# Change Log

*Changes from Version 2.0 to Version 3.0*

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Change in Content</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Created an executive summary</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Updated the pre requisites based on recent discussions with participants</td>
<td></td>
</tr>
<tr>
<td>7-10</td>
<td>Made updates to the RTDDA bill pay launch requirements to reflect inputs from recent discussions with FIs and billers</td>
<td></td>
</tr>
<tr>
<td>13-58</td>
<td>Made updates to the list of scenarios, process flows and sample prototype screens to reflect inputs from recent discussions with FIs</td>
<td></td>
</tr>
<tr>
<td>59-60</td>
<td>Created a section to describe a recommended phased approach to RTP Bill Pay Production Launch</td>
<td></td>
</tr>
</tbody>
</table>
Executive Summary

RTP® Bill Pay Implementation Guide has been developed to help all early adopters be successful in their RTP Bill Pay production launch.

RTP Path to Full Scale Production Launch:
- TCH has defined a set of prerequisites that all stakeholders within the RTP value chain - Biller, Biller’s FI, Customer’s FI, and the Customer – may consider in order to successfully launch and enable the use RTP® Bill Pay services.
- With the help of several working group discussions over the last two years with participating FIs, TCH has outlined a list of high level bill pay launch requirements across different stages of the bill pay journey (RfP initiation, Approving Payment Instructions, FI / Biller Payment Posting, Payment Acknowledgment, Returns), which are expected to aid early adopter FIs provide their customers with a consistent RTP Bill Pay product experience.
  - In addition, each participant must adhere to the RTP Operating Rules when sending payments or messages through the RTP network.
- To support the FIs through their Bill Pay journey, 7 scenarios (both positive and exception scenarios) have been outlined to provide guidance to participants, and ensure that they’re adequately prepared to enable RTP® for their customers/biller clients.
- The recommended approach for FIs is to follow a phased path to ensure a successful foundational launch and full scale production launch –
  - Phase 0 (Bank-to-Bank Testing and Prod Validation) – Test the basic end to end flow with a few transactions and limited end customers.
  - Phase 1 (Small Scale Production Launch) – Test the RTP® RfP capability (including positive and exception scenarios) with a small end customer cohort.
  - Phase 2 (Full Scale Production Launch) – Launch the RTP® RfP capability to all retail banking customers that can receive RfPs from participating billers.

This module lays out the approach, requirements, and scenario guidelines that FIs may leverage to best prepare for their RTP® production launch.
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bill Pay Launch Requirements</strong></td>
<td>5</td>
</tr>
<tr>
<td>Bill Pay Prerequisites across roles</td>
<td>6</td>
</tr>
<tr>
<td>RTDDA Bill Pay Launch Requirements</td>
<td>7-10</td>
</tr>
<tr>
<td><strong>Summary of Bill Pay Process Guidelines</strong></td>
<td>11</td>
</tr>
<tr>
<td>List of Process Flows – Happy Path and Exception Scenarios</td>
<td>12</td>
</tr>
<tr>
<td>Summary of Guidance on Exception Scenarios</td>
<td>13-15</td>
</tr>
<tr>
<td><strong>Detailed Bill Pay Process Flows and Sample Prototype Screens</strong></td>
<td>16</td>
</tr>
<tr>
<td>Scenario 1- Payment Successful</td>
<td>17-31</td>
</tr>
<tr>
<td>Scenario 2- Customer Unable to Receive an RfP</td>
<td>32-34</td>
</tr>
<tr>
<td>Scenario 3- Customer Ignores/Declines an RfP</td>
<td>35-40</td>
</tr>
<tr>
<td>Scenario 4- RTP Payment Fails/ Gets Rejected</td>
<td>41-44</td>
</tr>
<tr>
<td>Scenario 5- Customer Schedules a Payment</td>
<td>45-54</td>
</tr>
<tr>
<td>Scenario 6- Customer Makes an Erroneous Payment</td>
<td>55-56</td>
</tr>
<tr>
<td>Scenario 7- Biller Cancels an Already Issued RfP</td>
<td>57-59</td>
</tr>
<tr>
<td><strong>Phased Approach for RTP® Bill Pay Production Launch</strong></td>
<td>60</td>
</tr>
<tr>
<td>An Option – Phased Approach for RTP® Bill Pay Production Launch</td>
<td>61</td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td>62</td>
</tr>
</tbody>
</table>

*Note: This document does not provide legal or compliance advice and should not be relied on as such. As with any new product or service, each RTP Participant should engage its own counsel and compliance professionals to conduct its own review of the risks, compliance obligations and other relevant legal issues that RTP, including sending and/or receiving Requests for Payment, may implicate.*
Bill Pay Launch Requirements
Bill Pay Prerequisites Across Roles

**Biller**

- The biller has identified the preferred customer cohort and enrolled them for RfPs
- Biller has the necessary infrastructure to be able to send RfPs to end customers via their FI, and accept payments via RTP®
- The biller has acquired bank account details of the customer to initiate an RfP
- For privacy purposes, the biller may consider providing a disclaimer (when a customer signs up for RTP® as a payment method with the biller) that the bill will be delivered and available to all persons who have access to the bank account (For e.g., all joint account holders)

**Biller’s FI**

- Biller’s FI follows appropriate processes to enable RfP functionality for billers (conducting due diligence, updating legal terms, complying with RTP® rules etc.)
- The biller’s FI is enabled to send RfP and track RfP requests
- The biller’s FI has the capability to receive credit transfers using the RTP® network
- The biller’s FI has individually determined the pricing and other T&Cs for its biller customer
- Biller’s FI must implement documented procedures to perform risk based due diligence on a biller that seeks to initiate RfPs, monitor RfPs submitted by a biller and investigate any report of fraudulent RfP and retain the right to suspend biller’s ability to initiate RfPs

**Customer’s FI**

- Customer’s FI is enabled to receive and respond to RfP requests
- Customer’s FI has the capability to make credit transfers via RTP® network
- Customer’s FI must authenticate the customer in accordance with the RTP® rules
- Customer’s FI has a digital interface enabling the customer to view and respond to an RfP
- Customer’s FI must utilize fraud and risk-screening measures prior to submitting a Payment Message to the RTP® System
- Customer’s FI has updated its T&Cs / disclaimers for its customers to use RTP®

**Customer**

- Customer has provided necessary credentials (RT and DDA number) to the biller to send an RfP
- The customer FI account is digitally enabled
- The customer has not opted out of receiving RfPs from the biller/all billers

TCH Confidential

© 2021 The Clearing House Payments Company L.L.C.
## Bill Pay Launch Requirements

<table>
<thead>
<tr>
<th>Step</th>
<th>Reqmt. No.</th>
<th>Requirement Description</th>
<th>Cust. FI</th>
<th>Biller FI</th>
<th>Biller</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
<td>Ability to verify if the biller meets the FI’s RfP eligibility criteria, including with respect to the RTP Rules and Requirements for Request for Payment Customers</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
<td>Ability to provide the biller with an interface [batch or API – FI’s discretion] to enter payment details to initiate an RfP</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
<td>Ability of the biller’s FI to validate the eligibility of the customer’s FI to receive RfPs [e.g., valid routing no., RfP receive enabled, and currently active on the network]</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
<td>Ability of biller’s FI to communicate to the biller if customer’s FI is not RTP® enabled along with the appropriate reason code</td>
<td>NA</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>5.</td>
<td>5.</td>
<td>Ability of the customer’s FI to communicate back to the biller’s FI if an RfP cannot be accepted and/or presented to the customer, along with appropriate reason code</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>6.</td>
<td>6.</td>
<td>Ability of the biller’s FI to communicate back to the Biller if a customer is unable to receive an RfP along with appropriate reason code</td>
<td>NA</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>7.</td>
<td>7.</td>
<td>Ability of the biller to maintain a record in customer’s bill pay preferences in case an RfP cannot be delivered [as indicated by the biller’s FI]</td>
<td>NA</td>
<td>NA</td>
<td>Y</td>
</tr>
<tr>
<td>8.</td>
<td>8.</td>
<td>Ability of the customer’s FI to authenticate the customer as per RTP® operating rules on enabled digital channels [as in current state]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>9.</td>
<td>9.</td>
<td>Ability of the customer’s FI to validate customer’s details and receive an RfP [e.g., valid bank account no., has not opted out, is digitally enabled]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Note:** To access the latest version of the operating rules, please refer to the following link: [RTP Operating Rules, TCH](#)
# RTDDA Bill Pay Launch Requirements (2/4)

