FedGlobal® ACH Payments Service Origination Manual

Federal Reserve Financial Services
March 31, 2016

Table of Contents

Introduction 3

Purpose 3

Document History 3

Overview 5

General Description 5

ODFI Compliance Obligations 5

RDFI Compliance-Related Inquiries 6

FedGlobal ACH Payments Compliance 7

Dodd-Frank 1073 Compliance 7

Risks 8

Rules Differences 9

Holiday Processing 9

Customer Support 10

Implementation Requirements 10

Service Request Form 10

Pre-production Testing 10

FedGlobal ACH Geographic Reach 11

Country/Region Requirements 12

CANADA 12

MEXICO 18

PANAMA 31

EUROPE 35

Appendix I – IAT Format Origination Matrix 42

Appendix II – IAT Format Origination Matrix / F3X Payments 51

Appendix III – Guide to a Successful FedGlobal ACH Payments Launch 56

Appendix IV – Mexico F3X Specifications 57

Appendix V – Europe F3X Specifications 58

Appendix VI – FedGlobal ACH ISO Destination Country and Currency Codes 59

Appendix VII – Instructions for Tracing Payments in Mexico's SPEI System 60

Appendix VIII – FedGloabal ACH Mexico Service ABM Numbers for RDFIs 61

Appendix IX – FedGlobal ACH Panama Service Bank Numbers for RDFIs 64

Introduction

FedGlobal ACH Payments is an enhanced suite of international ACH services established to complement the FedACH Service. The portfolio of international ACH services provides a significant increase in the number of countries reachable and payment options available from FedACH. Ultimately, broader country reach as well as flexibility with payment options allows the Federal Reserve Banks to offer an efficient means of cross-border ACH payments to all originating depository financial institutions.

Purpose

This manual is intended to assist financial institutions in establishing an international ACH origination program using the Federal Reserve's FedGlobal ACH Payments Service. The manual will provide an overview of the service, processing and implementation requirements, as well as country and/or region-specific requirements for the purposes of originating international ACH payments. It is a living document that will be revised as service enhancements are identified and implemented.

Your FedACH Sales Specialist can assist you in implementing a successful international ACH origination program. To determine the appropriate FedACH Sales Specialist, please visit http://www.frbservices.org/contactus/fedach_specialists.html .

The FedGlobal ACH Service Origination Manual should be used in conjunction with Federal Reserve Bank Operating Circular (OC) 4 and the National Automated Clearing House Association (NACHA) Operating Rules. Since these rules may be updated or modified periodically, it is important to retain a current copy for reference.

- The NACHA Operating Rules can be referenced for a definition of terms used in this manual.
- The Federal Reserve's Operating Circulars can be obtained by visiting the Reference Guides and Operating Circulars section of the Federal Reserve Financial Services web site located at www.frbservices.org.

The content of this manual does not in any way constitute legal advice. It is important that originating depository financial institutions (ODFIs) understand the specific risk and requirements involved in originating payments to foreign countries and should consult with risk management, compliance and legal staff before originating such payments. Specifically, an ODFI that originates international ACH payments warrants under Article Two – Subsection 2.5.8.4 (Additional ODFI Warranties for Outbound IAT Entries) of the NACHA Rules that it is in compliance with the laws and payment system rules of the receiving country.

Document History

March 31, 2016: Updated ABM bank numbers list for Mexico.

December 31, 2015: Updated manual to align service features with the termination of the A2R service, thus ending the FedGlobal ACH Latin America Service. Updated manual to include references related to Dodd-Frank 1073; Updated information on bank holidays; Updated funds availability to the foreign RDFIs in FedGlobal ACH Geographic Reach table; Updated ABM Bank Number for Mexico and Financial Institution R/T Number list for Panama.

December 28, 2010: Updated manual to include 2011 Holiday Schedules for Canada, Mexico, Panama, and Europe.

November 17, 2010: Updated Appendix I and III to include formatting notations for Payment Related Information entered in the IAT Remittance Information record.

October 25, 2010: Updated manual to include the Europe Service; Updated manual to include service description for Europe; Updated IAT Origination Matrix to include formatting details for Account-to Account and F3X payments for Europe; Updated manual to instruct originators to use 2-character ISO countries to identify countries in payment records. Updated manual to include self-service item trace website instructions for Mexico.

April 21, 2010: Updated manual to include Account-to-Receiver (A2R) payments to Mexico and 10 Latin American countries; Updated manual to include F3X payments to Mexico; Updated manual to include 2010 Holiday Schedules for Canada, Mexico, and Panama. Updated manual to include ISO country and currency code table. Also updated the Mexico RDFI participants table.

September 25, 2009: Update manual to include general compliance obligations and recommendations for ODFIs, provide new URL for foreign exchange rates, and inserted an updated Mexico participants table.

July 1, 2009: New version of FedGlobal ACH Payments Origination Service Manual to replace the FedACH International Service Country Manuals. This is a combined manual to include all service countries for FedGlobal ACH Services.

Overview

General Description

FedGlobal ACH supports the Federal Reserve's mission to ensure an efficient, effective and accessible retail payments system and offers a single processing stream to financial institutions for sending and receiving domestic and international ACH credit and debit[1] items using domestic FedACH deadlines.

For payments originated in the U.S. and sent through FedGlobal ACH, the Federal Reserve Bank of Atlanta serves as the U.S. Gateway Operator (GO) and works with the appropriate foreign gateway operator (FGO). It is important to remember that each country is governed by its own domestic clearing rules and practices. Some of the prominent differences between the U.S. and foreign country payments systems are highlighted in the appropriate section of the manual to assist you in planning and implementing your service offering.

Cross-border payments are formatted using the NACHA Standard Entry Class (SEC) code IAT (international ACH transaction). The Company/Batch Header Record contains information specific to cross-border payments, including data related to foreign exchange, origination and destination country, and currency codes. Consequently, these entries can be included in the same file as domestic ACH transactions, but must be batched separately. The IAT SEC code and fields in the Company Batch Header Record allow cross-border payments to be readily identified. For efficiency purposes, ODFIs need to limit their batches to fewer than 500 records. Detailed record layouts are provided in Appendix I and II of this manual.

NACHA Operating Rules allow for transactions to be originated in three types of currency value exchange: fixed-to-variable (FV), variable-to-fixed (VF) or fixed-to-fixed (FF). The FedGlobal ACH Service accommodates fixed-to-variable (FV) and/or fixed-to-fixed (FF) for outbound payments destined to foreign countries depending on the agreement with the FGO. These foreign exchange options include:

- FV: USD to foreign currency. U.S. dollars are converted to a variable amount of destination currency based on a competitive foreign exchange rate provided as part of the payment flow.
- FF: USD to USD. U.S. dollars are both sent and received to USD denominated accounts. This applies to countries that allow USD accounts and are permitted in FedGlobal ACH.
- FF: foreign currency to foreign currency. This option, known as F3X[2], enables the ODFI to manage its own foreign exchange to participating countries. Settlement is conducted outside of the ACH network through a foreign correspondent. This option requires a separate service enrollment form with the Federal Reserve Banks to be able to participate.

FedGlobal ACH also offers the ability to send funds between deposit accounts in the U.S. and destination countries.

ODFI Compliance Obligations

Federal Reserve Operating Circular 4 applies to all FedACH transactions and contains provisions that apply specifically to all FedGlobal ACH Services. The NACHA Operating Rules apply to all FedGlobal ACH countries to the extent that the NACHA Operating Rules do not conflict with Operating Circular 4. NACHA's Operating Rules, particularly Article Five, outlines the obligations of Gateway Operators including responsibilities and warranties. A GO serves as the entry point to or exit point from the United States for payment transactions. A FGO means a gateway operator that acts as an entry point to or exit

[1] FedGlobal ACH Services offers debits to Canada only and does not introduce debits originated from any foreign country.
[2] F3X is patented by the Federal Reserve Bank of Atlanta: U.S. Patent No. 7,580,886.

point from a foreign country. Article Two allows for flexibility through the U.S. GO/FGO agreement to allocate processing responsibilities, assign warranties and liabilities, establish an accord for the handling of foreign exchange, define settlement procedures, and determine the legal basis for their business relationship.

Additionally, U.S. ODFIs are responsible for complying with applicable U.S. law as well as incorporating FedGlobal ACH services into applicable compliance policies and procedures. It is recommended that U.S. ODFIs have the following:

a) Have a compliance officer and a compliance program that includes policies and procedures designed to ensure the USODFI's compliance with the Bank Secrecy Act, and with U.S. laws, regulations, and bank supervisory policies regarding anti money laundering, anti terrorism financing, know your customer, customer identification programs, data security and data privacy, OFAC requirements, and mandatory consumer protections;
b) Adopt and adhere to policies and procedures that ensure that all Cross-border transactions are handled in compliance with the USODFI's compliance policies and procedures, with due regard for the enhanced OFAC requirements for international ACH transactions;
c) Perform due diligence with respect to all persons, entities and associated data in every Cross-border transaction to ensure compliance with OFAC regulations, and directly involve the USODFI's compliance staff in resolving any issues regarding any Cross-border Item that appears as if it may be a prohibited transaction under OFAC regulations;
d) Monitor all Cross-border transactions for indications of suspicious activity, including but not limited to structuring such transactions to avoid recordkeeping or reporting requirements or USGO's limits on transaction amounts;
e) File Suspicious Activity Reports and/or Currency Transaction Reports as required by applicable laws or regulations.

Information on OFAC regulations can be found at the OFAC web site: http://www.treas.gov/ofac/ and the NACHA Operating Rules.

It is important to note that either the GO or the FGO may refuse to handle IAT items originated by any participating U.S. ODFI that they believe to pose a compliance risk, such as originating items that include parties on the OFAC list. The quality and accuracy of the information provided by the originator are key to both the ODFI and RDFI's ability to successfully meet compliance obligations.

RDFI Compliance-Related Inquiries

Financial institutions that receive IAT items that entered the U.S. through FedGlobal ACH may from time to time require additional information about the payment originator. To determine if the IAT item entered the U.S through FedGlobal ACH, the RDFI can cross-reference the ODFI routing number in the E-Payments Routing Directory to verify if the Originating Gateway Operator is part of FedGlobal ACH Payments. By calling the contact number listed, the RDFI will reach FedACH and Check Customer Support. The RDFI should state that it is requesting assistance with a compliance-related issue. FedACH will coordinate these inquiries with the Originating Gateway Operating and will make reasonable efforts to facilitate initial communication between the depository financial institutions on both ends of the IAT item.

FedGlobal ACH Payments Compliance

While cross-border ACH is inherently riskier than ACH payments made between counter-parties within the United States, U.S. laws and regulations provide guidance to ODFIs on carrying out cross-border payments in a compliant manner. As an originator of IAT items outside the United States on behalf of U.S. ODFIs, FedGlobal ACH Payments seeks to support regulatory compliance by carrying out a series of compliance-related activities.

The Federal Reserve Bank of Atlanta, the U.S. Gateway Operator for FedGlobal ACH Payments, maintains a compliance officer and compliance program aimed at ensuring that payments transacted over the FedGlobal ACH service are compliant with U.S. laws and regulations. The objective of the compliance program is to: 1) detect attempts to abuse the Reserve Bank's FedGlobal ACH services for money laundering; 2) prevent such abuse; and 3) report the attempted abuse to the requisite authorities.

The Federal Reserve Bank of Atlanta's compliance program includes: 1) transaction monitoring for Anti Money Laundering and OFAC compliance at the aggregate level; 2) transaction monitoring for limits on the payment value by originator, where applicable; 3) establishing compliance obligations for payment processing in agreements with gateway operators and third-party service providers; and, 4) due diligence reviews of service offerings that include evaluations of gateway operators and third-party service providers as well as country risk assessments.

Transaction monitoring for Anti-Money Laundering may include post processing reviews of payments by ODFI, RDFI, originator, country of destination and origin, concentrations of payment activity and unusual patterns of activity. U.S. regulatory authorities will be notified of potentially suspicious payment activity. OFAC monitoring is conducted on items entering the U.S. ACH network through FedGlobal ACH Payments as requested by OFAC and the RDFI and OFAC are notified of potentially suspicious items. The transaction monitoring is conducted on a post transaction basis because FedACH as an ACH operator cannot separate out or pend suspicious items on a flow-through basis.

As a gateway operator, the Federal Reserve Bank of Atlanta includes in each FedGlobal ACH agreement with processors and Foreign Gateway Operators requirements that processors and Foreign Gateway Operators: 1) have a compliance officer; 2) establish and follow compliance policies and procedures; 3) be FATF compliant; 4) follow applicable record keeping requirements per local laws; and 5) follow applicable reporting requirements on illegal or suspicious transactions/activities per local laws.

Due diligence activities also include a risk assessment of the foreign gateway partners and any third-party service providers involved in carrying out the service, a country risk assessment of the countries which receive or which may originate payments into FedGlobal ACH Payments. The counter-party risk assessment evaluates operational risks, service level risks, and overall compliance risk. The country risk assessment evaluates risks presented the country or countries reached. Identified risks have been documented and mitigation procedures have been put in place. As examples, risk mitigation measures would include transaction monitoring, payment value limits, stipulations in legal agreements, etc.

The service offerings provided by FedGlobal ACH Payments have successfully met the criteria established by the Federal Reserve Bank of Atlanta's compliance program.

Dodd-Frank 1073 Compliance

In 2013, the Consumer Financial Protection Bureau implemented Section 1073 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank 1073). The rule, which amends Regulation E,

focuses primarily on disclosure, error resolution, and cancelation requirements for remittance transfer providers facilitating outbound cross-border consumer initiated electronic transfers of funds.

Dodd-Frank 1073 establishes requirements for exact disclosures in most cases. However, estimated disclosures are allowed under certain circumstances. Under the temporary exception for financial institutions, set to expire in July 2020, estimates can be provided for foreign exchange, covered third party fees, and other related disclosures, if specific criteria are satisfied.

With FedGlobal ACH, financial institutions are enabled with information around foreign fees, foreign taxes, and the date of funds availability, as well as estimated foreign exchange rates. Additionally, the service bolsters error resolution by assisting with the tracing of transactions where an error has occurred. Customers should consult their legal/compliance department to determine whether their institution is able to use estimates and how the information provided by the FedGlobal ACH Service can help satisfy disclosure obligations.

FedGlobal ACH offers further assistance through the FedGlobal ACH Formatting Aid, which is complimentary and available to all FedGlobal ACH customers. The tool is based in Microsoft Excel® and can help financial institutions manage customer disclosures for cross-border remittances. Customers can also employ the Aid in back-office formatting of international transactions. Interested FedGlobal ACH customers can obtain a copy of the Aid using the online request form.

The Federal Reserve Banks have evaluated how FedGlobal ACH Payments Service offerings can assist customers in complying with the rule's requirements. All attempts are made to ensure that the information provided by the FedGlobal ACH Service related to the payments process is accurate; however, due to differences in foreign payment system rules and practices, this information is provided on a best efforts basis and is not guaranteed.

Risks

Federal Reserve Operating Circular 4 and the NACHA Operating Rules stipulate the rights, obligation and warranties with respect to the U.S. payments system. Differences in the U.S. and foreign country payments systems may pose operational risk to an ODFI. Credit risk also exists with respect to return items, including but not limited to the following example:

- Return timeframes may be extended due to differences in country regulations, causing the originator to absorb extended temporal foreign exchange (FX) currency exposure and extended temporal credit risk of unsuccessful return charge back. Originators should also note that a different FX rate can be applied to the originated item and the return. This difference varies by the destination currency and country.
- Financial institution accounts are denominated in a particular currency. It is the responsibility of the ODFI and originator to determine the currency that the receiver's account is denominated in and to properly format the IAT fields. Otherwise, there is the potential that if the receiving depository financial institution receives a cross-border ACH item denominated in the incorrect currency, the receiving depository financial institution may convert the item into the appropriate currency and post the item to the receiver's account, instead of returning the item back to the foreign gateway operator. This is generally the case if there is a standing agreement between the receiving financial institution and its customer to provide the foreign exchange conversion. However, this not a requirement in some destination countries. This foreign exchange conversion is outside the scope of the FedGlobal ACH service. If the receiving depository financial institution does return the item, the foreign exchange rate used does fall

under the FedGlobal ACH service. Ultimately, it is important for the ODFI to work with the originator to determine the appropriate destination currency related to the receiver's account.

