

Payment Notification Guidelines

October 19, 2011

1. Overview

1.1 These Payment Notification Guidelines (“Guidelines”) establish a set of market practices for using tag {3620} *Payment Notification* in the Fedwire® Funds Service Customer Transfer Plus (CTP) message.

1.2 The market practices established in these Guidelines are specifically designed to facilitate notification to an originator of a funds transfer when the amount of the funds transfer has been credited to the beneficiary’s account or otherwise paid to the beneficiary by the beneficiary’s bank (i.e., the “originator model”). Depending upon the circumstances, these Guidelines may also result in notification to the originator or its bank as each intermediary bank completes processing of the payment order.

1.3 These Guidelines create the concept of a **Payment Notification User Group (PNUG)**. By joining the PNUG, an institution is indicating its willingness to abide by the market practices defined by the Guidelines.

1.4 The market practices described in these Guidelines are targeted at payments processed by members of the PNUG where both the originator’s bank and beneficiary’s bank are located in the United States. While banks located outside the United States can join the PNUG, there are mapping complexities that could result in a break in the notification chain for cross-border payments.

2. High-Level Processing Flow

2.1 When a sending bank that is a Fedwire Funds Service participant (“Fedwire Sender”) would like to request notification from a beneficiary’s bank for a particular funds transfer, the Fedwire Sender needs to provide a payment notification indicator, end to end identification number and at least one e-mail address in tag {3620} of a Fedwire CTP message. If multiple e-mail addresses are provided, they should be separated by commas. As detailed below, downstream parties to the funds transfer, to the extent that they have joined the PNUG and receive a payment order with the appropriate payment notification indicator, should send notification to each e-mail address provided in the payment order in accordance with these Guidelines.

2.2 The e-mail address provided in Fedwire tag {3620} by the Fedwire Sender may be an e-mail address that it has created (e.g., notify@firstbank.com). However, by choosing this approach, upstream parties to the funds transfer such as the originator (e.g., corporate) or the originator’s bank, if different from the Fedwire Sender, would not receive e-mail notification from downstream parties without further action by the Fedwire Sender. The Fedwire Sender would have to provide upstream notification to the originator or the originator’s bank.

2.3 Alternatively, the Fedwire Sender may choose to include in Fedwire tag {3620} a notification e-mail address that has been provided by an upstream party such as the originator (e.g., notify@XYZCorporation.com) or the originator’s bank, if different from the Fedwire Sender. If this approach is selected, then the originator or the originator’s bank will be the direct recipient of notification e-mails from downstream parties. In order to be able to reconcile the notification e-mail with the funds transfer, the party that will receive notification from downstream parties will need the end to end identification number. This can be accomplished if the Fedwire Sender assigns the end to end identification number and makes it available to the upstream party receiving the e-mail notification, or it can be accomplished by allowing the upstream party to assign its own end to end identification number.

2.4 Notification services should not be requested for a particular funds transfer unless the party that is assigning the end to end identification number has confirmed that the beneficiary’s bank has joined the

PNUG.¹ The Federal Reserve Banks will maintain a publicly available directory, in accordance with terms set forth in Federal Reserve Bank Operating Circular 6, of all financial institutions that have joined the PNUG.

2.5 Any member of the PNUG that has received a payment order with a notification request formatted in accordance with these Guidelines (as discussed further below) should send an e-mail to each electronic address indicated in Fedwire tag {3620}. For an intermediary bank, the notice should not be sent until it issues its own payment order relating to the funds transfer. For the beneficiary's bank, the notice should not be sent until it has credited the account of or otherwise paid the beneficiary. The required format of the notification e-mail is discussed later in these Guidelines.

3. Fedwire Tag {3620} Payment Notification

3.1 The Fedwire Customer Transfer Plus message contains the optional tag {3620} Payment Notification:

{3620} Payment Notification

01 Payment Notification Indicator (can be a single numeric character 0 – 9)

02 Contact Notification Electronic Address (2,048 characters; i.e., e-mail address)

03 Contact Name (140 characters)

04 Contact Phone Number (35 characters)

05 Contact Mobile Number (35 characters)

06 Contact Fax Number (35 characters)

07 End to End Identification (35 characters)

3.2 Any member of the PNUG requesting payment notification for a funds transfer from downstream parties in accordance with these Guidelines would only include data in the elements 01, 02, and 07 listed above in blue text. Data elements 03, 04, 05 and 06 are not required data elements.