<table>
<thead>
<tr>
<th>Step</th>
<th>Reqmt. No.</th>
<th>Requirement Description</th>
<th>Cust. FI</th>
<th>Biller FI</th>
<th>Biller</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Ability to <strong>notify a customer</strong> that an RfP has been received [email/push notification/etc.]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Ability for a customer to <strong>opt out</strong> of receiving RfPs from a particular biller [FI’s discretion to provide opt out at customer level or at an account level]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Provide customer the option to access an RfP through a <strong>digital interface</strong> supported by his/her FI [app or browser – FI’s discretion]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Ability to <strong>display all necessary fields</strong> like amount due, due date, biller name, customer name, customer’s account no. [masked if needed] once the RfP is opened</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Ability to provide a <strong>link to view the detailed bill statement</strong> [TCH Document Services]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Allow billers to indicate when a <strong>full payment is required</strong> vs. when a <strong>variable amount is allowed</strong> [max, min, without cap etc.]</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Ability of the biller’s FI to send RfP status messages to billers in their <strong>preferred format and time</strong> – daily/real time/ any other frequency <strong>based on existing banking relationship</strong></td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Ability of the customer’s FI to <strong>send a reminder</strong> closer to due date and / or when an existing RfP is overdue [Channel of notification and frequency will be based on customer preferences]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>In case of a <strong>joint customer bank account</strong>, customer’s FI should implement appropriate practices and legal terms to govern presentation of RfPs [At FI’s discretion based on their internal customer enrollment process. For e.g., If one RfP is paid by one account holder, the RfP may appear ‘paid’ to both account holders]</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Ability to keep an RfP open till the expiration date set by the biller [RTP 2.9 specs allow the biller to set an expiration date in an RfP]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Allow billers to <strong>cancel an existing RfP</strong></td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Ability to display a cancelled RfP in ‘read only’ mode</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*Document Services provided by The Clearing House* <Link to available documentation>

N = No additional dev may be needed ; Y = additional dev may be needed ; NA = Not applicable
### RTDDA Bill Pay Launch Requirements (3/4)

#### Development Effort

<table>
<thead>
<tr>
<th>Step</th>
<th>Reqmt. No.</th>
<th>Requirement Description</th>
<th>Cust. FI</th>
<th>Biller FI</th>
<th>Biller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approve Payment Instructions</strong></td>
<td>22.</td>
<td>Ability of the customer’s FI to display available and accessible account balance to the customer [for ‘pay now’ feature – up to FI’s discretion to show the balance before initiating the payment transaction and/or after the payment]</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>23.</td>
<td>Ability for a customer to ignore an RfP</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>24.</td>
<td>Ability for a customer to reject / decline an RfP</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>25.</td>
<td>Ability for the customer to set exact date and time of the payment [full or partial] for an RfP to help them with their financial planning</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>26.</td>
<td>Ability to send information regarding scheduled payments to the biller’s FI</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>27.</td>
<td>Ability to send information regarding scheduled payments to the biller</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>28.</td>
<td>Ability for the customer to select appropriate payment method (credit, checking account etc.) to make a payment to an RfP. The DDA account number should only serve as an ID to route the RfP to the appropriate customer, and not as the sole method to make a payment</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Payment Posting</strong></td>
<td>29.</td>
<td>Ability to make the funds immediately available to the biller’s account [in real time per SLA]</td>
<td>NA</td>
<td>Y</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>30.</td>
<td>Ability to immediately post a payment received to customer’s service account by the biller**</td>
<td>NA</td>
<td>NA</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Note: To access the latest version of the operating rules, please refer to the following link:** [RTP Operating Rules, TCH](#)

N = No additional dev may be needed ; Y = additional dev may be needed ; NA = Not applicable

**Time taken for the biller to post the RTP payment depends on the biller’s internal process (24-48 hours currently). However, they are encouraged to post the payment in real time**
## RTDDA Bill Pay Launch Requirements (4/4)

<table>
<thead>
<tr>
<th>Step</th>
<th>Reqmt. No.</th>
<th>Requirement Description</th>
<th>Cust. FI</th>
<th>Biller FI</th>
<th>Biller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Acknowledge ment</td>
<td>31.</td>
<td>Ability of the biller to send payment acknowledgement directly to the customer in real time*</td>
<td>NA</td>
<td>NA</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>32.</td>
<td>Ability to <strong>show payment sent message</strong> [visually in the customer’s banking digital interface] as soon as the payment is made (based on bank-to-bank acknowledgement message)</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>33.</td>
<td>Ability to <strong>show payment acknowledgement notification</strong> [visually in the customer’s banking digital interface] as soon as the payment is updated by the biller* on the customer service account</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Request for Return of Funds</td>
<td>34.</td>
<td>Ability for a customer to <strong>send</strong> a Request for Return of Funds through the customer bank</td>
<td>Y</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>35.</td>
<td>Ability of the biller to <strong>receive</strong> Request of Return of Funds through the biller bank</td>
<td>NA</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>36.</td>
<td>Ability of the biller to <strong>send acceptance/rejection</strong> for the Request for Return of Funds [based on biller’s internal refund policies and requirements]</td>
<td>NA</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>37.</td>
<td>Ability of the biller to <strong>initiate a credit transfer</strong> in response to the Request for Return of Funds in real time (in case it is accepted)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Development Effort**

Note: To access the latest version of the operating rules, please refer to the following link: [RTP Operating Rules, TCH](#)

- **N** = No additional dev may be needed ; **Y** = additional dev may be needed ; **NA** = Not applicable
- **Time taken for the biller to post the RTP payment depends on the biller’s internal process (24-48 hours currently). However, they are encouraged to post the payment in real time**
Summary of Bill Pay Process Guidelines
## Bill Pay Process Flows

<table>
<thead>
<tr>
<th>Positive Scenario</th>
<th>Exception Scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Payment Successful</td>
<td>2 Customer Unable to Receive an RfP</td>
</tr>
<tr>
<td></td>
<td>3 Customer Ignores / Declines an RfP</td>
</tr>
<tr>
<td></td>
<td>4 RTP Payment Fails / Gets Rejected</td>
</tr>
<tr>
<td></td>
<td>5 Customer Schedules a Payment</td>
</tr>
<tr>
<td></td>
<td>6 Customer Makes an Erroneous Payment</td>
</tr>
<tr>
<td></td>
<td>7 Biller Cancels an Already Issued RfP</td>
</tr>
</tbody>
</table>

**Exception Scenarios**

1. Customer Unable to Receive an RfP
2. Customer Ignores / Declines an RfP
3. RTP Payment Fails / Gets Rejected
4. Customer Schedules a Payment
5. Customer Makes an Erroneous Payment
6. Biller Cancels an Already Issued RfP
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Guidance for FIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Payment Successful</td>
<td>After customer requests the biller for an RfP, he/she receives the RfP via his/her digital banking interface and makes a successful payment for that RfP</td>
<td>▪ FI may process the RTP payment (BAU)</td>
</tr>
</tbody>
</table>
| 2. Customer Unable to Receive RfP | A customer may not be able to receive RfPs due to several reasons. For example:  
▪ Customer’s FI is not enabled to receive RfPs or send RTP payments  
▪ Customer may have opted out from receiving RfPs from all billers, or RfPs from a particular biller  
▪ Customer is not digitally enabled with his/her FI  
▪ The customer may not be able to use RTP as a payment method to make bill payments, until their FI is RTP payment enabled  
▪ If the customer has opted out from receiving RfPs from a particular biller, the customer FI may consider guiding them to update preferences to start receiving RfPs from that biller  
▪ If the customer is not digitally enabled, the FI may consider advising on next steps to enable customer digital enablement, and set up preferences | ▪ The customer may not be able to use RTP as a payment method to make bill payments, until their FI is RTP payment enabled  
▪ If the customer has opted out from receiving RfPs from a particular biller, the customer FI may consider guiding them to update preferences to start receiving RfPs from that biller  
▪ If the customer is not digitally enabled, the FI may consider advising on next steps to enable customer digital enablement, and set up preferences |
| 3. Customer Ignores / Declines an RfP | A customer may ignore/decline an RfP for any reason, including:  
▪ Customer has made a payment in full through another channel  
▪ Customer does not recognize the biller  
▪ The requested amount is different from the invoice amount, or the customer has paid partially through another channel  
▪ If the customer has made a payment in full through another channel and ignores the RfP received, the RfP will expire provided no action is taken by the customer before the expiry date set by the biller  
▪ If a customer ignores an RfP because they cannot recognize the biller, the FI should check whether the customer has requested to receive RfPs from that biller  
▪ If a customer has paid partially or if the requested amount is different from the invoice amount, biller may cancel the already issued RfP and send a new / reissued RfP based on updated invoice details | ▪ If the customer has made a payment in full through another channel and ignores the RfP received, the RfP will expire provided no action is taken by the customer before the expiry date set by the biller  
▪ If a customer ignores an RfP because they cannot recognize the biller, the FI should check whether the customer has requested to receive RfPs from that biller  
▪ If a customer has paid partially or if the requested amount is different from the invoice amount, biller may cancel the already issued RfP and send a new / reissued RfP based on updated invoice details |
## Summary – Guidance on Scenarios (2/3)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Guidance for FIs</th>
</tr>
</thead>
</table>
| 4. RTP Payment Fails / Gets Rejected | A customer’s RTP payment may fail / get rejected due to the following reasons -  
  a) Technical problem at the customer’s FI/Sending Participant or the biller’s FI/Receiving Participant (e.g., FI not live on the RTP network when the payment is initiated)  
  b) Specific conditions set up by the biller for the RfP sent (e.g. biller doesn’t accept payments for an amount that exceeds the amount due) | - If the payment cannot be made due to an FI’s technical issue, the FIs may try processing the payment again based on their retry process, along with sending the appropriate customer communication  
  - If the payment still fails, customer may be advised to try again later  
  - If the payment fails due to specific conditions set up by the biller, customer FI may communicate the rejection reason and advise the customer on next steps |
| 5. Customer Schedules a Payment | A customer may choose to schedule a payment if he/she does not want to pay it immediately, providing him / her with better control and flexibility. Once the payment is scheduled, a credit transfer is made to the biller as per the date selected by the customer | FI may process the RTP payment (BAU) on the scheduled date |
| 6. Customer Makes an Erroneous Payment | Customers may make an erroneous payment in cases such as –  
  - Customer accidently adding a zero and paying more than was requested by the biller in the RfP  
  - Duplicate payment made (one through the RfP received, and another through a different payment channel) | FI may use the Request for Return of Funds process to request the Receiving FI to return the payment made in error (Consumers may have rights under Regulation E for errors caused by the Sending FIs)  
  - FI may also advise customers to reach out to the biller for refunds, which may be handled by billers based on existing business processes and policies. Billers should inform the customer about the refund status based on existing standard operating procedures |