Rules Differences

As noted earlier, the Federal Reserve Bank and the appropriate FGO serve as conduits to their domestic payment systems to process and deliver international ACH payments. ACH items originated in the United States are governed by U.S. laws and rules (including the NACHA Rules), until they cross the border into another countries. Once they arrive in the foreign country, foreign country local laws and rules apply.

Examples of rule differences include but may not be limited to the following:

- Different return time frames by country.
- Debit authorization requirements for Canada.
- Ability to hold local (destination) currency and/or U.S. dollar currency accounts.
- Regulatory requirements in foreign countries vary. The IAT format enables all participating U.S. financial institutions to provide the necessary and regulatory compliant information in the appropriate fields to be delivered to receiving financial institutions in foreign countries. If the information provided in the IAT fields is inaccurate or non-specific, the foreign gateway operator and/or the receiving financial institution may find it necessary to return the item. Therefore, it is important for the originating financial institution to work with the originator to be able to accurately format as well as provide quality information in the IAT records.

Prenotifications and Notifications of Change (NOC)

Prenotes are only supported to Panama. NOCs are only supported to Canada and Panama. To verify account information for a new receiver, a forward IAT credit for $2.00 may be sent. If the information for the receiver is incorrect, the receiving financial institution may return the item within the appropriate time frame for the receiving country.

ODFI Recalls and Reversals

Reversals are not supported in FedGlobal ACH. If an error is detected after a file has been submitted, the U.S. ODFI should contact the originator, which in turn should work with the receiver to request a refund of the duplicated funds. In addition, the U.S. ODFI can contact FedACH, who can provide contact information for the foreign RDFI. Please refer to the Customer Support section for FedACH and Checks Customer Support contact information.

The U.S. ODFI and/or originator are responsible for contacting the foreign RDFI or the beneficiary to request a refund of the item.

Holiday Processing

Foreign country banking holidays are not identical to U.S. banking holidays. ODFIs occasionally transmit items through FedACH for settlement on a foreign country banking holiday. When this occurs, FedACH will process the items, send to the FGO, and settle against the ODFI's settlement account on the specified settlement date. The FGO will process, deliver and settle the items to the foreign receiving financial institutions on the next banking day after the holiday. For payments that require a foreign exchange rate conversion, the foreign exchange rate applied will be the date of the foreign settlement date, which may be different than the U.S. settlement date. For a list of the foreign country's holidays, please refer to the following URL for a list of bank holidays throughout the world: http://www.bank-holidays.com/index.htm

Supplementary holiday schedules for FedGlobal ACH participating countries may be found in the appropriate section of the manual.

Customer Support

ODFI Item Trace

To initiate an item trace on a FedGlobal ACH transaction, U.S. ODFIs should contact their local FedACH central operations support center (COS). The Reserve Bank will work with the appropriate FGO to answer inquiries and a response should be provided within 3 business days. Transactions in amounts less than $20.00 may not be traced beyond FedACH (the U.S. GO) for FedGlobal ACH Payments. It is important to note that U.S. ODFIs are responsible for any investigation fees should they be assessed by foreign RDFIs or downstream payment participants.

FedACH and Checks Customer Support
Toll Free 1-(877) 372-2457, Option 6

Implementation Requirements

Service Request Form

FedGlobal ACH is available to ACH originating depository financial institutions upon request. Prior to participation, a financial institution will need to complete and return the Service Request Form(s) to their FedACH Sales Specialist. The Request Form(s) for FedGlobal ACH country destinations and the F3X service are available in Part 6A and Part 6A Section B, respectively, of the FedACH Participation Agreement located at http://www.frbservices.org/forms/fedach_services.html#fedachagreement
For questions regarding the Service Request Form(s), financial institutions should contact their FedACH Sales Specialist.

Pre-production Testing

To ensure that payments flow properly, an ODFI must complete testing with FedACH. To begin the testing process, financial institutions should complete the Service Request Form and submit it to their FedACH Sales Specialist. Once the completed form has been received, a FedACH testing coordinator will contact the financial institution to schedule testing.

The test involves the ODFI creating an ACH file that contains a mixture of valid and invalid forward items. FedACH testing is open anytime between Tuesday and Friday. The purpose of testing is to verify the ODFI's ability to successfully originate payments to be processed and delivered through the service using the IAT SEC code.

Following a prepared test script, the ODFI submits several valid and invalid 1 and 2-day items using the standard entry class code IAT. After FedACH processes the items, FedACH will create and send the ODFI a file containing returns, which the ODFI can receive and process. Upon the completion of a successful test, participants establish a date to begin sending payments to the appropriate country. Please note that pre-production test files are not delivered to destination countries for further validation.

FedGlobal ACH Geographic Reach

Region	Country	FX Options /Funds Available to RDFI*				
			FF-USD	FF-foreign currency (F3X)	FV	
North America	Canada		D+1		D+1	
	Mexico			D+1	D+1	
Central America	Panama		D+2			
Region	Country	FX Options /Funds Available to RDFI*				
		FF-USD	FF-foreign currency (F3X/EUR)	FF-foreign currency (F3X/GBP)	FV -EUR	FV- (non-EUR currency)
Europe	Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden	D+3	D+2		D+3	
	Switzerland	D+3	D+2		D+3	D+4
	United Kingdom	D+3	D+2	D+3	D+3	D+4

*Funds availability is based on 1-Day item origination. Refer to each country/region's section for actual cut off and delivery timeframes.

Country/Region Requirements

CANADA

Processing

Service Description

The Federal Reserve Bank and the Bank of Nova Scotia, known as Scotiabank, acts as the gateway operators and serve as conduits to their domestic payments systems to accomplish straight-through processing of payments. The Canada Service supports both forward ACH 1-day and 2-day debits and credits originated in the U.S. and destined to any receiver's account in Canada.

As Canada is a dual-currency country, it is common practice for customers in Canada to have bank accounts denominated in either Canadian or U.S. dollars. Therefore, the Canada service allows for the flexibility in foreign exchange options, depending upon what the Canadian receiver's account is denominated in – fixed-to-fixed (FF) or fixed-to-variable (FV). The items can be paid in a variable amount of Canadian dollars (FV-USD to Canadian dollars) based upon a daily exchange rate applied by Scotiabank or in U.S. dollars (FF- USD to USD). All settlement with U.S. participants is in U.S. dollars.

For FV payments, the exchange rate is applied on the date the items are processed by Scotiabank. Scotiabank establishes the foreign exchange rate on a daily basis and is posted on the FedGlobal ACH foreign exchange rate website no later than 12:00 ET each day. Daily and historic foreign exchange rate information is currently available at http://www.frbservices.org/app/fedachfx/ .

Canadian Payments System Overview

In Canada, the clearing and settlement of ACH payments is handled separately. There is no ACH Operator, and ACH payments are exchanged directly among banks that are known as direct clearers in the Automated Clearing Settlement System (ACSS). The Bank of Canada, which is the central bank, provides the settlement for payments processed. Canadian banks are classified as either a direct or indirect clearing bank. There are a small number of financial institutions that act as direct clearers; all other financial institutions are indirect clearers and must arrange for a direct clearer to act as an agent on their behalf within the clearing system.

Direct clearers and the Canadian government exchange ACH transactions via data transmission. Settlement for these direct sends is done at the end of the day through the ACSS operated by the Canadian Payments Association (CPA), which is linked to the Bank of Canada. Each bank's account at the Bank of Canada is adjusted based upon the net settlement data submitted.

As noted earlier, ACH items originated in the U.S. are governed by U.S. laws and rules (including OC4 and the NACHA Rules) until they cross the border into Canada. Once they arrive in Canada, Canadian laws and the rules of the CPA apply. The CPA, as the rulemaking authority in Canada, imposes significant financial penalties for rule violations. The Canadian payment rules can be obtained from the web site at http://www.cdnpay.ca. In the case that Scotiabank is notified for a CPA Rules violation, it will inform the ODFI that a violation has occurred and on a best effort basis, will work with the ODFI to ensure that the ODFI's payments are compliant with the CPA rules.

Examples of rule differences include but may not be limited to the following:

- Return times are longer in Canada than in the U.S. In Canada, consumers can return debits up to 90 days after the debit date. Businesses can return debits up to 10 days. Although credits are seldom returned, the same return timeframes apply. Participants in the Canada Service will need to ensure their ACH software allows for these differences in return times.

- While debits into Canada are supported, originating financial institutions must be aware of, and comply with, the substantive requirements of the Canadian payment system rule H-1 on pre-authorized debits ("PAD"). Please refer directly to the CPA Rules to review the requirements of Rule H-1 at: http://www.cdnpay.ca/imis15/pdf/pdfs_rules/rule_h1.pdf.
- Bill C-25 establishes procedures and laws of money laundering and terrorist financial reporting. Due to the nature of this bill, Scotiabank reviews all payments for proper compliance, including the quality of the data that is being passed from the U.S. to Canada. If for some reason, there are pertinent fields such as the receiver information, that is not properly formatted according to the NACHA formats and/or the quality of the data within the fields is not reasonable, Scotiabank will return the item back to the originating depository financial institution. For more information on Bill C-25, please refer directly to: http://www.fintrac.gc.ca/act-loi/1-eng.asp.

Payment and Settlement Flows

This section describes both processing and delivery schedules for the Canada Service. ODFIs submit a NACHA formatted file that may contain both domestic and cross-border transactions to FedACH. Cross-border items need to be batched separately within a file. FV payments also must be batched separately by debit and credit payments due to differing foreign exchange calculations for debits and credits. FedACH edits the file and validates that receipt is from an eligible participant. The deposit deadline for cross-border items is 02:15 ET. Files are transmitted to Scotiabank by 06:00 ET for further processing. Scotiabank translates the NACHA formatted items into the Canadian format and converts the U.S. dollar amounts into Canadian dollars if the items are FV. Subsequently, Scotiabank posts the transactions to receiving accounts held at Scotiabank or distributes the transaction to RDFIs in Canada.

Settlement for cross-border transactions between ODFIs and FedACH occurs in U.S. dollars and is reflected on the ACH End-of-Day Advice and Reserve Account Statement as domestic items are today. The Canadian receiver's account is credited or debited for the full amount of the transaction; the service structure requires that no fees be deducted by the receiving institution from the principle amount of the transaction entry.

Fixed-to-Variable (FV – USD to Canadian dollars) Items

This section describes the FV exchange option for both debit and credit transactions. The ODFI or Sending Point (SP) deposits an ACH input file with FedACH, which receives and processes the file. The deposit deadline is 02:15 ET on FedACH processing Day 0[4]. FedACH acknowledges receipt of the file for the ODFI/SP, creates the accounting entries, and makes available settlement information to the ODFI and Scotiabank. Scotiabank receives the Canadian items in the file from FedACH on Day 1. Scotiabank reformats the items, converts the U.S. dollar amounts into Canadian dollars at 10:00 ET and exchanges the payments with the Canadian banks. All settlement with U.S. participants is in U.S. dollars.

Fixed-to-Fixed (FF – USD to USD) Items

This section describes an ODFI sending payments to Canadian receivers using the FF payment option. The items are deposited by the ODFI/SP, received and processed by FedACH and forwarded to Scotiabank where the items are converted into the Canadian format. In this case, there is no foreign exchange, and the items are delivered to the Canadian banks in U.S. dollars. Due to the time frames for exchanging U.S. dollars in Canada, 1-day FF payments received by FedACH after 14:00 ET will be processed as 2-day payments.

[4] The convention of "Day 0" and "Day 1" is used to distinguish the "day" in which processing occurs versus the "day" in which settlement takes place and reflects the FedACH processing day cycle (e.g. start of Day "0" at 03:00 ET Monday through close of Day "0" at 02:15 ET on Tuesday).

"Morning Post" Delivery

In an effort to have funds availability at opening of business for time critical payroll or pension payments, FedGlobal ACH also offers an enhanced payment process known as "Morning Post". The Morning Post brings uniformity to beneficiary posting that is not otherwise available for a 2-day item. Both FV and FF items meeting the three criteria below will be processed according to the Morning Post.

1. 2-day Item received by FedACH by the 14:00 ET file input deadline;
2. NACHA IAT Batch Header Record Field 13, "Effective Entry Date," set to Day 0+2;
3. NACHA IAT First Addenda Record Field 3, "Transaction Type Code," designated as SAL (salary) or PEN (pension).

Items meeting these criteria will be delivered to Canadian RDFIs on Day 1 and funds are made available to beneficiaries at the opening of business on Day 2.

FedGlobal ACH Canada Service Processing and Delivery Schedule				
FX Indicator & Type	**Settlement Date**	**ODFI Input Deadline**	**FX Rate Set**	**Payments Delivered to RDFIs**
FV - CAD	Day 1	02:15 ET, Day 0	10:00 ET, Day 1	14:30 ET Day 1
FF - USD	Day 1	14:00 ET, Day 0		10:00 ET Day 1
FF - USD	Day 1	After 14:00 ET, Day 0 to 02:15 ET, Day 0		10:00 ET Day 2
FF - USD	Day 2	02:15 ET, Day 0		10:00 ET Day 2
FV - CAD	Day 2	02:15 ET, Day 0	10:00 ET, Day 2	14:30 ET Day 2

Morning Post Processing and Delivery Schedule				
FX Indicator & Type	**Settlement Date**	**ODFI Input Deadline**	**FX Rate Set**	**Payments Delivered to RDFIs**
FF - USD	Day 2	14:00 ET, Day 0		10:00 ET Day 1
FV - CAD	Day 2	14:00 ET, Day 0	*10:00 ET, Day 1	14:30 ET Day 1

*Note that for the Morning Post delivery, the foreign exchange rate used for 2-day items will be the FX rate set on D+1

Holiday Schedule

Canadian banking holidays are not all identical to U.S. banking holidays, and ODFIs occasionally transmit items through FedACH for settlement on a Canadian holiday. When an ODFI submits items for settlement on a national Canadian holiday that is not a U.S. holiday, FedACH will process the items and settle against the ODFI's settlement account on the specified settlement date, and Scotiabank will process, deliver and settle the items to the receivers in Canada on the next Canadian banking day after the holiday. The FX Rate will then be set according to the rate posted on the business day following the holiday and funds availability will be at the opening of business on the following day.

Canadian Banking Holidays
New Year's Day
Family Day
Good Friday
Victoria Day
Canada Day
Civic Holiday
Labor Day
Thanksgiving Day
Remembrance Day
Christmas Day
Boxing Day

Notification of Change (NOCs)

NOC processing is supported in the Canada Service and NOCs may be initiated to notify ODFIs in the U.S. that previously valid information contained in a posted entry has become outdated and should be changed. Scotiabank complies with the NOC format specifications outlined in the NACHA Rules.

Exception Processing

Return Items

When Scotiabank receives files from FedACH, they are processed and posted to receiving accounts at Scotiabank or distributed to receiving institutions through the Canadian clearing system. Subsequently, Scotiabank or the Canadian RDFI may find it necessary to return an item. The item will be returned with the original dollar amount adjusted as necessary based upon the prevailing exchange rate, and the original forward item amount will be referenced in the return addenda record (field eight, position 47-56).

The procedures noted below outline the steps involved in two return item scenarios: items returned/rejected by Scotiabank and items returned by a Canadian RDFI. The items will be returned using one of the following U.S. NACHA Return Reason codes.

Code	Reason
R01	Insufficient Funds
R02	Account Closed
R03	No Account/Unable to Locate Account
R04	Invalid Account Number
R06	Returned per ODFI's Request
R07	Receiver Dispute
R08	Payment Stopped

R09	Uncollected Funds
R10	Customer Advises Not Authorized
R12	Branch Sold to Another DFI
R14	Representative Payee Deceased or Unable to Continue in that Capacity
R15	Beneficiary or Account Holder (Other Than Representative Payee) Deceased
R16	Account Frozen
R17	File Record Edit Criteria
R20	Non-Transaction Account
R24	Duplicate Entry
R80	Cross-Border Payment Coding Error
R81	Non-Participant in Cross-Border Program
R82	Invalid Foreign Receiving DFI Identification
R83	Foreign Receiving DFI Unable to Settle
R84	Entry Not Processed By OGO

Items returned by Scotiabank

Upon receipt of items from FedACH, Scotiabank may be unable to process some payments and will return these payments. Items may be returned because the Canadian RTN and account numbers within the addenda records are not within Scotiabank's defined edit range. It is critical that ODFIs ensure that items returned for edit failures are corrected before they are retransmitted. This will avoid having items reject "multiple times" for the same edit error.