3.3 A payment notification indicator of “1” should be used to denote a request for notification in accordance with these Guidelines (i.e., an indicator of “1” will refer to the originator model, which is the model described in these Guidelines). Use of the indicator of “1” is reserved for members of the PNUG. Other notification models, if developed, will use notification indicators other than “1”.

3.4 When a downstream party to the funds transfer that is a member of the PNUG receives a payment order with a payment notification indicator of “1”, it should send an e-mail in the format described later in these Guidelines to each party named in the contact electronic address with reference to the end to end identification number.

4. Payment Notification End to End Identification Number

4.1 Element 07 *End to End Identification* of Fedwire tag {3620} *Payment Notification* is used to include an end to end reference number associated with the funds transfer.

The end to end identification number may be assigned by the Fedwire Sender, the originator's bank, or the originator (see discussion above).

4.2 The end to end identification number can be up to 27 characters and should² consist of the following components:³

¹ Risk: In order for the beneficiary's bank to act on the notification request, all intermediary banks in the funds transfer chain would need to pass on the information contained in Fedwire tag {3620} to the next downstream party in the funds transfer chain.

² While the structured format described in this section is recommended for the end to end identification number, the party assigning the end to end identification number may choose to use an alternate internal reference number that is up to 27 characters in length. Care should be taken to ensure that the end to end identification number is unique and that the party being notified will be able to identify the funds transfer to which it relates.

- a. **Cycle Date** – 8 characters for the cycle date in YYYYMMDD format.
- b. **Control #** – 5 alphanumeric characters for the control # (i.e., A0001, 00001, etc.) for the given Participant ID. Each party assigning the end to end identification number may choose to randomize the control number to reduce its predictability, but should ensure that the control number cannot repeat on a given day to ensure it is unique.
- c. **Payment Tracking Institution ID** – the remaining 14 characters can be used for a variable length Institution ID (where “Institution” refers to the party that assigns the end to end identification number), which will be based on one of the following:
 - **ABA** – 9 characters
 - **BIC** – up to 11 characters
 - **UID** – 6 characters
 - **Other ID** (if participant does not have an ABA, BIC or UID)

4.3 Example: 1st Bank’s 15th Fedwire message requesting payment notification on May 8, 2011 might have the following end to end identification number: 20110508A0015011000015

5. Content, Format and Timing of e-mail Notification Message

5.1 A member of the PNUG that receives a payment order with a request for notification in accordance with these Guidelines should send an e-mail to the e-mail address provided in the payment order with the following content and format⁴:

- a. **ABA/BIC/UID of party sending the e-mail**
- b. **Reference Number** (Element 07 *End to End Identification* of Fedwire tag {3620})
- c. **Status Code**⁵
Using ISO20022 Payment Status Codes:
 1. **ACSC** – An intermediary bank should use this status code once it has issued its own payment order relating to the funds transfer. A beneficiary’s bank should use this status code once it has credited the account of or otherwise paid the beneficiary.
 2. **RJCT** – An intermediary bank or beneficiary’s bank should use this status code if it has properly rejected or canceled a payment order in accordance with governing law or has initiated an offsetting funds transfer to “return” the initial funds transfer.
- d. **Timestamp** – The timestamp should reflect the time when the status was achieved and should follow the ISO 8601 format (i.e., YYYYMMDDThmmssZ). **Note:** The “Z” at the end indicates universal time (UTC),

³ Even though the end to end identification number can carry as many as 35 characters in Fedwire tag {3620}, its length should be limited to no more than 27 characters to support mapping to CHIPS tag [650] and SWIFT field 72 and to ensure it only takes up one 35-character line (i.e., 8 characters for codewords, proprietary codes and slashes (i.e., “/ACC/BNQ” as the SWIFT mapping section below specifies) - plus the up to 27-character end to end identification number).