In such cases, the customer may seek a refund for the payment made in error.
### Summary – Guidance on Scenarios (3/3)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Guidance for FIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Cancels an Already Issued RfP</td>
<td>A biller may cancel an existing RfP under the following scenarios –</td>
<td>If an already issued RfP is cancelled by the biller, the customer may view the cancelled RfP but may not be able to respond to it with an RTP payment (the customer may make a payment based on next steps communicated by the biller)</td>
</tr>
<tr>
<td></td>
<td>- Customer received an RfP with incorrect bill details (e.g., amount, date, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Customer has already paid the bill partially through another channel. In this case, the biller may cancel the existing RfP, and reissue another RfP with the updated bill amount due</td>
<td></td>
</tr>
</tbody>
</table>
Detailed Bill Pay Process Flows and Sample Prototype Screens
## 1. Payment Successful – Setting the Stage

### Customer Receives an RfP and Makes a Successful Payment

<table>
<thead>
<tr>
<th>Context</th>
<th>After customer requests the biller for an RfP, he/she receives an RfP via his/her digital banking interface and makes a successful payment for that RfP</th>
</tr>
</thead>
</table>
| Prototype Link | **Customer Receives an RfP and Makes a Successful Payment (Full Amount)**  
**Payment Successful (Partial / Modified Amount)**  
**Payment Successful (Minimum Amount)** |

**Message specs used:** pain.013 (Request for Payment), pacs.008 (credit push payment), camt.035 (Payment acknowledgement in response to a payment made)
Payment Successful – Process Flow

Customer Receives an RfP and Makes a Successful Payment

1. Initiate RfP with invoice details such as amount, due date etc. and send to the biller’s FI
2a. Perform eligibility check on customer FI
2b. Route the RfP to the customer’s FI
3. Inform the biller FI that RfP cannot be presented to the customer
4. Present the information to the biller via treasury mgmt. system
5. Reach out to the customer for an alternative mode of bill delivery and payment
6. Verify RfP details (e.g., biller, bill summary, amount due, due date, account no.)
7. Reach out to the biller to resolve issues using servicing channel(s) offered by the biller
8. Resolve the customer query
9. Approve payment*
10a. Initiate credit transfer to the biller’s FI per payment instruction
10b. Send notification to customer that amount has been transferred
11a. Receive the credit transfer
11b. Notify the biller
12a. Post the payment to the bill
12b. Send payment confirmation to customer on preferred channel
13. Ignore / Decline the RfP with the applicable reason

Process flow key:
- Process Flow
- Process Step
- Call out

*Note – The customer always has the option to ignore / decline an RfP
Customer Requests for RfP at the Biller Website

Prototype Screens

In case the customer bank account details are already saved with the biller, these fields should appear as non editable/ greyed out. Customer can simply select RTP as the payment method*

*Note – If the customer has multiple accounts saved with their biller, they may be provided with a choice to select RTP for a specific bank account.
Payment Successful – Prototype Screens with Field Level Data (1/4)

Scenario – Successful Payment
A financial institution has received a RfP (pain.013) message on behalf of their customer through the RTP network
- Customer bank validates that their customer is eligible to receive the message
- Financial Institution then notifies their customer through their preferred mechanism (app, email, text)
- Customer authenticates with FI to view the details of the message

For every pacs.008 payment message, a corresponding response from the receiving bank will be sent in the form of a pacs.002.

This will be the first indicator to the sending bank that it can notify its customer that the payment was successfully received or if another action is required (see page TBD)
Payment Successful – Prototype Screens with Field Level Data (2/4)

Prototype Screen

Payer UX
- Payer configures payment details

Payer FI
- RfP displayed per payment type

Biller FI
- The FI may choose not to make this field editable if the amount modification flag is set to false.

- pain.013 message would contain account information available to biller, including account info supplied by the Payer when registering with the biller to receive RfPs
- Funding source(s) presented by the Payer FI

- pacs.002 status response (accepted)
- pacs.008 payment sent
- pacs.008 payment received
- pacs.002 status response (accepted)

FI facilitates the information back to Biller FI
Data gets transmitted via the pacs.008 message

- FI facilitates the information back to Biller FI
- Data gets transmitted via the pacs.008 message

- pacs.008 payment sent
- pacs.008 payment received
- pacs.002 status response (accepted)
Payment Successful – Prototype Screens with Field Level Data (3/4)

2.650 Nm
Credit Name

1.6 TtlIntrBkSttlmAmt
Total Interbank Settlement Amount

1.2 CreDtTm
Creation date/time of payment

Success!
Your payment has been made.
Paid to: EnergyCorp
Amount: $95.75
Payment Date: Jul 30, 2020 5:05pm

My Payments

<table>
<thead>
<tr>
<th>Creditor Name</th>
<th>Amount</th>
<th>Payment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnergyCorp</td>
<td>$95.75</td>
<td>7/30/20 5:05 PM</td>
</tr>
<tr>
<td>MovieStream</td>
<td>$10.79</td>
<td>7/21 11:34 AM</td>
</tr>
<tr>
<td>Telco</td>
<td>$175.23</td>
<td>7/22 7:45 PM</td>
</tr>
<tr>
<td>GymClub</td>
<td>$29.99</td>
<td>7/16 7:57 PM</td>
</tr>
<tr>
<td>CreditCorp</td>
<td>$500.00</td>
<td>7/05 5:30 PM</td>
</tr>
<tr>
<td>John Doe</td>
<td>$25.00</td>
<td>7/04 11:15 AM</td>
</tr>
</tbody>
</table>

Payer receives confirmation of successful payment
Pacer.002 received (accepted) displayed to Payer

Payer views paid request in context of other RfPs
Payment request status shown as paid

Receives notification of acknowledgement
Notifies payer of acknowledgement

Payment acknowledged by Biller
camt.035 sent with acknowledgement details
When a camt.035 (payment acknowledgement) is received, information can be pulled from pacs.008 and/or pacs.002 to present the full details to the customer.

**Payment Acknowledged**

Your payment has been received and acknowledged by EnergyCorp.

- **Paid to**: EnergyCorp
- **Amount**: $95.75
- **Payment Date**: Jul 30, 2020 5:05pm
- **Confirmation Date**: Aug 1, 2020 8:00am

Your payment has been received by EnergyCorp. Your confirmation number is 12345678. For more information regarding your payment, go to www.energycorp.com/account.

**1.256 CreDtTm**

Creation date/time of payment acknowledgement

**3.3 Ustrd**

Unstructured data field to hold Transaction ID

Payer views confirmation # and additional info

Payer Fi App

My Payments

- **EnergyCorp**
  - $95.75
  - PAID 7/30 5:05 PM
- **MovieStream**
  - $10.79
  - PAID 7/23 11:24 AM
- **Telco**
  - $175.23
  - PAID 7/22 7:45 PM
- **GymClub**
  - $29.99
  - PAID 7/16 7:57 PM
- **CreditCorp**
  - $500.00
  - PAID 7/05 5:50 PM
- **John Doe**
  - $25.00
  - PAID 7/04 11:15 AM

Payer views payment in context of other RfPs

Payer Fi App

Request for Payment (RfP)

- **From**: EnergyCorp
- **To**: Cindy Albert
- **Amount Due**: $95.75
- **Due Date**: Jul 31, 2020
- **RfP Issue Date**: Jul 30, 2020
- **Reference Id**: 23456

View Invoice

Your EnergyCorp July 2020 Statement for account ending in 6789

Questions about this RfP? Contact EnergyCorp Customer Care at 800-234-5678

Payment History

- **EnergyCorp**
  - $95.75
  - PAID 8/30 5:05 PM
  - Confirmation #: 12345678

Payer views acknowledgement details in RfP

RfP details updated
Payment Configuration for Minimum and Statement Balance

2.650 Nm Creditor Name
2.30 Nm Debtor Name
2.943 Amt Statement Balance
2.426 InstDtn Amount Due
2.14 ReqExctnDt Due Date of the RfP
2.15 Dt or 2.16 DtTm
2.942 Amt Statement Balance
2.263 InstdAmt Amount Due

The payment configuration for the minimum and statement balance involves the following steps:

1. **Payer FI** displays the Request for Payment (RfP) details to the Payer.
2. The Payer views the request details and configures the payment details.
3. The Payer logs in to their FI app and selects the payment from the list of accounts.
4. The Payer enters the payment amount and due date.
5. The payment is reviewed and sent by the FI.