Additionally, Scotiabank will reject debit payments if the effective entry date is more than 173 calendar days prior to the processing date. Credit payments will be rejected if the effective entry date is more than 30 calendar days prior to the processing date. These date ranges were set by Scotiabank to conform to the timeframes established in the CPA Rules.

Please note that edits at Scotiabank occur after foreign exchange is applied to Fixed to Variable items. Therefore, there will not be any immediate rejects from Canada. All rejects and returns to U.S. financial institutions from Scotiabank will be converted back to U.S. Dollars on the next business day and the amount sent back will likely be less than the amount first originated.

Items returned by the RDFI or receiver

Items processed by Scotiabank to the receiving institution may be returned if the RDFI is unable to post the items (account closed, invalid account number, etc). Items will generally be returned no later than the business day following receipt by the first organizational unit that is able to make or act upon a decision to accept an item.

ODFI Item Trace

Transactions in amounts less than $20.00 will not be traced beyond FedACH (the U.S. GO) for FedGlobal ACH Canada Service Payments. Refer to the Customer Support section for FedACH contact information to initiate an item trace request.

Other Information

Sample Canadian Check

During the sign-up process the financial institution should work with its originator(s) and their customers to obtain accurate information on the Canadian institution's routing and receiver's account number(s).

It is important to validate account numbers in the set-up process to ensure payment processing is not delayed once service begins. An example of a voided Canadian check is provided below. The illustration should help with identifying the Canadian routing and account numbers.

The check sample illustrates how to identify the "Foreign Receiving DFI Identification" number that must be inserted in field 5 of the NACHA addenda record. In the example below, padded with a leading zero, the routing transit number would be "**000295042**". The receiver's account number is "**06940234567**". It is necessary to follow the routing transit formatting routine described when items are entered into the IAT format to avoid an edit failure and return of items by Scotiabank.

Average Company Ltd. **N408911**
555 Main Street East
Toronto, Ontario M5K1X1 _____20_____

Pay to the order of _____$_____
VOID
_____/100 DOLLARS

The Scotiabank Bank
Toronto Centre Branch
55 King St. W. & Bay St.
Toronto, Ontario M5K 1A2

408911: 95042 : 002 : 0694:0234567

Step One: insert the receiver's account number, '06940234567' in field 8 of the IAT entry detail record.

Step Two: add a leading zero to the Institution Number to = 0002

Step Three: combine with Branch Transit number to = 000295042

The routing transit number is inserted into the 5th IAT addenda record in field 5, Foreign Receiving DFI Identification.

CPA Member Directory

Financial institutions can contact Bowne of Canada, Ltd to obtain directories containing information to facilitate the routing of payments to the appropriate branches of CPA members. Prices vary according to the format and frequency of updates selected by the subscriber. The contact information is:

Bowne of Canada, Ltd.
60 Gervais Drive,
Toronto, ON M3C 1Z3
Phone (416) 449-6400
Fax (416) 449-7114

MEXICO

Processing

Service Description

The Federal Reserve Bank of Atlanta and Banco de México, known as Banxico, acts as the gateway operators and serve as conduits to their domestic payments systems to accomplish straight-through processing of payments. The Mexico service supports both forward ACH 1-day and 2-day credits originated in the U.S. and destined to any receiver's account. Both payment options to Mexico offer funds availability to the receiver on the U.S. settlement day.

Mexican Payments System Overview

Sistema de Pagos Electrónicos Interbancarios, known as SPEI, is the real-time gross settlement system owned and operated by the Central Bank of Mexico, Banco de México (Banxico). Payments processed through SPEI are settled in the accounts of Banxico. The Banco de México Act of 1993 lays down the responsibilities and powers of the Central Bank. Under this Act, Banco de México shall promote the financial system's sound development and the proper functioning of the payments system, being empowered to regulate financial operations and payment systems, including funds transfer systems operated by banks or other firms.

ACH items originated in the United States are governed by U.S. laws and rules (including the NACHA Rules), until they cross the border into another countries. Once they arrive in Mexico, Mexican laws and the rules of SPEI apply. Examples of rule differences include but may not be limited to the following:

- Prenotes and NOCs are not supported in Mexico.
- Return times for Mexico are shorter than in the U.S for credit items. In SPEI, timeframes for returns are the same business day as the day of receipt. If these transactions are not received within the same business day, they will need to be handled individually and outside of the SPEI network.
- Mexican financial institutions do not distinguish between checking and savings accounts.

In Mexico, banking institutions are identified by a three-digit number assigned by the Asociación de Banqueros de México (ABM) which is the Mexican Bankers Association. ABM has a website: http://www.abm.org.mx, but a bank number catalogue is not published. Noted in Appendix VIII is a list of the financial institutions that can be reached through FedGlobal ACH.

Mexican Receiver Account Numbers

There are two types of account numbers that ODFIs can use to originate a cross-border item to Mexico; checking account number, known as the CLABE, or a debit card account number.

1. The CLABE (Clave Bancaria Estandarizda) is a standardized bank code that was established by the Mexican banking system for checking account numbers. It is an 18-digit number that uniquely identifies account holders and guarantees the correct posting of the electronic funds transfer operations throughout the SPEI processing platform. The CLABE replaced the previous numbering scheme for checking accounts, which was an 11-digit number. The receiver can easily identify his or her CLABE as it appears on the customer's checking account statement or it can also be obtained directly from the bank in Mexico that offers the account.

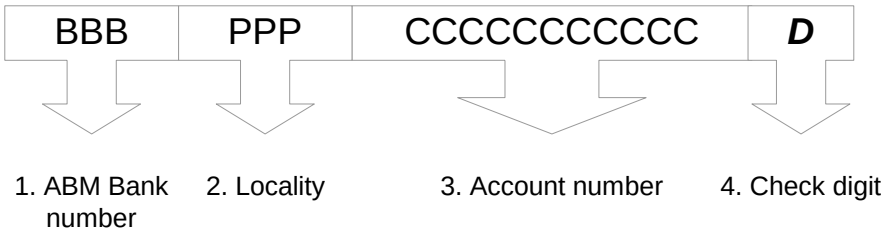
An originator must ensure that it receives the 18-digit CLABE associated with the checking accounts held by receivers in Mexico to ensure that the payments can be processed. Items containing the previous 11-digit checking account number can no longer be processed successfully.

2. The second numbering scheme pertains to debit card accounts. Debit card account numbers have 16-digit numeric positions. They are not affected by the CLABE requirement, which applies only to checking accounts. Please note that debit card account numbers change if the card is lost or cancelled. All debit card accounts have a CLABE account number associated with it, therefore it is recommended that the ODFI ask for the CLABE account number.

.

Calculating a CLABE Check Digit

A CLABE check digit calculator is available at http://www.frbservices.org/serviceofferings/fedach/mexico_resources.html .



CLABE structure

1. BBB	ABM Bank Number; 3 digits.
2. PPP	Locality; 3 digits.
3. CCCCCCCCCCC	Checking Account number; 11 digits.
4. D	Check digit, 1 digit.

Calculating the check digit: Example

As an example, take the CLABE where the first 17 positions are: 10315012415234578. In this case we have:

1. The check digit process involves a weight factor (3 7 1 3 7 1 3 7 1 3 7 etc.). Multiply each of the first 17 digits of the CLABE by its corresponding weight. Record only the digit in the "ones" position. For example in the 5th position, there is a 5 * 7 = 35. Only record the "5".
2. Sum the results of step 1. (3+0+3+3+5+0+3+4+4+3+5+2+9+8+5+1+6 = **64**)
3. Take the last digit of the sum, which in this example is **4**.
4. Subtract the figure from Step 3 from the number 10. (10-4 = **6**; the check digit of the CLABE is 6.) **Please note: If the last digit of the sum from Step 3 is 0, the check digit of the CLABE will be 0 as 10-0 is equal to 0.**

	Position	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1
											0	1	2	3	4	5	6	7
A	17 Digits	1	0	3	1	5	0	1	2	4	1	5	2	3	4	5	7	8
B	Weight	3	7	1	3	7	1	3	7	1	3	7	1	3	7	1	3	7
Ai*Bi	Product	3	0	3	3	5	0	3	4	4	3	5	2	9	8	5	1	6
	Addition result	64																
PR	Preliminary result	4																
10-PR	Check Digit	**6**																

Foreign Exchange Options
As the majority of accounts in Mexico are denominated in Mexican pesos, the Mexico service supports payments to be received in accounts denominated only in pesos. There are a small percentage of bank accounts denominated in U.S. dollars or other foreign currency and currently not supported in this service. Therefore, the Mexico service allows for the ability to send cross-border items using the fixed-to-variable (FV – USD to pesos), known as Directo a Mexico®, or fixed-to-fixed (FF – pesos to pesos), known as the F3X service.

For the FV process, the items are originated in a fixed amount of USD and paid in a variable amount of Mexican pesos based upon a daily exchange rate applied by Banxico. The exchange rate applied is on the date the items are processed by Banxico. Banxico established the foreign exchange rate on a daily basis and is posted on the FedGlobal ACH foreign exchange rate website shortly after 13:00 ET each day. Daily and historical foreign exchange rate information is available at http://www.frbservices.org/app/fedachfx/ . All settlement with U.S. participants is in U.S. dollars for the FV process.

For the F3X process, the items are originated and received in a fixed amount of pesos, enabling the ODFI to manage its own foreign exchange rate with its customers. Settlement is conducted outside of the ACH network through a foreign correspondent, known as the Mexican Correspondent Financial Institution (MCFI). This foreign exchange option requires a separate service request form with the Federal Reserve Banks to be able to participate. Please contact your FedACH Sales Specialist for this service request form. Additionally, the ODFI must enter into and maintain an account with a MCFI that is authorized to participate in SPEI, and that is capable of originating and receiving payments through the SPEI system. SPEI is the Mexican real time settlement system owned and operated by Banxico. A list of MCFIs is included in the following section, Mexican Payment System Overview.

There are two processing streams involved for the F3X Service. The first processing stream consists only of the transmission of F3X ACH messages between the ODFI and Banxico via the FedACH. Once the ODFI transmits the F3X ACH messages to FedACH, FedACH will edit, process, and send the messages to Banxico. Banxico then will edit, and hold the F3X messages pending certain actions taken by the ODFI through an MCFI in the second processing stream of this service. This first phase does not involve any kind of settlement between the ODFI, FedACH and Banxico.

The second processing stream involves the ODFI requesting the MCFI to send a payment order to Banxico via the SPEI System that satisfies certain formatting, informational and settlement requirements as set forth in this service manual and the SPEI Rules. Assuming that the payment order from the MCFI satisfies these requirements, Banxico will link this payment order with corresponding F3X ACH messages it receives from FRB and will then send all corresponding items via SPEI to the appropriate receivers' account at the Mexican RDFIs in accordance with the information contained in the F3X ACH messages. The ODFI is considered the initiator of the payment instruction. The MCFI serves as the ODFI's settlement correspondent of pesos in Mexico and the SPEI participant that is instructing Banxico as the providing participant to disburse cross-border items according to the SPEI Rules.

Payment and Settlement Flows
This section describes both processing and delivery schedules for the Mexico Service. ODFIs submit a NACHA formatted file that may contain both domestic and cross-border transactions to FedACH. Cross-border items need to be batched separately within a file. Additionally, ODFIs will need to batch FV itemsand F3X items separately. FedACH edits the file and validates that receipt is from an eligible participant. The deposit deadline for cross-border items is 02:15 ET. Files are transmitted to Banxico by

06:00 ET for further processing. Banxico translates the NACHA formatted items into the Mexican SPEI format and converts the U.S. dollar amounts into Mexican pesos if the items are FV. Subsequently, Banxico distributes the transaction to RDFIs in Mexico with funds availability to the receiver no later than 15:30pm ET.

Fixed-to-Variable (FV – USD to Mexican pesos) Items

This section describes the FV exchange option for credit transactions, which includes both account-to-account and account-to-receiver. The ODFI or Sending Point (SP) deposits as ACH input file with FedACH, which receives and processes the file. The deposit deadline is 02:15 ET on FedACH processing Day 0[5]. FedACH acknowledges receipt of the file for the ODFI/SP, creates the accounting entries, and makes available settlement information to the ODFI and Banxico. Banxico receives the Mexican items in the file from FedACH by 06:00 ET on Day 1. Banxico reformats the items, converts the U.S. dollar amounts into Mexican pesos at 13:30 ET and exchanges the payments with the Mexican banks. All settlement with U.S. participants is in U.S. dollars.

The same exchange rate process is used for account-to-account and account-to-receiver payments to Mexico.

Fixed-to-Fixed (FF – pesos to pesos) Items – F3X Service

This section describes an ODFI sending payments to Mexican receivers using the F3X service option. The F3X ACH messages are deposited by the ODFI/SP by 2:15 ET on Day 0, received and processed by FedACH and forwarded to Banxico by 06:00 ET on Day 1 where the items are converted into the Mexican SPEI format.

Separately, the ODFI instructs its MCFI to submit a SPEI payment order to Banxico with the total peso amount of the appropriate F3X Messages the ODFI has transmitted to FedACH on that day with the same settlement date. The settlement date used is indicated in the Company Batch Header in an F3X message if that day is a banking day for Banxico, and the following Banxico banking day if the settlement date in the F3X message is a Mexican holiday. The ODFI must instruct its MCFI to submit the SPEI payment order to Banxico with sufficient time to allow the MCFI to meet the 12:30 ET deadline.

The ODFI can submit the settlement instruction to the MCFI in two ways – "pooled" settlement or "batched" settlement. For "pooled" settlement, the ODFI will submit one payment order with the total pesos amount for all F3X batches transmitted to FedACH that have the same settlement date. For "batched" settlement, the ODFI will submit one payment order with the total pesos amount for each F3X batch transmitted to FedACH that has the same settlement date for that day. The MCFI will then submit a SPEI formatted payment order with sufficient time to arrive at Banxico no later than 12:30 ET with the corresponding pesos amount.

Each SPEI payment order will need to contain the following information for Banxico to appropriately link the F3X ACH messages with the settlement payment order:

- SPEI payment type: Third Party to Third Party (consumer to consumer)
- SPEI payment order to be sent to Banxico (SPEI code: 001)

[5] The convention of "Day 0" and "Day 1" is used to distinguish the "day" in which processing occurs versus the "day" in which settlement takes place and reflects the FedACH processing day cycle (e.g. start of Day "0" at 03:00 ET Monday through close of Day "0" at 02:15 ET on Tuesday).

- ODFI account number ("CLABE" number) assigned by Banxico after the FedGlobal ACH enrollment process. The account number will be generated by Banxico and communicated to the ODFI by email.
- Unique reference code included in the F3X ACH messages for the ACH batch(es) to be settled. This reference code will need to comply with the coding requirements described in Appendix IV and be placed in the "Concepto del Pago" field of the SPEI payment order

Once the SPEI payment orders have been received and reconciled, Banxico will edit and transmit SPEI payments to the appropriate Mexican RDFIs as specified by the instructions contained in the F3X ACH messages, no later than 15:30 ET on the Banxico settlement date. This means that F3X items to Mexico in advance of the 12:30 ET cut-off time frame will be forwarded to MRDFIs earlier than items which require foreign exchange conversion.

No settlement occurs between the ODFI and FedACH. Settlement only occurs between the ODFI and the MCFI, the MCFI and Banxico, and between Banxico and the Mexican RDFI's. Settlement from Banxico to the Mexican RDFIs is on the same day as the ODFI settlement date as indicated in the F3X messages, provided that it is a banking day in Mexico. The receivers' accounts are also credited on the same day as this settlement date for the full amount of the payment (as the service structure requires that no fees be taken from the par amount of the transaction entry).

Holiday Schedule

Mexican banking holidays are not all identical to U.S. banking holidays, and ODFIs occasionally transmit items through FedACH for settlement on a Mexican holiday. When an ODFI submits items for settlement on a national Mexican holiday that is not a U.S. holiday, FedACH will process the items and settle against the ODFI's settlement account on the specified settlement date for the FV process, and Banxico will process, deliver and settle the items to the receivers in Mexico on the next Mexican banking day after the holiday. For the F3X service, the ODFI will need to initiate the SPEI payment order on the next Mexican banking day after the holiday.