⁴ The party sending a payment notification in accordance with these Guidelines should be cognizant that the notification e-mail may be sent unencrypted over the Internet. Therefore, the party should not include detailed information about the underlying funds transfer. Instead, the originator (or other party obtaining the notification) should use the funds transfer’s end to end identification number to obtain that information. In addition, the party sending a payment notification should limit the content of the e-mail to plain text (i.e., the e-mail should not include any executable code, URL addresses, or attachments).

⁵ If one of these two statuses is not achieved (e.g., because a payment order is being held for a compliance investigation or for any other reason), no e-mail should be sent until the bank has resolved the handling of that payment order.

which means the same thing as GMT. (See the payment status code descriptions above for clarification of what the timestamp indicates.)

- e. **Example:** The notification e-mail sent from 2nd Bank to 1st Bank on May 8, 2011, at 15:21:36 GMT would include the following information:

The subject line would read: Payment Notification

The e-mail text would start at the very top of the e-mail and each data element would appear on a separate line as noted below.

021001208	(2 nd Bank's ABA)
20110508A0015011000015	(1 st Bank's End to End Identification number)
ACSC	(2 nd Bank's Status Code)
20110508T152136Z	(Date/Time 2 nd Bank Status Code was achieved)

5.2 Notification Message Timing: Members of the PNUG should send their e-mail notifications as soon as possible after the relevant status is achieved, but no later than close of business on the same business date that status is achieved.

5.3 Undeliverable e-mails: Members of the PNUG that use the e-mail address in Fedwire tag {3620} in accordance with these Guidelines are not expected to investigate undeliverable e-mails. The party requesting notification (i.e., the originator, the originator's bank, or the Fedwire Sender) should provide a valid e-mail address in Fedwire tag {3620} and ensure it has set its spam filter to accept e-mails from members of the PNUG (see PNUG Directory Section below for details on how this can be achieved).

5.4 Inquiries: Members of the PNUG should follow existing payment market practices in responding to inquiries from parties to a funds transfer related to any breaks in the payment notification chain.

5.5 Failure to Notify: Members of the PNUG should consider the legal, risk management, and customer service ramifications of a situation in which payment notification was requested but is not ultimately made.

5.6 Legal Disclaimer: Members of the PNUG may choose to add a legal disclaimer to the e-mail notifications they send to clarify that such notification does not guarantee that the amount of the funds transfer has been or will be credited to the beneficiary's account or that the beneficiary has been or will be otherwise paid.

6. SWIFT MT Compatibility

6.1 Although these Guidelines are focused on domestic funds transfers, financial institutions located outside the United States are not precluded from joining the PNUG as long as they join the PNUG through a member of the PNUG that is also a Fedwire Funds Service participant. To the extent that a non-U.S. financial institution is a downstream party to a particular funds transfer, the U.S. financial institution in the chain may need to map notification details from an incoming Fedwire Funds Service CTP message to an outgoing SWIFT MT 103 message. In such a case, the Fedwire Funds Service participant should follow the mapping conventions described below:

- a. Check for cross-border financial institutions in the funds transfer chain (i.e., by checking the country code in positions 5 and 6 of the BIC to determine if the bank is outside of the United States). If the transaction involves a cross-border financial institution, then perform the additional edits below.
- b. Limit content included in Fedwire tag {3620} Payment Notification to:
 - **Payment Notification Indicator** (i.e., "1" for the originator model)
 - **Contact Notification Electronic Address** (i.e., e-mail address). If mapping to SWIFT, the e-mail address should always begin on its own line in SWIFT field 72. Because the "@" sign is not

permissible in field 72, you should replace it with “??7C” according to SWIFT mapping conventions. Assigning shorter length e-mail addresses in Fedwire tag {3620} will reduce the number of characters that need to fit in field 72 and allow for an easier mapping process from the Fedwire Funds Service message format to SWIFT’s message format. Selecting e-mail addresses that are 33 characters or less will limit the mapping impact to one field 72 line. E-mail addresses between 34 and 66 characters in length can be accommodated on two field 72 lines.