The pain.013 message would contain account information available to the biller, including account info supplied by the Payer when registering with the biller to receive RfPs.

Funding source(s) presented by the Payer FI.
Payment Successful (Partial / Modified Amount) – Prototype Screens

- Receive RFP notification
- View RfP details
- Modify the payment amount
- Review and make the payment
- Receive payment verification
- View list of due/paid RFPs on the dashboard

B2C | Bill, Manual Payment, Modified Amount

5:03
Wed, Jul 30

**Request for Payment (RFP)**

**Payment Details**

- From: EnergyCorp
- To: Cindy Albert
- Amount Due: $95.75
- Due Date: Jul 31, 2020
- RFP Issue Date: Jul 30, 2020
- Reference ID: 23456

**Send Payment**

- Pay to: EnergyCorp
- Amount: $50.00
- Due Date: Jul 31, 2020
- Payment Date: Jul 30, 2020
- From: Cindy Albert
- Account: Checking
- Amount: $50.00
- Balance remaining: $45.75
- Payment Date: Jul 30, 2020, 5:05pm

**Success!**

Your payment has been made.

- Paid to: EnergyCorp
- Amount: $50.00
- Your payment has been received by EnergyCorp. To track your payment status and receive updates, go to www.energycorp.com/account.

**My Payments**

- EnergyCorp: $45.75, DUE TOMORROW
- EnergyCorp: $50.00, PAID 7/30 5:05PM
- MovieStream: $10.79, PAID 7/23 11:34AM
- Telco: $175.23, PAID 7/22 7:45PM
- GymClub: $29.99, PAID 7/19 1:01PM
- CreditCorp: $500.00, PAID 7/18 5:50PM

**Note:**

- Prototype Screen
- SAMPLE FOR GUIDANCE
Payment Successful (Minimum Amount) – Prototype Screens

B2C | Credit Card, Manual Payment, Minimum Due

4:45 Sat, Sep 1

Payee F1 App
Request for Payment
Your minimum payment of $25.00 to CreditCorp is due on September 1st.

Select Payment Amount
CreditCorp
Statement Balance
$1,250.09
Min Payment Due 09/01/2020
$25.00

2.943 Amt
Statement Balance

2.263 InstdAmt
Amount Due

Send Payment
To
CreditCorp
Amount
$25.00
Due Date
Sep 1, 2020
Account
Checking xxxxx1231

Your payment will be deducted from your account immediately.

My Payments
CreditCorp
$25.00
Paid 9/1 4:47 PM

EnergyCorp
$242.10
Paid 8/31 5:01 PM

MovieStream
$10.79
Paid 8/31 10:01 AM

Telco
$321.23
Paid 8/30 7:41 PM

GymClub
$29.99
Paid 8/16 5:33 PM

* If Type=FULL in data field 2.942, then use the amount in 2.943.
Payment Successful (Full Amount) – Prototype Screens (1/5)

- Receive RfP notification and login to the mobile device
- Accept RfP by providing one-time consent
- View list of RfPs; Select RfP due and view details
- Review details and make payment in full
- Receive payment verification; View list of paid RfPs on the dashboard
- View payment acknowledgement

**Prototye Screen**

5:03
Wed, Jul 30

**PAYER FI APP**
3m ago

**Request for Payment**
Your payment request from EnergyCorp in the amount of $95.75 is due on July 31st

**Device Login Options**

**RfP Acceptance**
Do you agree to give one-time consent to receive Requests for Payment from this biller?

- Confirm
- Decline

This is a one-time screen that appears when customer receives a bill from the biller for the first time.
Note: “My Payments” dashboard shown here represents the individual RfPs based on their status (due vs. paid). This is only one of the ways in which RfPs can be categorized. FIs can display RfP categorization in different ways (by biller, type, etc.) based on their preference.
Payment Successful (Full Amount) – Prototype Screens (3/5)

Prototype Screen

Receive RfP notification and login to the mobile device
Accept RfP by providing one-time consent
View list of RfPs; Select RfP due and view details
Review details and make payment in full
Receive payment verification; View list of paid RfPs on the dashboard
View payment acknowledgement

Payer FI App

Payment Details
Pay to: EnergyCorp
Amount: $95.75
Due Date: Jul 31, 2020
From: Cindy Albert

Make Payment from
Select Account

Amount Date
$95.75 07-30-2020

Review & Pay Back

Send Payment
Pay to: EnergyCorp
Amount: $95.75
Due Date: Jul 31, 2020
Payment Date: Jul 30, 2020
From: Cindy Albert
Account: Checking xxxxxx3356

This payment will be deducted from your account immediately.

Send Payment Back
Payment Successful (Full Amount) – Prototype Screens (4/5)

**Prototype Screen**

**Receive RfP notification and login to the mobile device**

**Accept RfP by providing one-time consent**

**View list of RfPs; Select RfP due and view details**

**Review details and make payment in full**

**Receive payment verification; View list of paid RfPs on the dashboard**

**View payment acknowledgement**

---

**Success!**

Your payment has been made.

Paid to: **EnergyCorp**

Amount: **$95.75**

Payment Date: **Jul 30, 2020 5:05pm**

Your payment has been received by EnergyCorp. To track your payment status and receive updates, go to [www.energycorp.com/account](http://www.energycorp.com/account).

---

**My Payments**

- **EnergyCorp**
  - Amount: $95.75
  - Paid: 7/30 5:05 PM

- **MovieStream**
  - Amount: $10.79
  - Paid: 7/23 11:34 AM

- **Telco**
  - Amount: $175.23
  - Paid: 7/22 7:45 PM

- **GymClub**
  - Amount: $29.99
  - Paid: 7/16 7:57 PM

- **CreditCorp**
  - Amount: $500.00
  - Paid: 7/05 5:50 PM

- **John Doe**
  - Amount: $25.00
  - Paid: 7/04 11:15 AM
Payment Successful (Full Amount) – Prototype Screens (5/5)

1. Receive RfP notification and login to the mobile device
2. Accept RfP by providing one-time consent
3. View list of RfPs; Select RfP due and view details
4. Review details and make payment in full
5. Receive payment verification; View list of paid RfPs on the dashboard

**Prototype Screen**

5:17
Fri, Jul 31

**Payer FI App**

**My Payments**

- **EnergyCorp**: $95.75
  - PAID 7/30 5:17 PM
  - Your payment is acknowledged as paid as of July 31, 2019 at 5:05 pm. Your confirmation number is 1234567. Track your payment posting at www.energycorp.com/account.

- **MovieStream**: $10.79
  - PAID 7/23 11:34 AM

- **Telco**: $175.23
  - PAID 7/22 7:45 PM

- **GymClub**: $29.99
  - PAID 7/16 7:57 PM

- **CreditCorp**: $500.00
  - PAID 7/05 5:50 PM

**SAMPLE FOR GUIDANCE**
### 2. Customer Unable to Receive an RfP – Setting the Stage

| Context | A customer may not be able to receive RfPs due to several reasons. For example:  
|         | - Customer’s FI is not enabled to receive RfPs or send RTP payments  
|         | - Customer may have opted out of receiving RfPs from a particular biller  
|         | - Customer is not digitally enabled with his/her FI |
| FI Guidelines | Customer FI should check the reason for customer being unable to receive RfPs, and advise the customer based on the below guidelines –  
|         | - **If the customer’s FI is not RTP payment enabled**: Customer will not be able to use RTP products and services until their FI is RTP payment-enabled. Customer may be contacted by the biller for an alternative mode of bill delivery and payment in such a scenario  
|         | - **If the customer has opted out of receiving RfPs** from a particular biller: Customer FI may consider reminding the customer that they will not receive RfPs from this particular biller, and may guide the customer to update preferences if the customer wants to start receiving RfPs from the biller again  
|         | - **If the customer is not digitally enabled** with his/her FI: Customer should be advised on the next steps to become digitally enabled based on existing standard operating procedures, and set up preferences for using RTP products and services (e.g., bill pay) |
## Customer Unable to Receive an RfP – Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Expected action from Customer’s Bank</th>
<th>Expected action from Biller’s Bank</th>
<th>Expected action from Biller</th>
</tr>
</thead>
</table>
| 1. Customer is not digitally enabled | ▪ Accept the RfP and send back pacs.002 status message  
▪ Attempt to present RfP to the customer. If RfP cannot be presented, send pain.014 with AG03. The bank may consider contacting its customer to encourage them to enroll in digital services | ▪ Inform the biller that customer is unable to receive the RfP, along with the reason code (pain.014 with AG03) | ▪ Reach out to the customer for an alternative mode of bill delivery and payment  
▪ Record that the customer is not digitally enabled |