Mexican Banking Holidays
New Year's Day
Constitution Day
Benito Juárez's Birthday
Holy Thursday
Good Friday
Labor Day
Independence Day
Day of the Deaths
Mexican Revolution Day
Virgin of Guadalupe Day
Christmas Day

Exception Processing

Return Items

When Mexico receives ACH files from FedACH, they are processed and distributed to receiving institutions through the Mexican payments system. Subsequently, the Mexican RDFI may find it necessary to return an item.

The procedures noted below outline the steps involved in two return item scenarios: items returned/rejected by Banxico and items returned by a Mexican RDFI. The items will be returned using one of the following U.S. NACHA Return Reason codes.

Code	Reason
R02	Account Closed
R03	No Account/Unable to Locate Account
R04	Invalid Account Number
R06	Returned per ODFI's Request
R16	Account Frozen
R17	File Record Edit Criteria
R80	Cross-Border Payment Coding Error
R81	Non-Participant in Cross-Border Program
R82	Invalid Foreign Receiving DFI Identification
R83	Foreign Receiving DFI Unable to Settle
R84	Entry not Processed by OGO

Items returned by Banxico

Upon receipt of items from FedACH, Banxico may be unable to process some payments and will return these payments. For the FV process Banxico will return the cross-border items prior to applying the foreign exchange rate conversion. Items may be returned because the Mexican ABM or the CLABE account number is invalid or incorrect. It is critical that ODFIs ensure that items returned for edit failures are corrected before they are retransmitted. This will avoid having items reject multiple times for the same edit error.

For the F3X process, Banxico may return a cross-border item for the same reasons as the FV process, in addition to the following return scenarios related to inability to link the F3X ACH messages to the settlement payment order, or not receiving adequate funds by the MCFI. Refer to the end of this section for specifications related to the SPEI payment order returns.

a. **Insufficient Pooled Settlement**. If the SPEI payment order for "pooled" settlement from the MCFI does not contain funds in an amount that is equal to or exceeds the sum of all the F3X ACH messages that have the appropriate settlement date from the ODFI, then Banxico will return all the F3X ACH messages back to FedACH in the NACHA format with the return reason code "R83" and will return the funds received from the MCFI by SPEI payment order to the MCFI.

b. **Insufficient Batched Settlement**. If the SPEI payment order for "batched" settlement from the MCFI does not contain funds in an amount that is equal to or exceeds the sum of all the F3X ACH messages contained in a batch that is linked to the payment order, then Banxico will return all the F3X ACH messages contained in the batch back to FedACH in the NACHA format with the return reason code "R83" and will return the funds received from the MCFI by SPEI payment order to the MCFI.

c. **Mismatched Batches or Lack of ODFI CLABE number.** If the Company Entry Description Field in a batch of F3X ACH messages Banxico receives from the ODFI and the "Concepto del Pago" field in the SPEI settlement message received from the MCFI do not match ("Mismatched Batches"), then Banxico will return the F3X ACH messages contained in

such mismatched batches and generate the corresponding returns to FedACH in the NACHA format with return reason code "R83". Similarly, Banxico will return all F3X ACH messages contained in batches for which there is no corresponding payment order from a MCFI that contains the matching ODFI CLABE number. Banxico will return all funds received from the MCFI related to any mismatched event to the MCFI through SPEI.

d. **Mismatched funding.** If the field "Concepto del Pago" included into the SPEI payment order coming from the MCFI does not comply with the structure specified in Appendix V, settlement for those transactions will be returned to the MCFI through SPEI.

e. **Excess of Funds**. In the event there are more than sufficient funds to cover all F3X ACH messages that Banxico has received from an ODFI through FedACH that have the appropriate settlement date, Banxico will return the difference between the funds received from that ODFI through the MCFI and the total amount of payment orders Banxico submitted to Mexican RDFIs based on the information contained in the corresponding F3X ACH messages ("Excess"). Settlement for those transactions will be returned to the MCFI by 14:00 ET through SPEI.

f. **Funds received from the MCFI after 12:30 ET.** All the SPEI payment orders related to the F3X process received after 12:30 ET will be returned to the MCFI through SPEI payment orders. If Banxico receives these funds before 17:00 ET, Banxico will return the resultant SPEI payment orders to the MCFI no later than 17:30 ET on the same banking day. If Banxico receives the funds after 17:00 ET, Banxico will forward the resultant SPEI payment orders to the MCFI on the following banking day, at 10:00 ET. Banxico will return the F3X ACH messages contained in such mismatched batches and generate the corresponding returns to FedACH in the NACHA format with return reason code "R83".

Items returned by the RDFI or receiver

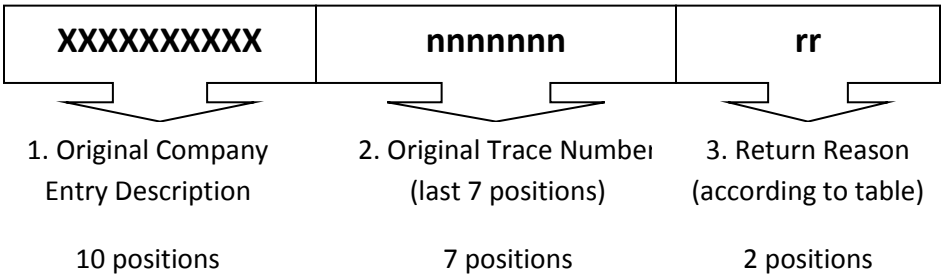
All items processed by Banxico to the receiving institution may be returned if the RDFI is unable to post the items (e.g. account closed, invalid account number, etc). Items will generally be returned no later than the business day following receipt by the first organizational unit that is able to make or act upon a decision to accept an item.

For all returns, if the Mexican RDFI submits the return to Banxico before 17:00 ET, Banxico will forward the return to FedACH no later than 17:30 ET on the same Banxico banking day. FedACH will then make the return items available to the US ODFI by 22:00 ET on the same banking day. If the Mexican RDFI submits the return to Banxico after 17:00 ET, Banxico will forward the return to FedACH no later than 10:00 ET on the following Banxico banking day, and FedACH will then make the return items available to t he US ODFI by 13:00 ET that same banking day. It is important to note that for cross-border items using the FV process, Banxico will re-convert the payment bank into U.S. dollars prior to sending the items to FedACH. The foreign exchange rate used will not be the same as the original forward item and therefore the U.S. dollar amount returned may not be the same as originally sent.

For the F3X service, return settlement will follow the same channels as the forward process. At the same time Banxico transmits return items to FedACH, Banxico will settle with the MCFI for such returns by making a SPEI payment for each MRDFI return Banxico forwarded to the USODFI via FedACH on that day. Settlement for those transactions will be returned to the MCFI through SPEI according to the following information.

SPEI Format Returns for the F3X Service

Banxico will include in the additional information of the SPEI instructions, field "Concepto del pago", the reason for the return.



Return reason code	Concept	Settlement message	"Concepto del pago" field in SPEI message	Occurs when
01	Mismatched Funding: Inability to link the SPEI Payment Order with the ACH Messages for due to a format error in the "Concepto del Pago" field	In this case there is not a specific batch Id nor trace Number: Banxico will use the original Concepto del Pago coming from the MCFI	**1F3X12345600000001**	The field "Concepto del Pago" included into the SPEI message coming from the MCFI does not comply with the structure specified in Appendix IV. Settlement schedule in SPEI: no later than 14:00 ET (13:00 Mexican Central Time)
02	Mismatched Batch: Inability to link the Payment Order with the ACH message due to inconsistency between "Concepto del Pago" and "Company Entry Description"	The original Concepto del Pago will be returned to the MCFI, with the corresponding exception code. In this case there is not a specific Trace Number, Banxico will use a 7 zeroes string.	**1F3X12345600000002**	For pooled settlement: The batch counter included into the SPEI message coming from the MCFI is minor to the number of USODFI's batches to be settled on that date. For batch settlement: There is no correspondence between the field "Concepto del Pago" included into the SPEI message coming from

	fields.			the MCFI, and the batches IDs to be settled for the USODFI on that day. File Reject: A whole file has been rejected because Banxico does not have any ID from the batches included in that file. Settlement schedule in SPEI: no later than 14:00 ET. (13:00 Mexican Central Time)
03	Excess of funds	As the excess funds are not the return of a SPEI Payment Order from a MRDFI, Banxico will insert 7 zeroes in the original "Concepto del Pago" field plus the exception code "03"	**1F3X1234560000000003**	The MCFI has sent more funds than necessary for settlement. Settlement schedule in SPEI: no later than 14:00 ET. (13:00 Mexican Central Time)
04	Insufficient funds	The original "Concepto del Pago" will be returned to the MCFI, with the corresponding exception code.	**1F3X1234560000000004**	The amount settled is smaller than the amount expected. All the batches included in the SPEI Payment Order will be sent back. The items included in the ACH return file will have the exception code "R83". Settlement schedule in SPEI: no later than 14:00 ET. (13:00 Mexican Central Time)
05	Returns from the MRDFIs	The field "Concepto del Pago" included in the SPEI Message from Banxico to the MCFI will contain	**1F3X1234561234567005**	When the MRDFI cannot post the funds, it must return the items and Banxico must generate a Payment

		the original Company Entry Description, the original trace number (last 7 digits) and the corresponding exception code for each item.		Order to the MCFI for each item returned. Settlement schedule in SPEI: No later than 17:30 ET (16:30 Mexican Central Time), provided that said return is received no later than 17:00 ET (16:00 Mexican Central Time), or on the following Banking Day at 10:00 ET (9:00 Mexican Central Time), if the return is received after 17:00 ET (16:00 Mexican Central Time)
06	Item/Batch rejects When they do not comply with standard edits	The original "Concepto del Pago" will be included in the SPEI Payment Order to the MCFI, with the corresponding exception code. In this case there is not a specific Trace Number, Banxico will use a 7 zeroes string.	**1F3X12345600000000006**	There has been batch/ item rejected by Banxico Settlement schedule in SPEI: no later than 14:00ET (13:00 Mexican Central Time)
07	Funds Received after deadline	The original "Concepto del Pago" will be returned to the MCFI, with the corresponding exception code.	**1F3X12345600000000007**	The Payment Order related to F3X settlement was received after 12:30 ET (11:30 Mexican Central Time). Settlement schedule in SPEI: on the same day no later than 17:30 ET (16:30 Mexican Central Time), provided that said Payment Order was received no later than 17:00 ET (16:00

				Mexican Central Time), or on the following Banking Day at 10:00 ET (9:00 Mexican Central Time), if the payment is received after 17:00 ET (16:00 Mexican Central Time).
13	Not a participant in the F3X Service	The original "Concepto del Pago" will be included in the return to the Correspondent Participant.	**N/A**	When the USODFI is not identified as a participant in the F3X Service, a return to the Correspondent Participant will be generated.

Other Information

Operational Tools
SELF-SERVICE ITEM TRACE WEBSITE
https://www.banxico.org.mx/mispei/inicio.do

Banxico has established a website which enables a US ODFI to trace SPEI payment orders for the last 3 business days between Banxico and the Mexican RDFI as well as between the MCFI and Banxico (for the F3X Service). To trace payment orders, the US ODFI should enter the last 7 digits of the trace number contained in the IAT Entry Detail Record in addition to the appropriate sending and receiving Mexican institutions. For the FV process, the sending institution is Banxico (ABM 001) and the receiving institution is the appropriate Mexican RDFI corresponding to the cross-border ACH item. For the F3X process, the sending institution is the MCFI, while the receiving institution is Banxico (ABM 001). Refer to Appendix VIII for more information about using the self-service item trace website.

The US ODFI may also contact the FedACH and Checks Customer Support to initiate a formal item trace. The Reserve Bank will work with Banxico to answer inquiries and a response should be provided within 1 to 4 business days. For the F3X process, if inquiries relate to settlement delivery, US ODFIs should contact the MCFI, who can contact Banxico for a resolution.

BENEFICIARY ACCOUNT REGISTRATION (BAR) WEBSITE
Financial institutions using Directo a Mexico can now use the Beneficiary Account Registration (BAR) Website offered by Bansefi, a development bank owned by the Mexican government. This innovative tool allows U.S. financial institutions to pre-open an account at any Bansefi or participating L@Red de la Gente credit union branch for a third-party beneficiary in Mexico, who then has 10 days to go to the selected branch, formalize the account and receive their money. By increasing financial access in Mexico and promoting bank usage, Bansefi has removed the obstacle in account-to-account remittances from the U.S. to Mexico. For more information, financial institutions should contact their FedACH Sales Specialist or Bansefi directly at barwebsite@bansefi.gob.mx.

Marketing Tools

DIRECTO A MEXICO WEBSITE AND TUTORIAL

The Federal Reserve Bank and Banco de Mexico have developed a Directo a México website in an effort to support the brand and extend it more broadly into the marketplace. Accessible at www.directoamexico.com, this website offers information in Spanish and English tailored to both consumers and financial institutions. It also includes daily information on the foreign exchange rate used, FAQs, and a branch locator tool for active and participating U.S. ODFIs.

PROFECO

Mexico's Department of Consumer Protection (Procuraduría Federal del Consumidor), known as PROFECO for short, is part of an educational effort of the Mexican government to promote informed consumer choices when purchasing remittances. Under its "Who's Who in the Remittance Market" program, Profeco offers US financial institutions the opportunity to be listed free of charge on its website as providers of the Directo a México service. Including information on your financial institution will help get the word out to the Mexican community in the US about your remittance products.

The website can currently be viewed in Spanish at the following URL: www.profeco.gob.mx/envio/envio.asp Information listed on Profeco's website specifically about Directo a México can be viewed in Spanish at www.profeco.gob.mx/envio/serv_int.asp

Although a listing on the Profeco website could be useful as a marketing tool, participation by a US financial institution is entirely optional. If your financial institution would like to participate, use the Profeco Registration Form found on the following page of this manual to provide the information required for a listing on the website. The form includes fields in which to submit the name and necessary contact information of your financial institution, as well the names and locations of its branches that offer Directo a México. The registration form also contains fields for submitting your institution's per-item fees, cancellations fees, withdrawal fees, minimum balances and discounts or promotions associated with Directo a México.

Please note that a US financial institution may add language that references the Profeco website in its marketing materials as long as such materials do not suggest an endorsement of the institution by Profeco.

Once the form is completed, please email it to enviodeldinero@profeco.gob.mx. In addition, please copy Ramiro Domínguez at rdominguez@banxico.org.mx from Banco de México.

When applicable, email updates on changes in service fees or contact information to enviodedinero@profeco.gob.mx.

REGISTRATION FORM

PROFECO'S "WHO'S WHO IN THE REMITTANCE MARKET" PROGRAM

SOLICITUD DE PARTICIPACIÓN

PROGRAMA <<QUIÉN ES QUIÉN EN EL ENVÍO DE DINERO>> DE PROFECO

Name of financial institution *Nombre de entidad financiera*		Contact person and title *Persona con quien comunicarse y su cargo*
Telephone / *Teléfono*	E-mail / *Correo electrónico*	
Address of headquarters or main branch / *Dirección de sede o sucursal principal*		
Website address / *Dirección de página web*		
Per-item charge *Comisión por envío*	Cancellation fee *Cargo por suspensión de envío*	Withdrawal fee *Cargo por retiros*
Required minimum balance *Saldo mínimo requerido*	Discounts or promotions *Descuentos o promociones*	

BRANCH INFORMATION / *INFORMACIÓN DE SUCURSALES*

Branch name / *Nombre de sucursal*	City and state / *Ciudad y estado*

Branch name / *Nombre de sucursal*	City and state / *Ciudad y estado*

Branch name / *Nombre de sucursal*	City and state / *Ciudad y estado*

Branch name / *Nombre de sucursal*	City and state / *Ciudad y estado*

Please email this form to enviodedinero@profeco.gob.mx and copy the following email address: rdominquez@banxico.org.mx

PANAMA

Processing

Service Description

The Federal Reserve Bank, Banco Nacional de Panama and Telered S.A. work together to serve as conduits to their domestic payments systems to accomplish straight-through processing of payments. Banco Nacional de Panama acts as the foreign gateway operator, while Telered acts as the processing and information service provider and agent for all cross-border items in Panama. The Panama Service supports forward ACH 1-day and 2-day credits originated in the U.S. and destined to any receiver's account at a commercial bank in Panama.