- **End to End Identification**

A URL address, Contact Name, Contact Phone Number, Contact Mobile Number and Contact Fax Number should not be used when mapping to SWIFT.

- c. See examples below to show mapping of the content of Fedwire tag {3620} Payment Notification to a SWIFT MT103 message in **field 72** Sender to Receiver Information using the codeword **/ACC/**, which indicates beneficiary’s bank information (in SWIFT, the beneficiary’s bank is called the Account With Institution).⁶

Notification Request:

Insert code **BNQ** (Beneficiary Notification Request) and map the **End to End Identification Number** and **E-mail Address** as follows:

Example:

Line 1: :72:/ACC/BNQ20110508A0015011000015

Line 2: //NOTIFY??7CFIRSTBANK.COM

- d. Follow existing mapping routines to map other Fedwire tags (i.e., tags {5200}, {6100}, {6200}, {6300}, {6400} & {6500}) to field 72, ensuring that the combination of these tags does not exceed 210 characters (i.e., the maximum size that can be mapped to field 72).
- e. If the originator’s bank determines that mapping the notification request and other data to field 72 will exceed 210 characters, then the originator’s bank should not request notification for that funds transfer.

6.2 Risk: If the originator’s bank determines there is enough space in field 72 to map the notification request and other data, but subsequent intermediary banks in the funds transfer chain add more data to field 72, the intermediary banks may truncate the original notification or other data so that the beneficiary’s bank is never aware that notification was requested for that funds transfer. This would lead to a break in the payment notification chain.

7. CHIPS Compatibility

7.1 CHIPS supports the payment notification feature through a market practice convention using existing tags. The convention is similar to the mapping convention used for the SWIFT MT format. When payment notification is requested, the payment should be a Non-bank payment, Beneficiary Type of “N”, with the payment notification request mapped to the CHIPS [650] tag BANK TO BANK INFORMATION.

7.2 The first line should contain “BNQ” to indicate a payment notification request followed by the End to End Identification number. The second line should contain the e-mail address to be notified. Additional lines may be used to complete the e-mail address. The e-mail address will terminate with the characters “++”.

⁶ The Payment Market Practices Group (PMPG) posted guidance to its website for carrying extended remittance information from a Fedwire Funds Service or CHIPS message to a SWIFT message. As of March 2011, that guidance also suggests mapping the end to end identification number from the Fedwire tag {3620} to SWIFT **field 70** rather than **field 72**. The PMPG has been contacted to see if it would be possible to change its guidance to be consistent with the market practices established by these Guidelines that the end to end identification number be mapped to **field 72** in cases where a SWIFT participant has elected to join the PNUG.

7.3 If other BANK TO BANK INFORMATION is to be included, it should start after the “++”. The current restriction of the total number of lines of BANK TO BANK INFORMATION is still enforced.

Line 1: [650]BNQ20110508A0015021000089*

Line 2: NOTIFY@FIRSTBANK.COM++INV.1235*

7.4 Additional information, including SWIFT mapping guidance, is provided in the *CHIPS Extended Remittance Information and Payment Notification Implementation Guide*.

8. PNUG Directory

8.1 The Federal Reserve Banks will maintain a directory, in accordance with terms set forth in Federal Reserve Bank Operating Circular 6, of financial institutions that have joined the PNUG and will make that directory available for download as a Microsoft Excel spreadsheet at FRBservices.org.

8.2 To become a member of the PNUG and be included in the Federal Reserve Bank PNUG directory, a Fedwire Funds Service participant must execute the relevant appendix to Federal Reserve Bank Operating Circular 6, agreeing, among other things, that it should use best efforts to follow these Guidelines.

8.3 Financial institutions that are not direct Fedwire Funds Service participants may become members of the PNUG by having an agent bank that is both a Fedwire Funds Service participant and a member of the PNUG execute the relevant appendix to Federal Reserve Bank Operating Circular 6.