2. Customer is digitally enabled but opts out  
   a. Opt out preferences saved for the first time | ▪ Accept the RfP and send back pacs.002 status message  
▪ Present the RfP to the customer. If the customer declines and selects ‘opt out’ as the reason, save preferences and send pain.014 with NARR* | ▪ Inform the biller that customer opted out of receiving RfPs from the biller, along with the reason code (pain.014 with NARR) | ▪ Save customer preferences  
▪ Reach out to the customer for an alternative mode of bill delivery and payment |
   b. Opt out preferences already saved with the bank | ▪ Reject the RfP and send back pacs.002 with NOAT | ▪ Inform the biller that customer has not authorized RfPs on their account, along with the reason code (pacs.002 with NOAT) | ▪ Save customer preferences  
▪ Reach out to the customer for an alternative mode of bill delivery and payment |

---

*In the NARR field, banks could potentially use the code SL12 (creditor on black-list of debtor) as a workaround till TCH adds this code as part of the pain.014 message spec changes in the 2022 release.*
Customer Unable to Receive an RfP – Process Flow

**Process Flow**

Customer Unable to Receive an RfP

**Biller**

1. Initiate RfP with invoice details such as amount, due date etc. and send to the biller’s FI

2. Perform eligibility check on customer FI

   - D1. Is the FI routing no. valid?
     - Yes
     - No
   - D2. Is the FI RfP receive enabled?
     - Yes
     - No
   - D3. Is the FI currently active on the network?

3. Send the RfP to the customer along with applicable notification

4. Review the RfP and make a payment

**Biller’s FI**

5. Inform the biller’s FI using the appropriate reject code

**Customer’s FI**

6. Inform biller that customer is unable to receive RfP (with the reason code)

7. Reach out to the customer for an alternative mode of bill delivery and payment

**Customer**

If the customer’s FI is not able to accept the RfP (determine in <5 sec), they should send back the appropriate reason code to the biller FI via pacs.002. For e.g., NOAT – customer has not authorized RfP on the a/c or from this particular biller (list of relevant reason codes in the appendix)

Once the RfP is accepted, Customer FI must present the RfP to the customer unless an exception applies, as set forth in the RTP Rules and Technical Specification obligations. If it cannot be presented for permissible reasons, the RfP should be rejected with an appropriate reason code in the pain.014 message. For e.g., AG03 – customer is not digitally enabled (list of relevant reject codes in the appendix)

**Process Flow Key**
- Process Flow
- Process Step
- Call out
### 3. Customer Ignores/Declines an RfP – Setting the Stage

**Customer Ignores / Declines an RfP**

<table>
<thead>
<tr>
<th>Context</th>
<th>Once a customer receives an RfP, he/she may ignore or decline an RfP for any reason, including:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Customer has made a payment in full through another channel</td>
</tr>
<tr>
<td></td>
<td>- Customer does not recognize the biller</td>
</tr>
<tr>
<td></td>
<td>- The requested amount is different from the invoice amount, or any other reason</td>
</tr>
<tr>
<td>Note</td>
<td>The Sending Participant FI must include an applicable reject reason code in its response to an RfP (pain.014)*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FI Guidelines</th>
<th>Below guidelines may be followed if a customer ignores/declines an RfP–</th>
</tr>
</thead>
</table>
|                | - **Customer has made a payment in full through another channel:** Customer can choose to ignore the RfP if the payment has already been made in full through another channel, which should be reflected in the biller account within the standard SLA time (associated with that payment method / channel). RfP would expire if no action is taken by the customer before the expiry date set by the biller.  
  *Note: If the RfP expires before the customer is able to make a payment, they should be advised that they may still owe a payment, to reach out to the biller to receive a new RfP for the same invoice or an updated invoice, using existing biller communication channels, and fulfill the latest RfP obligation on their bill. Biller to determine the next appropriate course of action (e.g., send a new RfP for the same invoice or a new invoice)* |
|                | - **Customer does not recognize the biller:** Customer can choose to ignore the RfP received from an unknown biller and inform his/her FI about the unrecognized RfP. The Customer FI should check whether the customer has requested to receive RfPs from that biller |
|                | - **The requested amount is different from the invoice amount, or the customer has paid partially through another channel:** Customer can expect the old RfP to be cancelled and receive a new / reissued RfP based on updated invoice details (amount, due date, etc.). Customer may also be contacted by the biller through existing communication channels to guide on next steps |

**Prototype Link**

[Customer Ignores/Declines an RfP](https://www.theclearinghouse.org/payment-systems/rtp/-/media/30ef24a893324095bb2ea5df08a156dc.ashx): This is a mandatory field and the reject reason codes from the message specification (https://www.theclearinghouse.org/payment-systems/rtp/-/media/30ef24a893324095bb2ea5df08a156dc.ashx) can be incorporated into an FI's interface for display to the customer.
Customer Ignores / Declines an RfP – Process Flow

1. Initiate RfP with invoice details such as amount, due date etc. and send to the biller’s FI

2a. Perform eligibility check on customer FI
2b. Route the RfP to the customer’s FI

3. Inform the biller FI that RfP cannot be presented to the customer

4. Present the information to the biller via treasury mgmt. system

5. Reach out to the customer for an alternative mode of bill delivery and payment

6. Verify RfP details (e.g., biller, bill summary, amount due, due date, account no.)

7. If customer declines, route the information to the biller’s FI through applicable reason codes (via pain.014)

8. Present the information to the biller (via the Treasury Management Solution)

9. Biller may cancel and reissue the RfP, or reach out to the customer via alternative communication channels for the payment

10. Make the payment

11. RfP expires if no action is taken by the customer before the expiry date set by the biller (as per 2.9 specs)

D1. Can customer FI present the RfP to the customer?

Yes

D2. Is there a discrepancy in the RfP?

Yes

D4. Is the issue resolved?

Yes

D5. Ignore / Decline RfP

No

D3. Reach out to the biller

No

D6. Ignore / Decline RfP

Yes

D2. Is there a discrepancy in the RfP?

No

D7. If customer declines, route the information to the biller’s FI through applicable reason codes (via pain.014)

D8. Present the information to the biller (via the Treasury Management Solution)

D9. Biller may cancel and reissue the RfP, or reach out to the customer via alternative communication channels for the payment

D10. Make the payment

End

Note – RTP® 2.9 technical specifications allow the biller to set an expiration date in an RfP. If a customer does not take any action on the RfP by the expiration date set by the biller, the RfP may expire.

TCH Confidential
Customer Declining an RfP – Prototype Screens (1/4)

1. Receive RfP notification on the mobile device
2. Log in to the mobile device
3. View RfP details
4. Select a reason to decline the RfP
5. Decline the payment
6. Receive decline confirmation
7. View declined RfP details on the dashboard

SAMPLE FOR GUIDANCE
Customer Declining an RfP – Prototype Screens (2/4)

1. Receive RfP notification on the mobile device
2. Log in to the mobile device
3. View RfP details
4. Select a reason to decline the RfP
5. Decline the payment
6. Receive decline confirmation
7. View declined RfP details on the dashboard

Prototype Screen

**Request for Payment (RfP)**

- **From:** EnergyCorp
- **To:** Cindy Albert
- **Amount Due:** $95.75
- **Due Date:** Jul 31, 2020
- **RfP Issue Date:** Jul 30, 2020
- **Reference ID:** 23456

**View Invoice**

Your EnergyCorp July 2020 Statement for account ending in 6789

Questions about this RfP? Contact EnergyCorp Customer Care at 800-234-5678

- **Make Payment**
- **Decline**

**Decline Payment**

- **From:** EnergyCorp
- **Amount Due:** $95.75

Select a reason below for declining:

- I have made the payment in full through another channel.
- I do not recognize the biller.
- The requested amount is different from the invoice/bill amount.
- Other

Enter your reason below

- There was a balance on my account that was supposed to be deducted from this bill.