As Panama's official currency is U.S. dollars, there is no foreign exchange conversion process. Therefore, the Panama service allows for the fixed-to-fixed (FF- USD to USD) foreign exchange process. All settlement between all parties in the U.S. and Panama is in U.S. dollars.

Panamanian Payments System Overview

In Panama, the ACH network was established in 1998 and is maintained, regulated and operated by Telered's *ACH Directo* service. ACH Directo uses the NACHA Rules as a basis for the Panama ACH network and has been an affiliated NACHA member since 1997. Today the network has more than 30 member financial institutions and more than 3,500 originators. Banco Nacional de Panama, which is the central bank, provides the settlement for payments processed to the Panamanian RDFIs.

As noted earlier, ACH items originated in the U.S. are governed by U.S. laws and rules (including OC4 and the NACHA Rules) until they cross the border into Panama. Once they arrive in Panama, Panamanian laws and the rules of the local ACH network apply. While ACH Directo follows the NACHA Rules, there are some variations.

Examples of rule differences include but may not be limited to the following:

- Panama allows credit card payments through the local ACH network as demand credit transactions. The credit card number will appear on the account number field.
- Returned transactions will be processed on the same day as received by the local ACH operator. If these transactions are not received within the processing windows, they will need to be handled individually and outside of the ACH network.

Banking institutions in Panama are identified by 9-digit numbers assigned by the Bank Superintendency in Panama. Noted in Appendix IX is a list of the financial institutions that can be reached through FedGlobal ACH.

Payment and Settlement Flows

This section describes both processing and delivery schedules for the Panama Service. ODFIs submit a NACHA formatted file that may contain both domestic and cross-border transactions to FedACH. Cross-border items need to be batched separately within a file. FedACH edits the file and validates that receipt is from an eligible participant. The deposit deadline for cross-border items is 02:15 ET. Files are transmitted to Telered following standard FedACH processing delivery windows and no later than 06:00 ET. Telered applies the necessary edits and subsequently distributes the transaction to RDFIs in Panama.

Transactions are delivered to Panama RDFIs according to standard Panama ACH delivery schedules and payments are posted to the receivers' accounts after 16:30 Panama time on the following business day.

Settlement for cross-border transactions between ODFIs and FedACH occurs in U.S. dollars and is reflected on the ACH End-of-Day Advice and Reserve Account Statement as domestic items are today. The Panamanian receiver's account is credited for the full amount of the transaction; the service structure requires that no fees be deducted by the receiving institution from the principle amount of the transaction entry.

Fixed-to-Fixed (FF – USD to USD) Items

This section describes an ODFI or Sending Point (SP) sending cross-border credit transactions to Panamanian receivers using the FF payment option. The ODFI/SP deposits as ACH input file with FedACH, which receives and processes the file. The deposit deadline is 02:15 ET on FedACH processing Day 0[6]. FedACH acknowledges receipt of the file for the ODFI/SP, creates the accounting entries, and makes available settlement information to the ODFI and Banco Nacional de Panama. Telered receives the Panamanian items in the file from FedACH by 06:00 ET on Day 1. As there is no foreign exchange, the items are delivered to the Panamanian banks in U.S. dollars.

Holiday Schedule

Panamanian banking holidays are not all identical to U.S. banking holidays, and ODFIs occasionally transmit items through FedACH for settlement on a Panamanian holiday. When an ODFI submits items for settlement on a national Panamanian holiday that is not a U.S. holiday, FedACH will process the items and settle against the ODFI's settlement account on the specified settlement date, and Telered will process, deliver and settle the items to the receivers in Panama on the next Panamanian banking day after the holiday.

Panamanian Banking Holidays
New Year's Day
Martyr's Day
Carnival Monday
Carnival Tuesday
Ash Wednesday
Good Thursday
Good Friday
Labor Day
Independence from Colombia
Flag's Day
Colon Patriots Day
Declaration of Independence at Los Santos
Independence from Spain
Mother's Day
Christmas Eve
Christmas Day
New Year's Eve

Prenotification and Notification of Change (NOCs)

[6] The convention of "Day 0" and "Day 1" is used to distinguish the "day" in which processing occurs versus the "day" in which settlement takes place and reflects the FedACH processing day cycle (e.g. start of Day "0" at 03:00 ET Monday through close of Day "0" at 02:15 ET on Tuesday).

Prenotes are supported in the Panama Service and may be initiated to help ensure that subsequent entries to a receiver's account at a Panamanian RDFI are posted appropriately. Telered complies with the prenotification requirements outlined in the NACHA Rules.

NOC processing is supported in the Panama Service and NOCs may be initiated to notify ODFIs in the U.S. that previously valid information contained in a posted entry has become outdated and should be changed. Telered complies with the NOC format specifications outlined in the NACHA Rules.

Exception Processing

Return Items

When Panama receives files from FedACH, they are processed and distributed to receiving institutions through the Panamanian payments system. Subsequently, the Panamanian RDFI may find it necessary to return an item.

The procedures noted below outline the steps involved in two return item scenarios: items returned/rejected by Telered and items returned by a Panamanian RDFI. The items will be returned using one of the following U.S. NACHA Return Reason codes.

Code	Reason
R02	Account Closed
R03	No Account/Unable to Locate Account
R04	Invalid Account Number
R06	Returned per ODFI's Request
R07	Receiver Dispute
R08	Payment Stopped
R09	Uncollected Funds
R12	Branch Sold to Another DFI
R14	Representative Payee Deceased or Unable to Continue in that Capacity
R15	Beneficiary or Account Holder (Other Than Representative Payee) Deceased
R16	Account Frozen
R17	File Record Edit Criteria
R20	Non-Transaction Account
R21	Invalid company identification
R22	Invalid individual ID number
R23	Credit refused by receiver
R24	Duplicate Entry
R80	Cross-Border Payment Coding Error
R81	Non-Participant in Cross-Border Program
R82	Invalid Foreign Receiving DFI Identification
R83	Foreign Receiving DFI Unable to Settle
R84	Entry Not Processed By OGO

Items returned by Telered

Upon receipt of items from FedACH, Telered may be unable to process some payments and will return these payments. Items may be returned because the Panamanian RTN and account numbers within the addenda records are not within Telered's defined edit range. It is critical that ODFIs ensure that items

returned for edit failures are corrected before they are retransmitted. This will avoid having items reject "multiple times" for the same edit error.

Items returned by the RDFI or receiver

Items processed by Telered to the receiving institution may be returned if the RDFI is unable to post the items (account closed, invalid account number, etc). Items will generally be returned no later than the business day following receipt by the first organizational unit that is able to make or act upon a decision to accept an item.

EUROPE

Processing

Service Description

The Federal Reserve Bank, Deutsche Zentral-Genossenschaftsbank (DZ Bank) and Equens work together to serve as conduits for bidirectional payments into and out of the United States and the following European countries: Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom

DZ Bank acts as the foreign gateway operator, while Equens acts as the processing service provider and agent for all cross-border items into these countries. This service supports forward ACH 1-day and 2-day credits originated in the U.S. and destined to any receiver's account at a commercial bank in participating European countries. Items originating in Europe are delivered to the Federal Reserve Bank and are then edited and distributed to U.S. RDFIs.

Foreign Exchange Options

As it is common for receivers to hold different foreign currency accounts, the Europe service offers all three FedGlobal ACH foreign exchange options; fixed-to-variable (FV), fixed-to-fixed (FF –USD), and fixed-to-fixed (F3X service). Currently, the Europe service accommodates the ability to reach euro and U.S. dollar accounts in all countries in addition to British pounds in the United Kingdom and Swiss francs in Switzerland. Below is a table outlining the local currencies permitted by country as well as the available foreign exchange options.

Country	**Permitted Currencies**	FF - USD	FV	FF-foreign currency (F3X)
Austria	Euro, USD	✓	✓	Euro
Belgium	Euro, USD	✓	✓	Euro
Cyprus	Euro, USD	✓	✓	Euro
Czech Rep.	Euro, USD	✓	✓	Euro
Denmark	Euro, USD	✓	✓	Euro
Finland	Euro, USD	✓	✓	Euro
France	Euro, USD	✓	✓	Euro
Germany	Euro, USD	✓	✓	Euro
Greece	Euro, USD	✓	✓	Euro
Ireland	Euro, USD	✓	✓	Euro
Italy	Euro, USD	✓	✓	Euro
Luxembourg	Euro, USD	✓	✓	Euro
Malta	Euro, USD	✓	✓	Euro
Netherlands	Euro, USD	✓	✓	Euro
Poland	Euro, USD	✓	✓	Euro
Portugal	Euro, USD	✓	✓	Euro
Slovakia	Euro, USD	✓	✓	Euro
Slovenia	Euro, USD	✓	✓	Euro
Spain	Euro, USD	✓	✓	Euro
Sweden	Euro, USD	✓	✓	Euro
Switzerland	Euro, Franc, USD	✓	✓	Euro and Pounds
United Kingdom	Euro, Pound, USD	✓	✓	Euros and Pounds

European Payments System Overview
ACH items originated in the United States are governed by U.S. laws and rules (including the NACHA rules) until the payments cross the border into other countries. In the foreign country, local laws and rules then apply to the payment. DZ Bank and Equens have established multiple connections into a variety of payments systems that provide greater efficiency for the FedGlobal ACH Europe Service. These include, but are not limited to, leveraging local payments systems, as well as the European Automated Clearing House Association (EACHA), TARGET2 and SWIFT.

More information on the payment systems of each of the European countries, as well as the European Central Bank, European Payments Council, the TARGET 2 System, and EACHA can be found at the following URL addresses:

Country	Resource
Austria	http://www.oenb.at/en/welcome_to_the_oenb.jsp
Belgium	http://www.nbb.be/pub/Home.htm?l=en
Cyprus	http://www.centralbank.gov.cy/nqcontent.cfm?a_id=1
Czech Rep.	http://www.cnb.cz/en/
Denmark	http://www.nationalbanken.dk/
Finland	http://www.bof.fi/en
France	http://www.banque-france.fr/home.htm
Germany	http://www.bundesbank.de
Greece	http://eng.bankofgreece.gr/en/
Ireland	http://www.centralbank.ie/
Italy	http://www.bancaditalia.it
Luxembourg	http://www.bcl.lu/en/index.php
Malta	http://www.centralbankmalta.org/
Netherlands	http://www.dnb.nl/dnb/home?lang=en
Poland	http://www.nbp.pl/Homen.aspx?f=/srodeken.htm
Portugal	http://www.bportugal.pt/en-US/Pages/inicio.aspx
Slovakia	http://www.nbs.sk/en/home
Slovenia	http://www.bsi.si/en/
Spain	http://www.bde.es/homee.htm
Sweden	http://www.riksbank.com/
Switzerland	http://www.snb.ch/
United Kingdom	http://www.bankofengland.co.uk/
European Central Bank	http://www.ecb.int/paym/sepa/html/links.en.html
European Payments Council	http://www.europeanpaymentscouncil.eu/
TARGET 2 System	http://www.ecb.int/paym/t2/html/index.en.html
EACHA	http://www.eacha.org/

Examples of rule differences include but are not limited to the following:

- Prenotes and NOCs are not supported in Europe
- Return time frames

Currently payments from the U.S. to Europe are not treated as Single Europe Payments Area (SEPA) payments because they originate outside the Euro area. As such, SEPA rules do not apply. The rules

governing this service are a combination of business rules and domestic payment system rules. Having Equens, a member of the European ACH Association, as an entry point to Europe provides first-hand knowledge of how the payments will flow across Europe-based payment systems. The delivery time frames in this service are built around the expected delivery times for payments across Europe today. Many U.S. financial institutions have voiced concerns about the possibility of beneficiary deductions – or deductions from the principal amount of the payment – being levied on these items. Although beneficiary deductions were once common place in Europe, the practice is not very common today as competition and transparency pressures have taken hold.

Nevertheless, as part of the overall service level for FedGlobal ACH payments into Europe, Equens, acting as the third-party processor of these payments, will reimburse the receiver for the amount of the beneficiary deduction in cases when the beneficiary bank is a direct correspondent. It is important to distinguish between a beneficiary deduction and a bank fee or commission for performing a service. An example of the latter would be a fee for receiving a cross-border payment that the receiver has agreed to in his or her account contract. These fees are levied on the account statement and are not deductions from the principal amount of the payment. In order to receive reimbursement for a beneficiary deduction, the originator should obtain documentation of the beneficiary deduction and contact the Federal Reserve at mpls.rpo.administration.support@mpls.frb.org. The message and relevant information will then be provided to Equens.

How to identify European banks and receiver account numbers:
Receiving financial institutions in Europe are identified by the bank identifier code (BIC). The first three components are mandatory, while the fourth component is optional. Note: Originators should ensure that when creating ACH files the alphabetical characters in the BIC are in capital letters. The format is as follows:

Components of the BIC	**1** **Bank Code**	**2** **Country Code**	**3** **Location Code**	**4** **Branch Code**
Description	Identifies the financial institution	Identifies the country where the financial institution is located	Identifies the location of the institution within the country	Identifies the branch of the institution
Format	4 letters (All caps)	2 letters (All caps)	2 alphanumeric characters. (Alpha all caps)	3 alphanumeric characters (Alpha all caps)
e.g.	BBBB	CC	LL	AAA

The international bank account number (IBAN) is used to identify the foreign receiver's account number. In Europe, the IBAN is required by the European Committee for Banking Standards (ECBS) and the International Organization for Standardization (ISO) as the common structure to identify a customer's bank and account number. An IBAN consists of a header placed in front of a country's normal domestic account number format. This header consists of a two-character country code followed by a pair of check digits. Some countries, including the United Kingdom, have also incorporated a code in front of the standard domestic account number to further identify the bank. Additional information on the structure of each country's IBAN can be found on the following website: http://www.ecbs.org/iban.htm.

Originators need to provide both the BIC and IBAN when issuing payment instructions.

Payment and Settlement Flows

This section describes both the processing and delivery schedules for the Europe Service. ODFIs submit a NACHA formatted file that may contain both domestic and cross-border transactions to FedACH. Cross-border transactions need to be batched separately within a file. Additionally, ODFIs will need to batch FF-USD, FV, and F3X items separately. FedACH edits the file and validates that receipt is from an eligible participant by the end-of-day deposit deadline at 02:15 ET. Once the files are delivered Equens will translate the items into the respective local format and convert the U.S. dollar amounts into local currency if the items are FV. Subsequently, Equens distributes the transactions to RDFIs in Europe through the appropriate domestic clearing systems.

Fixed-to-Variable (FV – USD to euros, British pounds, or Swiss francs)

This section describes the FV exchange option for one-day credit transactions. The ODFI or Sending Point (SP) deposits an ACH input file with FedACH, which must receive the file by the 02:15 ET deposit deadline on FedACH processing Day 0[7]. FedACH acknowledges receipt of the file for the ODFI/SP, creates the accounting entries, and makes available settlement information to the ODFI and Equens. Equens then receives the European items in the file from FedACH by 06:00 ET and verifies settlement on Day 1. The foreign exchange rates for items processed on Day 1 is applied after the rates are set at 13:00 CET (07:00 ET) on Day 2. Equens will then convert the U.S. dollar amounts into the appropriate local currency (euros, pounds, francs). After the foreign exchange conversion is complete, Equens will forward the payments to the European RDFIs. All settlement with U.S. participants is in U.S. dollars.

Fixed-to-Fixed (FF – USD to USD) Items

This section describes sending one-day credit transactions to European receivers that hold U.S. dollar denominated accounts. The items are deposited by the ODFI/SP, received and processed by FedACH and forwarded to Equens by 06:00 ET on Day 1. Equens will convert the payments into the appropriate format and since there is no foreign exchange conversion to be done, the items are delivered to the European banks in U.S. dollars on Day 1. All settlement with U.S. participants is in U.S. dollars.

It is important to note that if the destination account is not denominated in U.S. dollars, the RDFI will likely convert the U.S. dollars into the currency in which the account is denominated. Where the FX conversion is performed by the foreign RDFI, FedGlobal ACH will not have knowledge of the rate applied. As Europeans are accustomed to working in a multi-currency environment, this may not necessarily be a concern for the receiver. ODFIs should encourage originators to confirm that the account is a U.S. dollar account, especially in cases in which an invoice specifies the currency in which the credit should be made.

