D-PAS) is an EMV®-compliant smart card payment solution for contact, contactless and mobile payments (click the link in the title above to learn more).

**Discover Network Chip Terminal Parameters**

Discover Network supports the following Application Identifiers (AIDs) required to be loaded/programmed/coded in all EMV terminals in the corresponding territories:

Specification Name	AID	Uses	Territory
D-PAS	A0000001523010	D-PAS contact and contactless AID for Discover® Card, Diners Club, and network alliances	All
D-PAS	A0000001524010	Contact and contactless Discover® US Common Debit AID	US
J/Smart & J/Speedy	A0000000651010	JCB J/Smart contact and contactless AID	US
UICS & qUICS	A000000333010102	UnionPay credit cards, Contact and Contactless AID	US, Canada, Mexico, and the Bahamas
UICS & qUICS	A000000333010103	UnionPay quasi credit cards, Contact and Contactless AID	US, Canada, Mexico, and the Bahamas
UICS & qUICS	A000000333010101	UnionPay debit cards, Contact and Contactless AID	US, Canada, Mexico, and the Bahamas
UICS	A000000333010108	US UnionPay common debit AID	US

**Note:** The United States of America, includes 50 states, the District of Columbia, and any commonwealth, territory, or possession of the United States of America, including military bases and embassies, including Puerto Rico, Guam, Saipan, US Virgin Islands, etc.

**Internationally Issued Cards AVS – Response Codes**

Address Verification Service (AVS) is an optional service provided by U.S. Issuers. AVS aids Merchants and Acquirers certified for AVS on the ® with Card Not Present and unattended/self-service Points of Sale (i.e., Automated Fuel Pumps) Card Transactions by confirming the U.S. numerical billing address and/or U.S. ZIP Code associated with the Card. Requesting Address Verification Service is not a guarantee against possible Disputes. Rather, AVS is a tool to assist Merchants and Acquirers Certified for AVS by Discover Network with reducing the risk or occurrence of fraudulent Card activity. Non-U.S. Issuers (Internationally Issued Cards) do not participate in Address Verification Service and do not receive AVS data.

Below are the valid AVS Response Codes Merchants and Acquirers may receive from U.S. Issuers in an Authorization Response Message. Please note an AVS Response Code may not be present even though AVS was requested. Merchants and Acquirers Certified by Discover Network for AVS may interpret the absence of an AVS Response Code as “S” from the chart below (AVS not supported at this time).

Code	Description
X	Address matches, nine-digit Postal Code matches
A	Address matches, five-digit Postal Code matches
Y	Address matches, Postal Code does not
T	Nine-digit Postal Code matches, address does not
Z	Five-digit Postal Code matches, address does not
N	Nothing matches
W	No data from Issuer/Authorization system
U	Retry, system unable to process
S	AVS not supported at this time
G	Address information not verified for international transaction



### Terminal PIN prompts

It is important to ensure that terminals are configured according to the merchant’s requirements. PIN prompts have been observed on terminals, when EMV contact or contactless transactions are performed, even though merchants have indicated that PIN was not part of their solution. This has primarily been observed at fast food locations. It is also important to note that a merchant not wanting PIN enabled on their terminal may support our US Common Debit AID without having PIN enabled at the terminal. Here are some **Authorization** recommendations to prevent undesired PIN prompts:

- **Contactless Transactions**
  - The Terminal Transaction Qualifiers (TTQ), Byte 1 bit 3 – Online PIN Support, can be set to ‘0’ before implementation in the field. This will eliminate the Online PIN prompt completely for contactless transactions where merchant doesn’t want to support it.
- **Contact Transactions**
  - The Terminal Capabilities (EMV Tag 9F33) should indicate that Online PIN is not supported for the Application Identifier if merchants don’t want to support Online PIN, Byte 2-bit 7 set to 0. If the merchants want to support merchant routing choice for US issued Debit cards, they must be informed that the PIN will need to be enabled and make sure the merchant is certified for it.

### Comprehensive IIN Range Table

It is important to ensure that our partners are using the most current data to route and process transactions correctly. You may obtain, and we encourage you to use, the most comprehensive updated IIN range table through your acquirer. Companies with an **NDA on file** can directly access the DGN IIN Range Table in the EASI Portal Document Library. Please email [easi@discover.com](mailto:easi@discover.com) for assistance if you would like to be setup with this access.

### New Merchant Category Code

In accordance with applicable law, the below new Merchant Category Code (MCC) was made available as of July 1, 2024. The use of this MCC on our networks is acceptable where permitted or required by law, and shall not be used where prohibited. All transactions submitted to Discover® must comply with all applicable laws and regulations.

MCC	Description
5723	GUN AND AMMUNITION STORE

### Updates to Discover ProtectBuy® Authentication Service

Effective with Release 24.2 on October 18, 2024, the Discover ProtectBuy® Authentication Service is updated to reflect that we will no longer support Discover ProtectBuy® authentication using 3-D Secure™ protocol 2.1. Acquirers, Agents and their Merchants that use the optional service will be required to support Discover ProtectBuy® using EMV 3-D Secure protocol 2.2 or higher.

Discover ProtectBuy® may be used by a Merchant or its Agent to authenticate a Card presenter in advance of a Card Not Present Card Sale (e.g., upon enrollment of a Card Account in Recurring Payments with a Merchant or enrollment of a Cardholder in a wallet).

Refer to the Discover ProtectBuy® Implementation Guide, available upon request at [ProtectBuy@Discover.com](mailto:ProtectBuy@Discover.com), for information regarding enrollment, Certification, and implementation of Discover ProtectBuy®.



### **CNP Only Restriction Removed**

Effective with Release 24.2 on October 18, 2024, the Card Not Present (CNP) only restriction for the following Asia Pacific (APAC) countries: Australia, Hong Kong, and Singapore have been removed. These changes allow for Card Acceptance of Card Present (CP) transactions which aligns with the industry.

### **[Verify Your Acceptance](#)**

Test your point-of-sale system or device to make sure you're ready to accept the cards of the 345 million cardholders<sup>ii</sup> that transact on our network. Testing instructions are available for both U.S. and International POS systems. Test card information includes Discover® Card, Diners Club International®, Discover® Debit, JCB, UnionPay, and BCard and DinaCard. Click here to get started <https://www.discoverglobalnetwork.com/resources/businesses/check-your-card-reader/>.

### **[Register Now for the Discover® EASI Portal](#)**

The Discover® Global Network [Enablement, Acceptance and Support Info-center \(EASI Portal\)](#) provides a resource to engage/communicate with Account Executives, obtain program documents and collateral, request test cards, and receive news and announcements from Discover® Global Network. Discover® offers POS Developer Test Card Kits with multiple testing options including a card that can be provisioned into mobile devices. Obtain more information about the portal and how to register for access by clicking [here](#).

If you are an existing user, we are excited about the great things that are coming! We are currently working to bring a new look and more functionality to our portal. Please be patient during this time as some screens have been updated and others are still in progress.

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<sup>i</sup> EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere. The EMV® trademark is owned by EMV®Co, LLC.

<sup>ii</sup> Based on data provided to Discover® by Network Alliances participants and other third-party sources as of December 31, 2023.