- **Review & Decline**
- **Back**
Customer Declining an RfP – Prototype Screens (3/4)

Receive RfP notification on the mobile device
Log in to the mobile device
View RfP details
Select a reason to decline the RfP
Decline the payment
Receive decline confirmation
View declined RfP details on the dashboard

Prototype Screen

Receive RfP notification on the mobile device
Log in to the mobile device
View RfP details
Select a reason to decline the RfP
Decline the payment
Receive decline confirmation
View declined RfP details on the dashboard

Prototype Screen

Receive RfP notification on the mobile device
Log in to the mobile device
View RfP details
Select a reason to decline the RfP
Decline the payment
Receive decline confirmation
View declined RfP details on the dashboard

SAMPLE FOR GUIDANCE
Customer Declining an RfP – Prototype Screens (4/4)

**Receive RfP notification on the mobile device**

**Log in to the mobile device**

**View RfP details**

**Select a reason to decline the RfP**

**Decline the payment**

**Receive decline confirmation**

**View declined RfP details on the dashboard**

---

**Payer FI App**

### My Payments

- **EnergyCorp**
  - $95.75
  - DECLINED 7/30 5:05 PM
  - Reason: Other
    - There was a balance on my account that was supposed to be deducted from this bill.
  - View Request Details

- **MovieStream**
  - $10.79
  - PAID 8/23 11:34 AM

- **Telco**
  - $175.23
  - PAID 8/22 7:45 PM

- **GymClub**
  - $29.99
  - PAID 8/16 7:57 PM

- **CreditCorp**
  - $500.00
  - PAID 8/5 5:50 PM

---

**Request for Payment (RfP)**

- **From**: EnergyCorp
- **To**: Cindy Albert
- **Amount Due**: $95.75
- **Due Date**: Jul 31, 2020
- **RfP Issue Date**: Jul 30, 2020
- **Reference ID**: 23456

**View Invoice**

- **Your EnergyCorp July 2020 Statement for account ending in 6789**
- Questions about this RfP? Contact EnergyCorp Customer Care at 800-234-5678

---

**Payment History**

- **EnergyCorp**
  - $95.75
  - DECLINED 7/30 5:05 PM
  - Reason: Other
    - There was a balance on my account that was supposed to be deducted from this bill.
# Context

A customer’s real-time payment may fail or be rejected due to:

- **a) Technical issue** at the customer’s FI/Sending Participant or the biller’s FI/Receiving Participant side (e.g., FI not live on the RTP network when the payment is initiated, etc.)
- **b) Specific conditions set up by the biller** for the RfP sent (e.g., biller does not accept payments for an amount that exceeds the amount due specified in the RfP)

## FI Guidelines

Below guidelines may be followed in case a payment fails or gets rejected:

- **If the payment cannot be made due to an FI’s technical problem:** The customer’s FI may have a retry process (based on their current state business rules) in place along with appropriate customer communication. If the payment still fails, customer can be advised to try again later.

  **Note:** An alternate payment method may be suggested to customers to complete the payment in case of a payment failure (dependent upon customer FI capabilities).

- **If the payment fails due to specific conditions set up by the biller:** Customer should be communicated the rejection reason and advised on next steps (for e.g., please try again later, please contact the biller etc.) based on existing standard operating procedures.

## Prototype Link

[RTP Payment Fails / Gets Rejected](#)

---

**Message specs used:** pacs.002 in response to pacs.008 (credit push payment)
RTP Payment Fails / Gets Rejected – Process Flow

**Process Flow Key:**
- RFP: Request for Payment
- Fi: Financial Institution

1. **Initiate RFP** with invoice details such as amount, due date etc. and send to the biller’s FI

2a. **Perform eligibility check** on customer FI
   2b. Route the RFP to the customer’s FI

3. Inform the biller FI that RFP cannot be presented to the customer

4. Present the information to the biller via treasury mgmt. system

5. Reach out to the customer for an alternative mode of bill delivery and payment

6. Verify RFP details (e.g., bill summary, amount due, due date, account no.)

7. Initiate credit transfer to biller’s FI per payment instruction

9a. Receive the credit transfer
   9b. Notify the biller

8. Send notification to customer that amount has been transferred

D1. Can customer FI present the RFP to the customer?
   - **No**

   D2. Approve Payment?*
   - **No**

   D3. Is the Customer FI live on RTP network?
   - **No**

   D3. Is the Customer FI live on RTP network?
   - **Yes**

   10a. Post the payment to the bill across all channels
       10b. Send payment confirmation to customer on preferred channel

   11. In case of a technical issue on customer FI side, resolve the issue and try making the payment again**

   12. Display to the customer that payment could not be made, along with next steps (e.g., ‘Try again later’)?

   13. Reach out to the Biller to resolve issues using existing channels of communication, or ignore/decline the RFP

**End**

*Note – The customer always has the option to ignore / decline an RFP
**There may also be a payment failure if the Biller FI is not connected to the RTP network, or if the Biller sets up a pre-condition
Payment Cannot be Made Due to FI Technical Error

The customer may have to reach out to the bank or the biller depending upon the reject message displayed on this screen –

- If the payment fails due to network issues, the customer’s bank may request the customer to try again later. The customer’s bank may retry a transaction before requesting a customer to “Please try again later”. The frequency of retries may be determined by the customer’s bank based on their current state business rules.

- If the payment fails due to other reasons (e.g., insufficient balance, blocked account etc.), the customer’s bank should provide applicable message to the customer along with next steps (For e.g., please try again later, please call our help desk for further information, please contact the biller etc.).
RTP Payment Fails / Gets Rejected (Pre-conditions set up by Biller) – Prototype Screens

Receive RfP notification on the mobile device
View RfP details
Enter payment amount
Review and make the payment
Payment is rejected; Check the rejection reason
View rejected RfP on the dashboard

Prototype Screen

Receive RfP notification on the mobile device

Request for Payment (RfP)

From: EnergyCorp
To: Cindy Albert
Amount Due: $95.75
Due Date: Jul 31, 2020
RfP Issue Date: Jul 30, 2020
Reference ID: 23456

Request for Payment:
Your payment request from EnergyCorp is the amount of $95.75 is due on July 31st.

View Invoice:
Your EnergyCorp July 2020 Statement for account ending in 6789
Questions about this RfP?
Contact EnergyCorp Customer Care at 800-123-4567

Make Payment:
Select Account
Amount: $500.00
Date: 07-30-2020

Review & Pay
Back

Send Payment

Payment Details

From: EnergyCorp
Amount: $95.75
Due Date: Jul 31, 2020

From: Cindy Albert
Account: Checking xxxxx3356

Payment Error:
There is a problem with your payment.
Reason:
The amount of $500 submitted exceeds the amount due.

My Payments

EnergyCorp
$95.75
DUE TOMORROW
REJECTED 7/30
The amount of $500 submitted on July 30 exceeds the amount due.

MovieStream
$10.79
PAID 7/23 11:34 AM

Telco
$175.23
PAID 7/22 7:45 PM

GymClub
$29.99
PAID 7/16 7:57 PM

CreditCorp
$500.00
PAID 7/05 5:50 PM

SAMPLE FOR GUIDANCE

B2C | Bill, Manual Payment, Modified Amount
A customer may choose to schedule a payment if he/she does not want to pay it immediately, providing him/her with better control and flexibility. Once they schedule the payment, a credit transfer is made to the biller as per the scheduled date selected by the customer.
Customer Schedules a Payment – Process Flow

**Customer Schedules a Payment**

**Biller**

1. Initiate RfP with invoice details such as amount, due date etc. and send to the biller’s FI

2a. Perform eligibility check on customer FI
2b. Route the RfP to the customer’s FI

3. Inform the biller FI that RfP cannot be presented to the customer

4. Present the information to the biller via treasury mgmt. system

5. Reach out to the customer for an alternative mode of bill delivery and payment

6. Verify RfP details (e.g., biller, bill summary, amount due, due date, account no.)

7. Schedules payment to be made after X days**

8. Inform the biller FI (using pain.014*) that payment to the RfP has been scheduled

9. Present the information to the biller via treasury mgmt. system

10. Record the payment to be expected on scheduled date and time

11a. Initiate credit transfer to the biller’s FI per payment instruction after a period of X days
11b. Send acknowledgment to customer that amount has been transferred

12a. Receive the credit transfer
12b. Notify the biller

13a. Post the payment to the bill
13b. Send payment confirmation to customer on preferred channel

14. Reach out to the biller to resolve issues using servicing channel(s) offered by the biller

15. Resolve the customer query

16. Decline the RfP with the applicable reason

**Biller’s FI**

D1. Can customer FI present the RfP to the customer?

Yes

No

**Customer’s FI**

D3. Is the query resolved?

Yes

No

**Customer**

D2. Is there an issue with the bill?

Yes

No

---

*RTP 2.9 specs allow pain.014 to be used as a positive business response to RfP (pain.013) as a notification that a payment in response to an RfP has been scheduled. Requested Execution Date and Time field can be populated to indicate when the pacs.008 can be expected (Note- Receipt of a positive pain.014 message does not guarantee that payment will be sent on the date indicated); **Customer always has the option to ignore / decline an RfP*
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed – Prototype Screens

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Receive confirmation for payment being scheduled
View scheduled payments on the dashboard

B2C | Credit Card, Scheduled Payment, Modified Amount

![Prototype Screens](image-url)
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (1/3)

Receive RfP notification on the mobile device

View RfP details

Select the payment date and amount; Schedule the payment

Receive confirmation for payment being scheduled

View scheduled payments on the dashboard

Prototype Screen

8:00
Sat, Aug 17

Request for Payment
Your payment request from CreditCorp is due on September 1st.