Fixed-to-Fixed (FF – euros to euros; pounds to pounds) Items – F3X Service[8]

This section describes an ODFI sending payments to European receivers using the F3X service option. For one-day credit items to be delivered to the European RDFIs on Day 1, the ODFI must deliver the F3X message to FedACH by 11:00 ET on Day 0. FedACH will apply necessary edits and deliver the message for further processing to Equens . Separately, the ODFI should send or have arranged a settlement instruction to the designated DZ Bank account via its foreign correspondent bank with the total euro or

[7] The convention of "Day 0" and "Day 1" is used to distinguish the "day" in which processing occurs versus the "day" in which settlement takes place and reflects the FedACH processing day cycle (e.g. start of Day "0" at 03:00 ET Monday through close of Day "0" at 02:15 ET on Tuesday).

[8] ODFIs wishing to utilize the F3X Service must also complete Part 6A – Section B "F3X Service Request Form" prior to sending these payments.

pound amount that was sent through FedACH. The total funds must be received by DZ Bank by 11:00 ET (17:00 CET) on the same banking day (Day 0). Once the funds have been received and reconciled with the ACH messages, Equens will edit and transmit the transactions to the appropriate European RDFIs on the following business day, Day 1.

For two-day credit items to be delivered to the European RDFIs on Day 2, the ODFI must deliver the F3X message to FedACH by 02:15 ET on Day 0. The total funds must be received by DZ Bank by 11:00 ET (17:00 CET) on the following banking day (Day 1). Once the funds have been received and reconciled with the ACH messages, Equens will edit and transmit the transactions to the appropriate European RDFIs on the following business day, Day 2.

No settlement occurs between the ODFI and FedACH. Settlement only occurs between the ODFI and its foreign correspondent bank, the foreign correspondent bank and DZ Bank, and between DZ Bank and the European RDFIs.

Each settlement instruction will need to contain the following information for Equens to appropriately link the F3X ACH items with the settlement instruction:

- SWIFT payment type: MT 202
- SWIFT payment order sent to appropriate DZ Bank account for euros or pounds
- Unique reference code included in the F3X ACH item for the ACH batch(es) to be settled. This reference code will need to comply with the coding requirements described in Appendix II and Appendix V be placed in "Sender to Receiver Information" field (Field 72) in the MT202 as well as the "Company Entry Description" field (Field 10) in the Batch Header Record of the IAT batch(es).

To settle F3X euro payments in euros or pounds, the ODFI will need to send the settlement instruction to the appropriate account number below:

Currency	Settlement To	Settlement At
Euros	DZ Bank Account: 0000149426 BIC-code: GENODEFF	Deutsche Bundesbank Account: 0050060400 BIC-Code: MARKDEFF Frankfurt, Germany
Pounds	DZ Bank Account: 0000219823 BIC-code: GENODEFF	HSBC Bank BIC-code: MIDLGB22 London, England

The ODFI can submit the settlement instruction to the appropriate DZ Bank account in two ways – "pooled" or "batched" settlement. For "pooled" settlement, the ODFI will submit one settlement instruction with the total euros or pounds amount for all F3X ACH batches transmitted to FedACH that have the same settlement date. For "batched" settlement, the ODFI will submit one settlement instruction with the total euros or pounds amount for each F3X ACH batch transmitted to FedACH that has the same settlement date for that day. The ODFI must instruct the foreign correspondent bank to submit the settlement instruction with sufficient time to arrive at the appropriate DZ Bank account no later than 13:00 ET (17:00 CET) with the corresponding euros or pounds amount.

<u>Holiday Schedule</u>

Equens and European countries banking holidays are not identical to U.S. banking holidays. ODFIs occasionally transmit items through FedACH for settlement on either an Equens holiday or a European country banking holiday. When this occurs, FedACH will process the items, send to Equens, and settle against the ODFI's settlement account on the specified settlement date. Equens will process, deliver and settle the items to the European receiving financial institutions on the next banking day after the holiday if it is an Equens holiday. For payments that require a foreign exchange rate conversion, the foreign exchange rate applied will be the following business day. If it not an Equens holiday, Equens will deliver the payments to the European RDFIs on the appropriate day, and the RDFIs will post the funds on the following banking day. It is important to note that for the F3X Service, the ODFI will need to deliver the settlement instruction on an Equens business day. For a list of the European countries holidays, please refer to the following URL for a list of bank holidays throughout the world: http://www.bank-holidays.com/index.htm. Below is a list of Equens' holiday schedule.

Equens Holiday Schedule (TARGET System Holidays)
New Year's Day
Good Friday
Easter Monday
Labor Day
Christmas Day
Christmas Holiday

Exception Processing

Return Items

When Equens receives ACH files from FedACH, they are processed and distributed to receiving financial institutions. Subsequently, the European RDFI may find it necessary to return an item. The procedures noted below outline the steps involved in two return item scenarios: items returned/rejected by Equens and items returned by the European RDFI. The items will be returned using one of the following U.S. NACHA Return Reason codes.

Code	**Reason**
R02	Account Closed
R03	No Account/Unable to Locate Account
R04	Invalid Account Number
R06	Returned per ODFI's Request
R16	Account Frozen
R17	File Record Edit Criteria
R80	Cross-Border Coding Error
R81	Non-Participant in Cross-Border Program
R82	Invalid Foreign Receiving DFI Identification
R83	Foreign Receiving DFI Unable to Settle
R84	Entry not Processed by OGO

Items returned by Equens

Upon receipt of items from FedACH, Equens may be unable to process some payments and will return them. For the FV process, Equens will return the cross-border items prior to applying the foreign exchange rate conversion. An item may be returned because the BIC or IBAN is invalid or incorrect. It is

critical that ODFIs ensure that items returned for edit failures are corrected before they are retransmitted. This will avoid having items reject multiple times for the same edit error.

For the F3X process, Equens may return a cross-border item for invalid BICs or IBANs, in addition to the following return scenarios related to the inability to link the F3X ACH items to the settlement instruction, or not receiving adequate funds from the foreign correspondent bank.

a. **Insufficient Funds.** If the settlement instruction from the foreign correspondent bank does not contain the amount that is equal to or exceeds the sum of all the F3X ACH items that have the appropriate settlement date from the ODFI, Equens will return all the F3X ACH items back to FedACH. FedACH will return the items back to the ODFI in the NACHA format with the return reason code "R83". Equens will also return the funds originally received back to the foreign correspondent bank.
b. **Mismatched Batches or Lack of Unique Reference Number.** If the Company Entry Description Field in a batch of F3X ACH items Equens receives from the ODFI and the Related Reference field in the MT202 format does not match ("mismatched batches") or is not present, then Equens will return the F3X ACH items contained in such mismatched batches and generate the corresponding returns to FedACH. The ODFI will receive the returns with the return reason code "R83". Equens will also return the funds originally received back to the foreign correspondent bank.
c. **Funds received after 11:00 ET (17:00 CET).** All the settlement funds related to the F3X process received after 11:00 ET (17:00 CET) will be held for one business day in anticipation of the matching F3X ACH items. After one business day, Equens will return the funds originally received to the foreign correspondent bank at the end of the Equens business day.
d. **Excess of Funds.** In the event there are more than sufficient funds to cover all F3X ACH items that Equens has received from an ODFI through FedACH that have the appropriate settlement date, Equens will return the "excess" funds received from that ODFI back to the foreign correspondent bank on the following business day.
e. **Message received prior to settlement funds.** If an F3X ACH item is received prior to the settlement funds, the F3X ACH item will be held for one business day in anticipation of the matching settlement funds. After one business day, Equens will return the F3X ACH item if the settlement funds are not received.

Items returned by the RDFI or receiver

All items processed by Equens to the receiving institution may be returned if the RDFI is unable to post the items (e.g. account closed, invalid account number, etc). Items will generally be returned no later than the business day following receipt by the RDFI.

For all returns, if the European RDFI submits the return to Equens by 14:00 CET, Equens will forward the return to FedACH no later than 18:00 CET (12:00 ET) on the same European banking day. FedACH will then make the returns available to the US ODFIs by 16:00 ET and immediate settlement will occur between FedACH and the US ODFI at 17:30 ET. It is important to note that for cross-border items using the FV process, Equens will re-convert the payment bank into U.S. dollars prior to sending the items to FedACH. The foreign exchange rate used will not be the same as the original forward item and therefore the U.S. dollar amount returned may not be the same as originally sent.

For the F3X service, return settlement will follow the same channels as the forward process. At the same time Equens transmits return items to FedACH, Equens acting on behalf of DZ Bank will settle with the foreign correspondent bank for such returns by initiating a SWIFT message for each return item by 18:00 CET on that same business day.

Appendix I – IAT Format Origination Matrix / Account to Account Payments

ACH File Header (Same as Domestic File Header)						
IAT Company Batch Header						
Field #	**Field Name**	**FedGlobal ACH Inclusion Requirement**	**Canada**	**Europe**	**Mexico**	**Panama**
1	Record Type Code	M	'5' Always	'5' Always	'5' Always	'5' Always
2	Service Class Code	M	'225' - Debits only '220' - Credits only '200' - Mixed credits and debits (Note: FV batches must be separated by credit and debit items. FF batches may contain credit and debits.)	'220' - Credits only '200' - Mixed credits and debits	'220' - Credits only '200' - Mixed credits and debits	'220' - Credits only '200' - Mixed credits and debits
3	IAT Indicator	O	Blank - (Note: Must include 'IATCOR' for NOCs only)	Blank - (Note: Must include 'IATCOR' for NOCs only)	Blank - (Note: Must include 'IATCOR' for NOCs only)	Blank - (Note: Must include 'IATCOR' for NOCs only)
4	FX Indicator	M	FF (Fixed-to-fixed) FV (Fixed to variable)	FF (Fixed-to-fixed for USD only) FV (Fixed to variable)	FV (Fixed to variable)	FF (Fixed-to-fixed)
5	FX Reference Indicator	R	'3' Always	'3' Always	'3' Always	'3' Always
6	FX Reference	R	Blank	Blank	Blank	Blank
7	ISO Destination Country Code	M	CA	See Appendix VI for valid codes for Europe	MX	PA
8	Originator Identification	M	Assigned by ODFI for each originator	Assigned by ODFI for each originator	Assigned by ODFI for each originator	Assigned by ODFI for each originator
9	Standard Entry Class Code	M	'IAT' Always	'IAT' Always	'IAT' Always	'IAT' Always
10	Company Entry Description	M	Provided by originator	Provided by originator	Provided by originator	Provided by originator

11	ISO Originating Currency Code	M	USD	USD	USD	USD
12	ISO Destination Currency Code	M	USD for Fixed-to-fixed CAD for Fixed-to-variable	CHF EUR GBP USD	MXN	USD
13	Effective Entry Date	R	YYMMDD'	YYMMDD'	YYMMDD'	YYMMDD'
14	Settlement Date	Inserted by ACH Operator	Blank	Blank	Blank	Blank
15	Originator Status Code	M	'1' Always	'1' Always	'1' Always	'1' Always
16	GO Identification/ODFI Identification	M	Routing transit number of ODFI	Routing transit number of ODFI	Routing transit number of ODFI	Routing transit number of ODFI
17	Batch Number	M	Start at ODFI designated number	Start at ODFI designated number	Start at ODFI designated number	Start at ODFI designated number
IAT Entry Detail Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	6' Always	6' Always	6' Always	6' Always
2	Transaction Code	M	'22' - Checking Credits '32' - Savings Credits '27' - Checking Debits '37' - Savings Debits '52' - Loan Credits	'22' - Checking Credits	'22' - Checking Credits '32' - Savings Credits	'22' - Checking Credits '32' - Savings Credits '52' - Loan Credits
3	GO Identification/RDFI Identification	M	091050234	061050057	091050700	091050807
4	Check Digit	M	Combined with Field #3 above	Combined with Field #3 above	Combined with Field #3 above	Combined with Field #3 above
5	Number of Addenda Records	M	Total number of Addenda	Total number of Addenda	Total number of Addenda	Total number of Addenda
6	'RESERVED'	N/A	Blank	Blank	Blank	Blank
7	Amount	M	Amount of payment	Amount of payment	Amount of payment	Amount of payment

8	Foreign Receiver's Acct No. /DFI Acct No.--M	M	Account number of receiver (Note: not to exceed 12 digits)	Account number of receiver / IBAN (Note: Alphabetical characters in the IBAN are capitalized)	Account number of receiver (Note: Use 18 digits for CLABE # and 16 digits for Debit card #)	Account number of receiver
9	'RESERVED'	N/A	Blank	Blank	Blank	Blank
10	Gateway Operator OFAC Screening Indicator	O	Blank	Blank	Blank	Blank
11	Secondary OFAC Screening Indicator	O	Blank	Blank	Blank	Blank
12	Addenda Record Indicator	M	'1' Always	'1' Always	'1' Always	'1' Always
13	Trace Number	M	Assigned by ODFI	Assigned by ODFI	Assigned by ODFI	Assigned by ODFI
First IAT Addenda Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'10' Always	'10' Always	'10' Always	'10' Always
3	Transaction Type Code	R	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX
4	Foreign Payment Amount	R	For FF payments, this field should contain the USD amount or may be blank. For FV payments, this field should be '0'.	For FV or FF in USD payments this field should be '0'.	For FV payments this field should be '0'.	This field should contain the USD amount or may be blank
5	Foreign Trace Number	O	Insert blanks or zeros	Insert blanks or zeros	Insert blanks or zeros	Insert blanks or zeros
6	Receiving Company Name/Individual Name	M	Provided by originator (customer name).	Provided by originator (customer name).	Provided by originator (customer name).	Provided by originator (customer name).

7	'RESERVED'	N/A	Blank	Blank	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Second IAT Addenda Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'11' Always	'11' Always	'11' Always	'11' Always
3	Originator Name	M	Originator's Name	Originator's Name	Originator's Name	Originator's Name
4	Originator Street Address	M	Originator's physical address	Originator's physical address	Originator's physical address	Originator's physical address
5	'RESERVED'	N/A	Blank	Blank	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Third IAT Addenda Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'12' Always	'12' Always	'12' Always	'12' Always
3	Originator City & State/Province	M	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
4	Originator Country & Postal Code	M	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each

			element and a backslash "\" at the end of the record)	element and a backslash "\" at the end of the record))	element and a backslash "\" at the end of the record)	element and a backslash "\" at the end of the record)
5	'RESERVED'	N/A	Blank	Blank	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record
Fourth IAT Addenda Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'13' Always	'13' Always	'13' Always	'13' Always
3	Originating DFI Name	M	ODFI's name	ODFI's name	ODFI's name	ODFI's name
4	Originating DFI Identification Number Qualifier	M	01' Always (National Clearing System)	01' Always (National Clearing System)	01' Always (National Clearing System)	01' Always (National Clearing System)
5	Originating DFI Identification	M	ODFI's routing transit number	ODFI's routing transit number	ODFI's routing transit number	ODFI's routing transit number
6	Originating DFI Branch Country Code	M	'US' - Two-character ISO code assigned to the ODFI's country	'US' - Two-character ISO code assigned to the ODFI's country	'US' - Two-character ISO code assigned to the ODFI's country	'US' - Two-character ISO code assigned to the ODFI's country
7	'RESERVED'	N/A	Blank	Blank	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record
Fifth IAT Addenda Record						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'14' Always	'14' Always	'14' Always	'14' Always
3	Receiving DFI Name	M	RDFI's name	RDFI's name	RDFI's name	RDFI's name

4	Receiving DFI Identification Number Qualifier	M	'01' Always (National Clearing System)	'02' Always (BIC Code)	'01' Always (National Clearing System)	'01' Always (National Clearing System)
5	Receiving DFI Identification	M	Foreign RDFI's routing transit number	Insert Foreign RDFI's routing transit number (Note: Alphabetical characters in the BIC are in capital letters.)	Foreign RDFI's routing transit number (3-digit ABM of RDFI)	Foreign RDFI's routing transit number (9-digits of RDFI)
6	Receiving DFI Branch Country Code	M	CA	See Appendix VI for valid codes for Europe	MX	PA
7	'RESERVED'	N/A	Blank	Blank	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Sixth IAT Addenda Record

Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'15' Always	'15' Always	'15' Always	'15' Always
3	Receiver Identification Number	O	Used by the Originator to identify the Receiver or may be used for tracing purposes	Used by the Originator to identify the Receiver or may be used for tracing purposes	Used by the Originator to identify the Receiver or may be used for tracing purposes	Used by the Originator to identify the Receiver or may be used for tracing purposes
4	Receiver Street Address	M	Receiver's physical address	Receiver's physical address	Receiver's physical address	Receiver's physical address
5	'RESERVED'	N/A	Blank	Blank	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Seventh IAT Addenda Record

Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always

2	Addenda Type Code	M	'16' Always	'16' Always	'16' Always	'16' Always
3	Receiver City & State /Province	M	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
4	Receiver Country and Postal Code	M	Receiver's Country & Zip Code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's Country & Zip Code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's Country & Zip Code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's Country & Zip Code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
5	'RESERVED'	N/A	Blank	Blank	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

IAT Addenda Record for Remittance Information						
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Canada	Europe	Mexico	Panama
1	Record Type Code	M	'7' Always	'7' Always	'7' Always	'7' Always
2	Addenda Type Code	M	'17' Always	'17' Always	'17' Always	'17' Always
3	Payment Related Information	O	Free form text	Free form text (Note: Since field lengths vary between payment systems, only the first 120 characters will be delivered if multiple IAT Remittance Information addenda records are used.)	Free form text	Free form text
4	Addenda Sequence Number	M	Sequence number of Type Code "17" addenda records in ascending order	Sequence number of Type Code "17" addenda records in ascending order	Sequence number of Type Code "17" addenda records in ascending order	Sequence number of Type Code "17" addenda records in ascending order beginning

			beginning with 0001	**beginning with 0001**	**beginning with 0001**	**with 0001**
5	**Entry Detail Sequence Number**	**M**	**Last 7 digits used for the trace number in the Entry Detail Record**	**Last 7 digits used for the trace number in the Entry Detail Record**	**Last 7 digits used for the trace number in the Entry Detail Record**	**Last 7 digits used for the trace number in the Entry Detail Record**
IAT Company/Batch Control Record (Same as Domestic Batch Control Record Type #8)						
ACH File Control Record (Same as Domestic File Control Record Type #9)						

Note: Originators must use a two-character ISO Country Code in fields where the country name must be specified. Failure to use these codes may cause payments to reject or other processing related problems may occur. See Appendix VI for a listing of valid Codes.