8.4 Financial institutions joining the PNUG should provide the Federal Reserve Banks with the e-mail addresses that they will use to send notification e-mails to parties named in Fedwire tag {3620}. The Federal Reserve Banks will make these e-mail addresses available to members of the PNUG that are Fedwire participants in a manner the Federal Reserve Banks may specify from time to time. Fedwire Funds Service participants that have agreed to act as Agent Banks (as that term is defined in Federal Reserve Bank Operating Circular 6) will make these e-mail addresses available to those members on whose behalf they have agreed to act. Members of the PNUG may make these e-mail addresses available to their customers that wish to receive notification emails directly from downstream parties in accordance with Section 2.3 of these Guidelines. Parties requesting notification are expected to use this list of e-mail addresses to prevent their antispam filters from blocking notification e-mails. The e-mail addresses should be distributed in a manner designed to reduce the likelihood that persons without a need to know the information will obtain or have access to it.

9. Governance

9.1 The Wholesale Customer Advisory Group of the Federal Reserve Bank of New York initially approved these Guidelines.

9.2 It is anticipated that an industry group will assume responsibility for maintenance of these Guidelines.

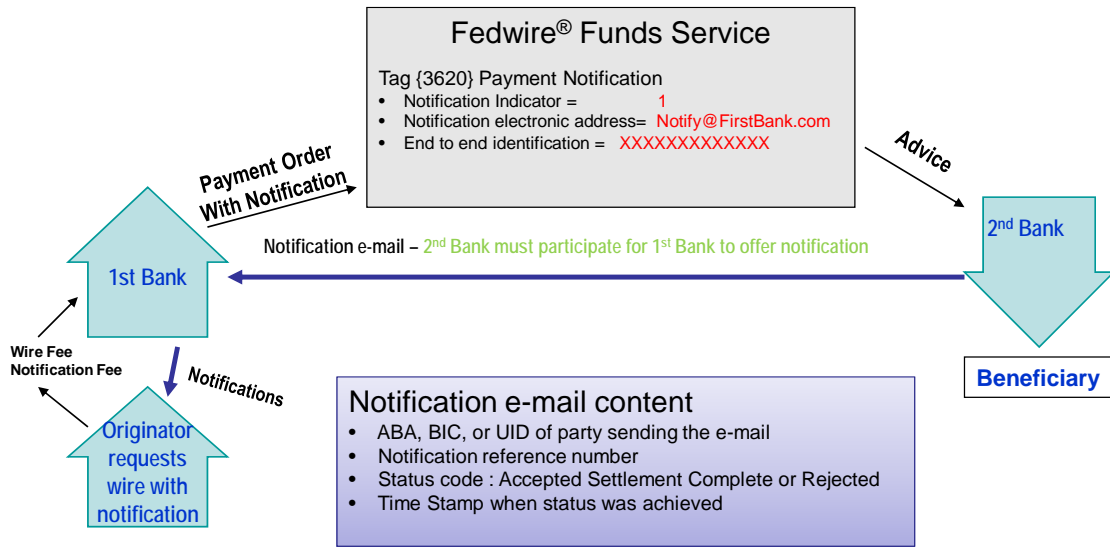
9.3 Members of the PNUG are expected to use best efforts to follow these Guidelines.

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Appendix 1

ISO MX Compatibility	1. Fedwire tag {3620} Payment Notification fields are compatible with fields available in the ISO MX payment clearing and settlement message (PACS.008.001.02). See mapping below.	
	Fedwire	Map to ISO
	Tag {3620} Payment Notification Indicator	Payment Type Information <PmtTplnf> <ul style="list-style-type: none"> ▪ Service Level <SvcLvl> <ul style="list-style-type: none"> ▪ Proprietary <Prtry>
	Tag {3620} Payment Notification Contact Notification Electronic Address	Contact Details <CtctDtIs> <ul style="list-style-type: none"> ▪ Email Address <EmailAdr>
	Tag {3620} Payment Notification Contact End to End Identification	Contact Details <CtctDtIs> <ul style="list-style-type: none"> ▪ End-to-End ID <EndToEndId>

Appendix 2: Initial Target Market Diagram



Appendix 3: Future market potential