Payer FI App

Request for Payment (RfP)

From: CreditCorp
To: James Smith
Statement Balance: $1,250.09
Minimum Amt Due: $25.00
Due Date: Sep 1, 2020
Issue Date: Aug 17, 2020
Reference ID: 54321

View Statement

Your monthly CreditCorp statement for account ending in 1144. Payments made before 12:00 Midnight ET will be considered on time.

Questions about this RfP?
Contact CreditCorp Customer Care at 800-234-5676

Make Payment Decline
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (2/3)

Receive RfP notification on the mobile device

View RfP details

Select the payment date and amount;
Schedule the payment

Receive confirmation for payment being scheduled

View scheduled payments on the dashboard

Payer Fi App

Select Payment Amount

- CreditCorp
- Statement Balance as of 8/17/2020
  $1,250.09
- Min Payment Due 09/01/2020
  $25.00
- Other Amount
  500.00

Make Payment from

Select Account

Payment Date

09-01-2020

Schedule Payment

Pay to

CreditCorp

Amount

$500.00

Due Date

Sep 1, 2020

From

James Smith

Account

Checking xxxxx1221

Your payment of $500.00 will be sent on Sep 1, 2020.

Schedule Payment

Back
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (3/3)

Prototype Screen

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Receive confirmation for payment being scheduled
View scheduled payments on the dashboard

---

**Success!**

Your payment has been scheduled.

Payee: CreditCorp

Payer: James Smith

Amount: $500.00

Scheduled on: Aug 17, 2020

Payment Date: Sep 1, 2020

Reference ID: 7654321

Your payment will be made to CreditCorp on the date you specified. To track your payment status and receive updates, go to www.creditcorp.com/account.

**My Payments**

- **CreditCorp**: $500.00, SCHEDULED 8/17, PAID 9/1 12:00 AM
- **EnergyCorp**: $242.10, PAID 8/31 5:11 PM
- **MovieStream**: $10.79, PAID 8/23 10:09 AM
- **Telco**: $321.23, PAID 8/22 7:45 PM
- **GymClub**: $29.99, PAID 8/16 9:20 PM
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed – Prototype Screens

Receive RfP notification on the mobile device

View RfP details

Select the payment date and amount; Schedule the payment

Payment not scheduled; View payment error details

View scheduled payment error message on the dashboard

B2C | Credit Card, Scheduled Payment, Modified Amount
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (1/3)

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

Prototype Screen

Receive RfP notification on the mobile device
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

Prototype Screen

Receive RfP notification on the mobile device
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

TCH Confidential

© 2021 The Clearing House Payments Company L.L.C. 52
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (2/3)

Prototype Screen

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

Select Payment Amount

- CreditCorp
- Statement Balance as of 8/17/2020
  - $125.44
- Min Payment Due 09/01/2020
  - $25.00
- Other Amount
  - 750.00

Make Payment from
Select Account
Payment Date
09-01-2020

Schedule Payment

- Pay to: CreditCorp
- Amount: $750.00
- Due Date: Sep 1, 2020
- From: James Smith
- Account: Checking xxxxx1221

Your payment of $750.00 will be sent on Sep 1, 2020

Send Payment Back
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (3/3)

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

Prototype Screen

Receive RfP notification on the mobile device
View RfP details
Select the payment date and amount; Schedule the payment
Payment not scheduled; View payment error details
View scheduled payment error message on the dashboard

SAMPLE FOR GUIDANCE
6. Customer Makes an Erroneous Payment – Setting the Stage

<table>
<thead>
<tr>
<th>Context</th>
<th>Customer makes an Erroneous Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers may make an erroneous payment in cases such as –</td>
<td></td>
</tr>
<tr>
<td>▪ Customer accidently adding a zero and paying more than was requested by the biller in the RfP</td>
<td></td>
</tr>
<tr>
<td>▪ Duplicate payment made (one through the RfP received, and another through a different payment channel)</td>
<td></td>
</tr>
</tbody>
</table>

In such cases, the customer may seek a refund for the payment made in error

<table>
<thead>
<tr>
<th>FI Guidelines</th>
<th>Below guidelines may be followed by the customer FI (as appropriate) –</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ <strong>An FI may use the Request for Return of Funds</strong> process to request the Receiving FI to return the payment that was made in error. (Consumers may have rights under Regulation E for errors caused by the Sending FI)</td>
<td></td>
</tr>
<tr>
<td>▪ Customer may report the erroneous payment to his/her FI</td>
<td></td>
</tr>
<tr>
<td>▪ Customer FI may send a Request for Return of Funds message to attempt to recover funds from the Biller FI in the event of a customer dispute regarding an RTP payment</td>
<td></td>
</tr>
<tr>
<td>▪ It is a Biller FI’s decision whether it will return funds in response to a Request for Return of Funds; returning funds in response to a Request for Return of Funds is always voluntary</td>
<td></td>
</tr>
<tr>
<td>▪ In some cases, the Biller FI will choose to return funds. In other cases, the Biller FI will choose not to return funds and the customer FI may choose to compensate its customer anyway. In such cases the customer FI will absorb the cost associated with compensating its customer</td>
<td></td>
</tr>
<tr>
<td>▪ <strong>An FI may also advise customers to reach out to the biller for refunds</strong>, which may be handled by billers based on existing business processes and policies. Biller should inform the customer about the refund status based on existing standard operating procedures</td>
<td></td>
</tr>
</tbody>
</table>
# Customer Makes an Erroneous Payment – Process Flow

## Customer Makes an Erroneous Payment, and Requests for Return of Funds

<table>
<thead>
<tr>
<th>Process Flow Key:</th>
<th>Process Step</th>
<th>Call out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Start</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Dispute erroneous payment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2a. Ask for payment information from the customer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2b. Send a Request for Return of Funds to the biller FI along with relevant information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Pass the information received to the biller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Review the Request for Return of Funds, and determine whether to return funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D1. Does the biller decide that the claim is valid and decide to return funds?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6. Initiate payment for the claim / refund amount via pacs.008</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>5. Customer does not get a refund in response to the Request for Return of Funds</td>
</tr>
<tr>
<td></td>
<td>D2. Does the customer FI choose to compensate the customer?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>8. Credit the refund amount to the customer account</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7. Send the credit transfer to the customer’s FI per payment instruction</td>
</tr>
<tr>
<td>Biller’s FI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer’s FI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 2021 The Clearing House Payments Company L.L.C.
### 7. Biller Cancels an Already Issued RfP – Setting the Stage

<table>
<thead>
<tr>
<th><strong>Biller Cancels an Already Issued RfP</strong></th>
</tr>
</thead>
</table>

#### Context

A biller may cancel an existing RfP under the following scenarios –

- Customer received an RfP with incorrect bill details (e.g., amount, date, etc.)
- Customer has already paid the bill partially through another channel. In this case, the biller may cancel the existing RfP, and reissue another RfP with the updated bill amount due

**Note:** Biller may use existing communication channels to inform the customer of the reason for cancelling the existing RfP, and issuing a new one

#### FI Guidelines

Below guidelines should be followed in case the existing RfP is cancelled by the biller –

- The customer may view the cancelled RfP but may not be able to respond to it with an RTP payment (the customer may make a payment based on next steps communicated by the biller. E.g., make a payment via another channel, make a payment to the new/reissued RfP, etc.)

**Note:**

1) Biller should communicate to the customer (through standard comm. channels) about the reason for cancelling an existing RfP, and provide applicable reference document / bill

2) Customer should refer to the latest RfP along with biller communication to decide on next steps

#### Prototype Link

[Biller Cancels an Already Issued RfP](#)
Biller Cancels an Already Issued RfP – Process Flow

1. Biller cancels an already issued RfP by selecting the cancellation reason code* in message camt.056

2. Biller FI sends the cancellation message (camt.056) to the Customer FI

3. Customer FI cancels the original RfP based on the message received and makes the original RfP “read only” / inactive

4. Customer can only view the original RfP (no action allowed)

 Guidance to biller is to communicate to the customer (through standard comm. channels) about the reason for cancelling an existing RfP, and provide applicable reference document / bill

Note – *A biller may choose to cancel an RfP for various reasons; biller FI may use the appropriate reason code to convey the reason of cancellation to the customer FI e.g., AM09 – Amount in RfP not correct, DUPL – Creditor FI sent two RfPs (duplicate), UPAY – Customer paid using another channel. After cancelling an already issued RfP, a biller may choose to send a new RfP to the customer using pain.013 message for a scenario where the amount was incorrect (AML9)
Biller Cancels an Already Issued RfP – Prototype Screens

Receive RfP cancellation notification on the mobile device

View cancelled RfP on the dashboard

Select cancelled RfP to view details

3:00
Thu, Jul 31

Request for Payment Cancelled
Your payment request from EnergyCorp has been cancelled.