This page intentionally left blank.

Appendix II – IAT Format Origination Matrix / F3X Payments

ACH File Header (Same as Domestic File Header)

IAT Company Batch Header				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'5' Always	'5' Always
2	Service Class Code	M	'220' - Credits only '200' - Mixed credits and debits	'220' - Credits only '200' - Mixed credits and debits
3	IAT Indicator	O	Blank - (Note: Must include 'IATCOR' for NOCs only)	Blank - (Note: Must include 'IATCOR' for NOCs only)
4	FX Indicator	M	FF (Fixed-to-fixed)	FF (Fixed-to-fixed)
5	FX Reference Indicator	R	1 = FX rate 2= FX Reference 3 = Space filled	1 = FX rate 2= FX Reference 3 = Space filled
6	FX Reference	R	Formatted to correspond with Field #5	Formatted to correspond with Field #5
7	ISO Destination Country Code	M	See Appendix VII for valid codes for Europe	MX
8	Originator Identification	M	Assigned by ODFI for each originator	Assigned by ODFI for each originator
9	Standard Entry Class Code	M	'IAT' Always	'IAT' Always
10	Company Entry Description	M	Formatted according to F3X coding requirements (N"F3X"NNNNNN) N = Settlement (1, Pooled or 2, Batch) F3X NNNNNN = Number of batches settled (if Pooled) or Batch Identification	Formatted according to F3X coding requirements (N"F3X"NNNNNN) N = Settlement (1, Pooled or 2, Batch) F3X NNNNNN = Number of batches settled (if Pooled) or Batch Identification
11	ISO Originating Currency Code	M	EUR GBP	MXN
12	ISO Destination Currency Code	M	See Appendix VI for valid codes for Europe	MXN
13	Effective Entry Date	R	YYMMDD'	YYMMDD'
14	Settlement Date	Inserted by ACH Operator	Blank	Blank
15	Originator Status Code	M	'1' Always	'1' Always
16	GO Identification/ODFI Identification	M	Routing transit number of ODFI	Routing transit number of ODFI
17	Batch Number	M	Start at ODFI designated number	Start at ODFI designated number

IAT Entry Detail Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	6' Always	6' Always
2	Transaction Code	M	''24' - Zero Dollar Transaction	'24' - Zero Dollar Transaction
3	GO Identification/RDFI Identification	M	061050057	091050700
4	Check Digit	M	Combined with Field #3 above	Combined with Field #3 above
5	Number of Addenda Records	M	Total number of Addenda	Total number of Addenda
6	'RESERVED'	N/A	Blank	Blank
7	Amount	M	"0" Zero	"0" Zero
8	Foreign Receiver's Acct No. /DFI Acct No.--M	M	Account number of receiver / IBAN (Note: Alphabetical characters in the IBAN are capitalized)	Account number of receiver (Note: Use 18 digits for CLABE # and 16 digits for Debit card #)
9	'RESERVED'	N/A	Blank	Blank
10	Gateway Operator OFAC Screening Indicator	O	Blank	Blank
11	Secondary OFAC Screening Indicator	O	Blank	Blank
12	Addenda Record Indicator	M	'1' Always	'1' Always
13	Trace Number	M	Assigned by ODFI	Assigned by ODFI

First IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'10' Always	'10' Always
3	Transaction Type Code	R	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX	Type of payment: ANN, BUS, DEP, LOA, MIS, MOR, PEN, RLS, SAL, TAX
4	Foreign Payment Amount	R	For FF payments, this field should contain the amount to be paid to the beneficiary in the destination currency.	For FF payments, this field should contain the Peso amount to be paid to the beneficiary.
5	Foreign Trace Number	O	Insert blanks or zeros	Insert blanks or zeros
6	Receiving Company Name/Individual Name	M	Provided by originator (customer name).	Provided by originator (customer name).
7	'RESERVED'	N/A	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Second IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'11' Always	'11' Always
3	Originator Name	M	Originator's Name	Originator's Name
4	Originator Street Address	M	Originator's physical address	Originator's physical address
5	'RESERVED'	N/A	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Third IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'12' Always	'12' Always
3	Originator City & State/Province	M	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Originator's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
4	Originator Country & Postal Code	M	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Originator's Country & Zip code (Note: Must use a valid ISO Code from Appendix VI as the country name. Also, use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
5	'RESERVED'	N/A	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Fourth IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'13' Always	'13' Always
3	Originating DFI Name	M	ODFI's name	ODFI's name
4	Originating DFI Identification Number Qualifier	M	'01' Always (National Clearing System)	'01' Always (National Clearing System)
5	Originating DFI Identification	M	ODFI's routing transit number	ODFI's routing transit number

6	Originating DFI Branch Country Code	M	'US' - Two-character ISO code assigned to the ODFI's country	'US' - Two-character ISO code assigned to the ODFI's country
7	'RESERVED'	N/A	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Fifth IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'14' Always	'14' Always
3	Receiving DFI Name	M	RDFI's name	RDFI's name
4	Receiving DFI Identification Number Qualifier	M	'02' Always (BIC Code)	01' Always (National Clearing System)
5	Receiving DFI Identification	M	Insert Foreign RDFI's routing transit number (Note: Alphabetical characters in the BIC are in capital letters.)	Insert Foreign RDFI's routing transit number (3-digit ABM of RDFI)
6	Receiving DFI Branch Country Code	M	See Appendix VI for valid codes for Europe	MX
7	'RESERVED'	N/A	Blank	Blank
8	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Sixth IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'15' Always	'15' Always
3	Receiver Identification Number	O	Used by the Originator to identify the Receiver or may be used for tracing purposes	Used by the Originator to identify the Receiver or may be used for tracing purposes
4	Receiver Street Address	M	Receiver's physical address	Receiver's physical address
5	'RESERVED'	N/A	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

Seventh IAT Addenda Record				
Field #	Field Name	FedGlobal ACH Inclusion	Europe F3X	Mexico F3X

		Requirement		
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'16' Always	'16' Always
3	Receiver City & State /Province	M	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's City, State/Province location (Note: Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
4	Receiver Country and Postal Code	M	Receiver's Country & Zip Code (Note: Note: Must use a valid ISO Code from Appendix VI as the country name. Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)	Receiver's Country & Zip Code (Note: Note: Must use a valid ISO Code from Appendix VI as the country name. Use an asterisk "*" to separate each element and a backslash "\" at the end of the record)
5	'RESERVED'	N/A	Blank	Blank
6	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

IAT Addenda Record for Remittance Information				
Field #	Field Name	FedGlobal ACH Inclusion Requirement	Europe F3X	Mexico F3X
1	Record Type Code	M	'7' Always	'7' Always
2	Addenda Type Code	M	'17' Always	'17' Always
3	Payment Related Information	O	Free form text (Note: Since field lengths vary between payment systems, only the first 120 characters will be delivered if multiple IAT Remittance Information addenda records are used.)	Free form text
4	Addenda Sequence Number	M	Sequence number of Type Code "17" addenda records in ascending order beginning with 0001	Sequence number of Type Code "17" addenda records in ascending order beginning with 0001
5	Entry Detail Sequence Number	M	Last 7 digits used for the trace number in the Entry Detail Record	Last 7 digits used for the trace number in the Entry Detail Record

IAT Company/Batch Control Record (Same as Domestic Batch Control Record Type #8)

ACH File Control Record (Same as Domestic File Control Record Type #9)

Note: Originators must use a two-character ISO Country Code in fields where the country name must be specified. Failure to use these codes may cause payments to reject or other processing related problems may occur. See Appendix VI for a listing of valid Codes.

Appendix III – Guide to a Successful FedGlobal ACH Payments Launch

The following three steps are provided as a guide for implementing a successful FedGlobal ACH Payments service.

Step 1. Information Gathering

- Contact your FedACH Sales Specialist for assistance with implementing a successful FedGlobal ACH origination program.
- Review Reference Materials.
- Review the *FedGlobal ACH Service Origination Manual*
- Ensure backroom operations support FedGlobal ACH Payments.
- Software should accommodate cross-border Standard Entry Class Code IAT.
- Ensure understanding of field responses required for Federal Reserve's FedGlobal ACH Services (outlined in the *FedGlobal ACH Payments Service Origination Manual*).
- Ensure understanding of how the foreign RDFI ABA number and receiver account number are formatted.
- Begin plans for marketing service to customers and assist with enrollment process.

Step 2. Service Set-up and Testing

- Complete the Service Request Form located in Part 6A of the FedACH Participation Agreement available at http://www.frbservices.org/forms/fedach_services.html#fedachagreement.
- Forward the completed Service Request Form to your FedACH Sales Specialist.
- A FedACH testing coordinator will contact you to schedule format testing and provide a test script.
- Confirm test dates and consult with the coordinator regarding unanswered questions on formatting and testing parameters.
- Conduct testing as scheduled following the scripts.
- Consult with FedACH testing coordinator regarding test results.
- Confirm internal administrative/operational procedures are in place.
- Confirm successful test and production service date with FedACH testing coordinator.

Step 3. Congratulations! You are ready to begin originating international payments!

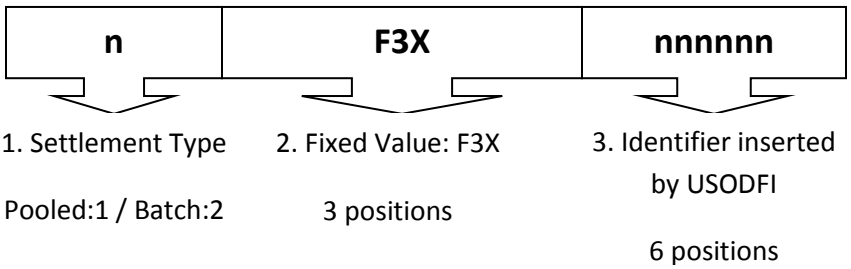
Appendix IV – Mexico F3X Specifications

USODFI Contact Information
USODFI Name: _____
USODFI Address: _____
Enrolled RT Number: _____
Email address (operational contact): _____

Banxico will assign a CLABE-type reference ID, known as 'USODFI CLABE Number'. for the USODFI based on the USODFI's routing transit number in order to link the SPEI settlement with the ACH messages with the Instructions. Banxico will send by e-mail the USODFI CLABE Number to the Federal Reserve within 2 days after of the receipt of the USODFI's information. The Federal Reserve will notify the USODFI of this USODFI CLABE Number assigned by Banxico.

US ODFI's Mexican Correspondent Financial Institution Information
MCFI Name: _____
US ODFI's Account Number at MCFI (18-digits):_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Unique F3X Identifier to Link ACH messages with SPEI settlement
The following unique F3X identifier is required to be the Company Entry Description Field of the IAT Batch Header Record, field 10, in addition to the SPEI settlement record, "*concepto de pago*" field.



- When Pooled settlement:

1	to identify pooled settlement
F3X	to identify the F3X service settlement
NNNNNN	to identify the number of batches that are being settled for the USODFI. (must be 6 numeric positions)

- When Batches settlement:

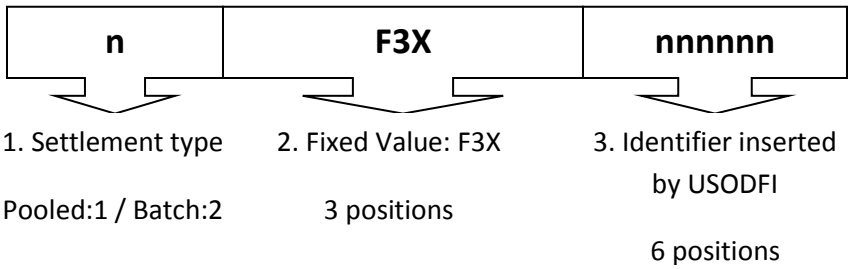
2	to identify batch settlement
F3X	to identify the F3X service settlement
NNNNNN	unique identifier for each batch that is being settled for each settlement order.

Note: The F3X Identifier or the Fixed Value used in its naming convention should not be placed in the Company Entry Description field of non-F3X payments.

Appendix V – Europe F3X Specifications

USODFI Contact Information
USODFI Name: _____
USODFI Address: _____
Enrolled RT Number: _____
Email address (operational contact): _____

Unique F3X Identifier to Link ACH messages with settlement instruction
The following unique F3X identifier is required to be the Company Entry Description Field of the IAT Batch Header Record, field 10, in addition to the MT202 cover payment, "Sender to Receiver Information" field 72.



- When Pooled settlement:

1	to identify pooled settlement
F3X	to identify the F3X service settlement
NNNNNN	to identify the number of batches that are being settled for the USODFI. (must be 6 numeric positions)

- When Batches settlement:

2	to identify batch settlement
F3X	to identify the F3X service settlement
NNNNNN	unique identifier for each batch that is being settled for each settlement order.

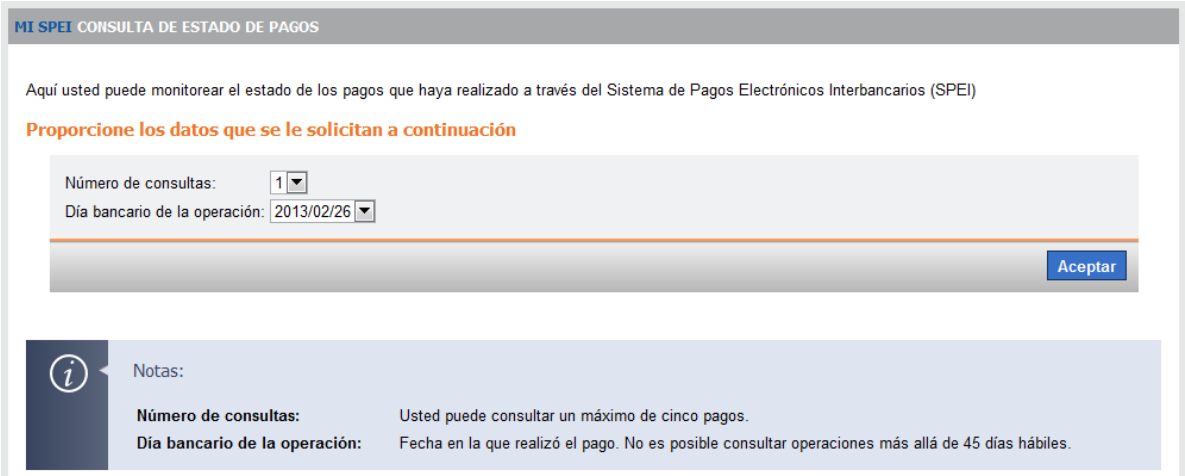
Note: The F3X Identifier or the Fixed Value used in its naming convention should not be placed in the Company Entry Description field of non-F3X payments.

Appendix VI – FedGlobal ACH ISO Destination Country and Currency Codes

FedGlobal ACH Service	Country	ISO Destination Country Code	ISO Destination Currency Code		
Canada	Canada	CA	CAD		USD
Mexico	Mexico	MX	MXN		
Panama	Panama	PA	USD		
Europe	Austria	AT	EUR		USD
	Belgium	BE	EUR		USD
	Cyprus	CY	EUR		USD
	Czech Republic	CZ	EUR		USD
	Denmark	DK	EUR		USD
	Finland	FI	EUR		USD
	France	FR	EUR		USD
	Germany	DE	EUR		USD
	Greece	GR	EUR		USD
	Ireland	IE	EUR		USD
	Italy	IT	EUR		USD
	Luxembourg	LU	EUR		USD
	Malta	MT	EUR		USD
	Netherlands	NL	EUR		USD
	Poland	PL	EUR		USD
	Portugal	PT	EUR		USD
	Slovakia	SK	EUR		USD
	Slovenia	SI	EUR		USD
	Spain	ES	EUR		USD
	Sweden	SE	EUR		USD
	Switzerland	CH	CHF	EUR	USD
	United Kingdom	GB	GBP	EUR	USD

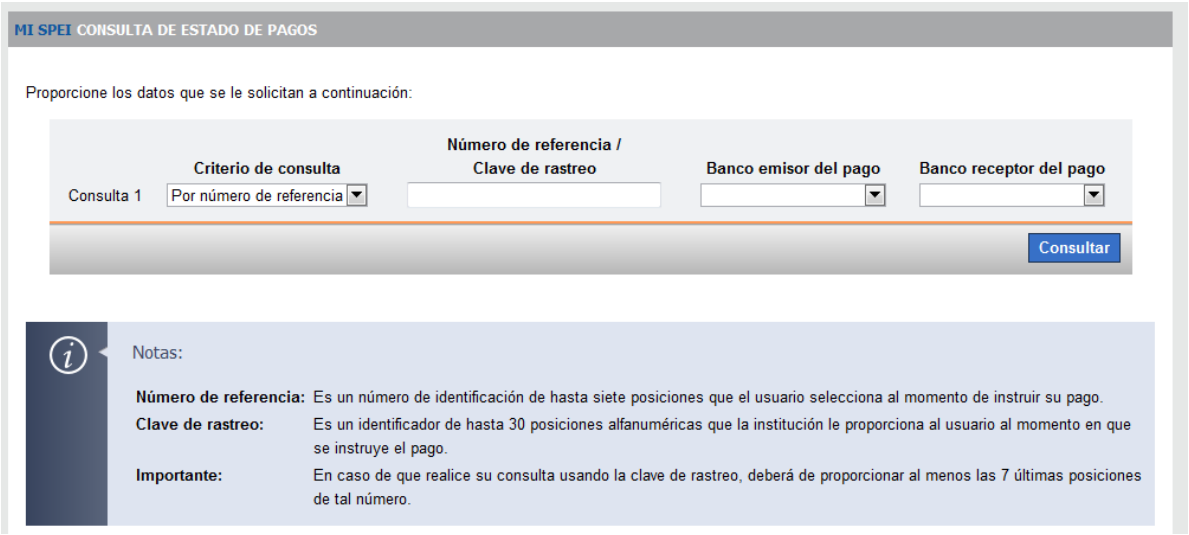
Appendix VII – Instructions for Tracing Payments in Mexico's SPEI System

1. From https://www.banxico.org.mx/mispei/inicio.do select "Consultar estado de pagos" to begin your item trace.
2. Once the screen below is displayed, select the number of payments to be traced, the Settlement Date of the payments, and press "Aceptar".



3. Select "Por numero de referencia" when the "Modulo de informacion del SPEI" screen found below is displayed
4. Enter the last 7 digits of the reference number in the "Numero de referencia/Numero de rastreo" field
5. Select "Banxico" in the "Banco emisor del pago" field
6. Select the name of the RDFI in Mexico in the "Banco receptor del pago" field, then press "Consultar"

<u>Please note: For F3X item trace requests, the ABM of the MRDFI must be selected for the "Coanco emisor del pago" field and "Banxico" must then be selected for the "Banco receptor del pago" field.</u>



Appendix VIII - FedGlobal ACH Mexico Service
ABM Numbers for RDFIs
(Participants in SPEI)

ABM NUMBER	INSTITUTION NAME	SHORT NAME	INDIVIDUAL (R) OR COMMERCIAL (RC) ACCOUNTS
001	BANCO DE MÉXICO	BANXICO	RC
006	BANCO NACIONAL DE COMERCIO EXTERIOR, S.N.C.	BANCOMEXT	RC
009	BANCO NACIONAL DE OBRAS Y SERVICIOS PÚBLICOS, S.N.C.	BANOBRAS	RC
019	BANCO NACIONAL DEL EJÉRCITO, FUERZA AÉREA Y LA ARMADA, S.N.C.	BANJERCITO	R
135	NACIONAL FINANCIERA, S.N.C.	NAFIN	RC
166	BANCO DEL AHORRO NACIONAL Y SERVICIOS FINANCIEROS, S.N.C.	BANSEFI	R
168	SOCIEDAD HIPOTECARIA FEDERAL, S.N.C.	HIPOTECARIA FED	RC
002	BANCO NACIONAL DE MÉXICO, S.A.	BANAMEX	R
012	BBVA BANCOMER, S.A.	BBVA BANCOMER	R
014	BANCO SANTANDER (MÉXICO), S.A.	SANTANDER	R
021	HSBC MÉXICO, S.A.	HSBC	R
030	BANCO DEL BAJÍO, S.A.	BAJIO	R
036	BANCO INBURSA, S.A.	INBURSA	R
037	BANCO INTERACCIONES, S.A.	INTERACCIONES	R
042	BANCA MIFEL, S.A.	MIFEL	R
044	SCOTIABANK INVERLAT, S.A.	SCOTIABANK	R
058	BANCO REGIONAL DE MONTERREY, S.A.	BANREGIO	R
059	BANCO INVEX, S.A.	INVEX	R
060	BANSI, S.A.	BANSI	R
062	BANCA AFIRME, S.A.	AFIRME	R
072	BANCO MERCANTIL DEL NORTE, S.A.,	BANORTE/IXE	R
102	INVESTA BANK, S.A.	INVESTA BANK	R
103	AMERICAN EXPRESS BANK (MÉXICO), S.A.	AMERICAN EXPRES	R
106	BANK OF AMERICA MÉXICO, S.A.	BAMSA	R
108	BANK OF TOKYO-MITSUBISHI UFJ (MÉXICO), S.A.	TOKYO	R
110	BANCO JP MORGAN, S.A.,	JP MORGAN	R
112	BANCO MONEX, S.A.	BMONEX	R
113	BANCO VE POR MÁS, S.A.	VE POR MAS	R
124	DEUTSCHE BANK MÉXICO, S.A.	DEUTSCHE	R
126	BANCO CREDIT SUISSE (MÉXICO), S.A.	CREDIT SUISSE	R
127	BANCO AZTECA, S.A	AZTECA	R
128	BANCO AUTOFIN MÉXICO, S.A.	AUTOFIN	R

129	BARCLAYS BANK MÉXICO, S.A.	BARCLAYS	R
130	BANCO COMPARTAMOS, S.A.	COMPARTAMOS	R
131	BANCO AHORRO FAMSA, S.A	BANCO FAMSA	R
132	BANCO MULTIVA, S.A.	BMULTIVA	R
133	BANCO ACTINVER, S.A.	ACTINVER	R
136	INTER BANCO, S.A.	INTERBANCO	R
137	BANCOPPEL, S.A.	BANCOPPEL	R
138	ABC CAPITAL, S.A.	ABC CAPITAL	R
139	UBS BANK MÉXICO, S.A.	UBS BANK	R
140	CONSUBANCO, S.A.	CONSUBANCO	R
141	VOLKSWAGEN BANK, S.A.	VOLKSWAGEN	R
143	CIBANCO, S.A.	CIBANCO	R
145	BANCO BASE, S.A.	BBASE	R
147	BANKAOOL, S.A.	BANKAOOL	R
148	BANCO PAGATODO, S.A.	PAGATODO	R
149	BANCO FORJADORES, S.A.,	FORJADORES	R
150	BANCO INMOBILIARIO MEXICANO, S.A.	INMOBILIARIO	R
151	FUNDACIÓN DONDÉ BANCO, S.A.	DONDE	R
152	BANCO BANCREA, S.A.	BANCREA	R
600	MONEX CASA DE BOLSA, S.A. DE C.V.	MONEXCB	RC
601	GBM GRUPO BURSÁTIL MEXICANO, S.A.	GBM	RC
602	MASARI CASA DE BOLSA, S.A.	MASARI	RC
605	VALUE, S.A. DE C.V., CASA DE BOLSA	VALUE	RC
606	ESTRUCTURADORES DEL MERCADO DE VALORES CASA DE BOLSA, S.A. DE C.V.	ESTRUCTURADORES	RC
608	VECTOR CASA DE BOLSA, S.A. DE C.V.	VECTOR	RC
610	B Y B CASA DE CAMBIO, S.A. DE C.V.	B&B	RC
614	ACCIONES Y VALORES BANAMEX, S.A. DE C.V., CASA DE BOLSA	ACCIVAL	RC
615	MERRILL LYNCH MÉXICO, S.A. DE C.V., CASA DE BOLSA	MERRILL LYNCH	RC
616	CASA DE BOLSA FINAMEX, S.A. DE C.V.	FINAMEX	RC
617	VALORES MEXICANOS CASA DE BOLSA, S.A. DE C.V.	VALMEX	RC
619	MAPFRE TEPEYAC, S.A.	MAPFRE	RC
620	PROFUTURO G.N.P., S.A. DE C.V.	PROFUTURO	RC
621	ACTINVER CASA DE BOLSA, S.A. DE C.V.	CB ACTINVER	RC
622	OPERADORA ACTINVER, S.A. DE C.V.	OACTIN	RC
623	OLD MUTUAL LIFE, S.A. DE C.V.	SKANDIA	RC
626	DEUSTCHE SECURITIES, S.A. DE C.V.	CBDEUTSCHE	RC

627	ZURICH COMPAÑÍA DE SEGUROS, S.A.	ZURICH	RC
628	ZURICH VIDA, COMPAÑÍA DE SEGUROS, S.A.	ZURICHVI	RC
630	INTERCAM CASA DE BOLSA, S.A. DE C.V.	CB INTERCAM	RC
631	CI CASA DE BOLSA, S.A. DE C.V.	CI BOLSA	RC
634	FINCOMÚN, SERVICIOS FINANCIEROS COMUNITARIOS, S.A. DE C.V.	FINCOMUN	RC
636	HDI SEGUROS, S.A. DE C.V.	HDI SEGUROS	RC
637	ORDER EXPRESS CASA DE CAMBIO, S.A. DE C.V	ORDER	RC
638	AKALA, S.A. DE C.V., SOCIEDAD FINANCIERA POPULAR	AKALA	RC
640	J.P. MORGAN CASA DE BOLSA, S.A. DE C.V.	CB JPMORGAN	RC
642	OPERADORA DE RECURSOS REFORMA, S.A. DE C.V., S.F.P.	REFORMA	RC
646	SISTEMA DE TRANSFERENCIAS Y PAGOS STP, S.A. DE C.V., SOFOM E.N.R.	STP	RC
648	EVERCORE CASA DE BOLSA, S.A. DE C.V.	EVERCORE	RC
649	OLD MUTUAL OPERADORA DE FONDOS S.A. DE C.V.	OSKNDIA	RC
651	SEGUROS MONTERREY NEW YORK LIFE, S.A. DE C.V.	SEGMTY	RC
652	SOLUCIÓN ASEA, S.A. DE C.V.,	ASEA	RC
653	KUSPIT CASA DE BOLSA, S.A. DE C.V.	KUSPIT	RC
655	J.P. SOFIEXPRESS, S.A. de C.V., S.F.P.	SOFIEXPRESS	RC
656	UNAGRA, S.A. DE C.V.	UNAGRA	RC
659	OPCIONES EMPRESARIALES DEL NORESTE, S.A. de C.V., S.F.P.	ASP INTEGRA OPC	RC
670	LIBERTAD SERVICIOS FINANCIEROS, S.A. DE C.V., S.F.P.	LIBERTAD	RC
671	CAJA POPULAR LAS HUASTECAS, S.C. DE A.P. DE R.L. DE C.V.	HUASTECAS	RC
673	GRUPO NACIONAL PROVINCIAL, S.A.B.	GNP	RC
674	AXA SEGUROS, S.A. de C.V.	AXA	RC
677	CAJA POPULAR MEXICANA, S.C. de A.P. de R.L. de C.V.	CAJA POP MEXICA	RC
678	AFORE SURA, S.A. DE C.V.	SURA	RC
679	FINANCIERA NACIONAL DE DESARROLLO AGROPECUARIO, RURAL, FORESTAL Y PESQUERO	FND	RC
680	CAJA POPULAR CRISTÓBAL COLÓN, S.C. DE R.L. DE C.V.	CRISTOBAL COLON	RC
681	PRINCIPAL AFORE, S.A. DE C.V.	PRINCIPAL	RC
682	LA PERSEVERANCIA DEL VALLE DE TEHUACÁN, S.A. DE C.V., S.F.P.	PERSEVERANCIA	RC
683	CAJA DE AHORRO DE LOS TELEFONISTAS, S.C. DE A.P. DE R.L. DE C.V.	CAJA TELMEX	RC
685	FONDO DE GARANTÍA Y FOMENTO PARA LA AGRICULTURA, GANADERÍA Y AVICULTURA	FONDO (FIRA)	RC
686	AFORE INVERCAP, S.A. DE C.V.	INVERCAP	RC
687	INSTITUTO DEL FONDO NACIONAL DE LA VIVIENDA PARA LOS TRABAJADORES -INFONAVIT	INFONAVIT	RC
689	FONDO MEXICANO DEL PETRÓLEO PARA LA ESTABILIZACIÓN Y EL DESARROLLO	FOMPED	RC

Appendix IX - FedGlobal ACH Panama Service
Bank Numbers for RDFIs

Institution Name	Identification Number
001 - BANCO NACIONAL	000000013
002 - BANISTMO	000000026
003 - CITIBANK	000000039
018 - DAVIVIENDA	000000181
037 - MULTIBANK	000000372
040 - TOWERBANK	000000408
042 - SCOTIABANK	000000424
051 - BICSA	000000518
071 - COOPROFESIONALES	000000712
076 - BANVIVIENDA	000000767
077 - CAJA DE AHORROS	000000770
106 - METROBANK	000001067
108 - BANCO ALIADO	000001083
110 - CREDICORP BANK	000001106
115 - GLOBAL BANK	000001151
138 - BAC INTL. BANK	000001384
139 - BCT BANK	000001397
146 - CITIBANK (PANAMA)	000001465
147 - MMG BANK	000001478
149 - ST GEORGES BANK	000001494
150 - BANCO AZTECA	000001504
151 - BCO PICHINCHA PMA	000001517
153 - PRODUBANK	000001533
156 - BANCO DELTA	000001562
157 - BANCO LAFISE	000001575
158 - BANESCO	000001588
159 - CAPITAL BANK	000001591
160 - BANCO PANAMA	000001601
161 - BANISI	000001614
163 - MERCANTIL BANK	000001630
167 - PRIVAL BANK	000001672
168 - BALBOA BANK	000001685
170 - UNI BANK	000001708
172 - BANCO FICOHSA	000001724
173 - FPB BANK	000001737
174 - ALLBANK	000001740
175 - BANCOLOMBIA	000001753
177 - CANAL BANK	000001779