Payer FI App

My Payments

<table>
<thead>
<tr>
<th>Company</th>
<th>Amount</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnergyCorp</td>
<td>$95.75</td>
<td>CANCELLED 7/31 3:00 PM</td>
<td></td>
</tr>
<tr>
<td>GasCorp</td>
<td>$37.84</td>
<td>DUE TODAY</td>
<td></td>
</tr>
<tr>
<td>UtiliCorp</td>
<td>$121.50</td>
<td>PAID 7/22 5:23 PM</td>
<td></td>
</tr>
<tr>
<td>InternetBiz</td>
<td>$79.40</td>
<td>PAID 7/22 5:15 PM</td>
<td></td>
</tr>
<tr>
<td>MovieStream</td>
<td>$10.79</td>
<td>PAID 7/22 8:01 PM</td>
<td></td>
</tr>
<tr>
<td>Telco</td>
<td>$175.23</td>
<td>PAID 7/22 7:45 PM</td>
<td></td>
</tr>
<tr>
<td>GymClub</td>
<td>$29.99</td>
<td>PAID 7/16 7:57 PM</td>
<td></td>
</tr>
<tr>
<td>CreditCorp</td>
<td>$500.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Request for Payment (RfP)

From: EnergyCorp
To: Cindy Albert
Amount Due: $95.75
Due Date: Jul 31, 2020
RfP Issue Date: Jul 30, 2020
Reference ID: 23456

Payment History

<table>
<thead>
<tr>
<th>Company</th>
<th>Amount</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnergyCorp</td>
<td>$95.75</td>
<td>CANCELLED 7/31 3:00 PM</td>
<td></td>
</tr>
</tbody>
</table>

Questions about this RfP?
Contact EnergyCorp Customer Care at 800-234-5678

This request for payment has been cancelled by EnergyCorp. Contact 800-234-5678 for payment options.
Phased Approach for RTP® Bill Pay Production Launch
## An Option – Phased Approach for RTP® Bill Pay Production Launch

<table>
<thead>
<tr>
<th>Description</th>
<th>Controlled Production Launch</th>
<th>Full Scale Production Launch</th>
<th>General Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test the basic RTP® Bill Pay functionalities by conducting a round trip transaction over the RTP® network in the production environment</strong></td>
<td><strong>Test the end-to-end flow in a controlled production environment with a small/limited customer cohort to test positive and exception scenarios. May still involve some manual operational processes (e.g., payment posting, customer query management, etc.)</strong></td>
<td><strong>Launch of the RTP® – RfP capability to all customers in a segment on the RTIs enabled by the Customer FI to receive RfPs and send credit transfers. All processes are expected to be automated to support a large volume of transactions</strong></td>
<td><strong>Launch of RTP® Bill Pay capabilities to all customers across different business segments available to receive RfPs and send credit transfers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Customer Cohorts</th>
<th>Participants from Customer FI, Biller FI and the network</th>
<th>Friends and Family or employees with active account with Customer FI and existing relation with the biller</th>
<th>All RTP® enabled Customer FI customers in a segment</th>
<th>All RTP® enabled customers in all the segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Cohort Identification</td>
<td>Biller to identify customers based on the list of enabled routing numbers</td>
<td>Biller to review enabled Customer FI routing numbers to identify a potential customer population</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Customer Onboarding Process</td>
<td>NA</td>
<td>E.g., ‘Push or opt out’, OR ‘Pull or opt in’</td>
<td>Refined communication and onboarding process based on outcomes from Controlled Production Launch</td>
<td>Same as Full Scale Production Launch</td>
</tr>
</tbody>
</table>

### Potential Timeline

<table>
<thead>
<tr>
<th><strong>SAMPLE TIMELINE</strong></th>
<th><strong>Potential Timeline</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Validation</td>
<td>1-2 Weeks</td>
</tr>
<tr>
<td>Controlled Production Launch</td>
<td>4-6 Weeks</td>
</tr>
</tbody>
</table>

**Note:** This approach is for reference only; it is recommended that FIs and their biller partners take an informed decision on the timelines and the set of activities for each phase (e.g., scale up Full scale Production Launch if required). FIs should consult with their own legal and compliance representatives to review the risks and legal issues the service may raise.
RTP® BillPay Payment Flows

Access the samples below for click-through prototypes of RTP BillPay payment flows.

- Customer Receives an RfP and Makes a Successful Payment (in full)
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495152364

- Payment Successful (Partial / Modified Amount)
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495310228

- Payment Successful (Minimum Amount)
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495873297

- Customer Ignores/Declines an RfP
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495943844

- RTP Payment Fails / Gets Rejected
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495942812

- Customer Schedules a Payment
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495871163

- Biller Cancels an Already Issued RfP
  https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495943157
Customer feedback on desired features (1/2)

An individual FI may choose to enable features from the below customer wish list based on their desire to differentiate themselves and offer better customer experience*

*These features are not part of existing RTP® Bill Pay capabilities

<table>
<thead>
<tr>
<th>Financial Planning and Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Ability to calculate interest rate penalties and flat late fees compared across bills</td>
</tr>
<tr>
<td>▪ Ability to provide guidance from the FIs on which bill payments to make (to reduce interest rates or pay off near-zero remaining balances)</td>
</tr>
<tr>
<td>▪ Ability to send biller notifications and explanations for interest rate changes</td>
</tr>
<tr>
<td>▪ Ability to provide alerts of any changes in the biller’s policies or fee structure</td>
</tr>
<tr>
<td>▪ Ability to provide visibility into flexible bill deadlines or bills without late fee</td>
</tr>
<tr>
<td>▪ Ability to send notification for bill payments that will affect credit scores</td>
</tr>
<tr>
<td>▪ Ability to update on weekly or monthly bank account balances</td>
</tr>
<tr>
<td>▪ Ability to prioritize the RfPs (e.g. based on due date, late fee, etc.) and use the bill pay calendar view for planning (including offline viewing)</td>
</tr>
<tr>
<td>▪ Ability to sync/integrate bill pay calendar with phone/apple, Google, and/or Outlook calendars</td>
</tr>
<tr>
<td>▪ Ability of the customer to set preference on certain deposit money to get auto-allocates to bill pay</td>
</tr>
<tr>
<td>▪ Ability to provide bank alerts of risk of overdraft</td>
</tr>
<tr>
<td>▪ Ability to round up bill payments and deposit the rounding into a savings account</td>
</tr>
<tr>
<td>▪ Ability to provide help during tax time with organizing deductions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Ability to provide notifications of suspicious activity or security breaches</td>
</tr>
<tr>
<td>▪ Ability for the system to time-out when not in use for security purposes</td>
</tr>
<tr>
<td>▪ Ability for customers to use unique one-time codes, voice recognition, and/or 4 digit codes for extra log-in security</td>
</tr>
</tbody>
</table>

TCH Confidential

© 2021 The Clearing House Payments Company L.L.C.
Customer feedback on desired features (2/2)

An individual FI may choose to enable features from the below customer wish list based on their desire to differentiate themselves and offer better customer experience*

*These features are not part of existing RTP® Bill Pay capabilities

<table>
<thead>
<tr>
<th>Features requested by customers during the testing phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiate RfP</strong></td>
</tr>
<tr>
<td>- Ability to indicate to the customer that an RfP exists in case customer attempts to use an alternative (to RfP) to pay for his / her bill</td>
</tr>
<tr>
<td>- Ability to &quot;snooze&quot; bill pay notifications received by the customer</td>
</tr>
<tr>
<td>- Ability to send notification for when contracts with billers are ending in advance of an auto-renewal so that customers can change elected service(s)</td>
</tr>
<tr>
<td><strong>Approve Payment Instructions</strong></td>
</tr>
<tr>
<td>- All methods of directly contacting the biller customer service (call, chat, email, website)</td>
</tr>
<tr>
<td>- Ability for a customer to view an RFI drop down (customized by the biller) with common queries raised to the biller</td>
</tr>
<tr>
<td>- Ability to use self-service RFIs for bill inquiries and exception handling</td>
</tr>
<tr>
<td>- Ability to receive &quot;read receipts&quot; from the biller once an RFI message is read</td>
</tr>
<tr>
<td>- Ability to use “quick pay”/Apple Pay capabilities to use RTP® to pay for common goods (like groceries, etc.)</td>
</tr>
<tr>
<td><strong>Payment Acknowledgment</strong></td>
</tr>
<tr>
<td>- Ability to view, search and run reports on historical bill payments (requested period is up to 6 months) using several search parameters e.g., name of biller</td>
</tr>
<tr>
<td>- Ability to view promotions and offers in the form of contextual message along with the acknowledgment message from the biller</td>
</tr>
<tr>
<td>- Ability to export the payment confirmation to maintain records offline or outside of the bank app</td>
</tr>
</tbody>
</table>
RTP® Bill Pay Message Flow

1 – A bill or invoice is optional related to a Request for Payment and can be included as a remote link on the pain.013 or as a stand alone message via the remt.001

2 – Response could be initiated by the customer’s FI or the customer

3 – The customer could initiate a response, payment or choose to do nothing related to received Request for Payment

Note:

© 2021 The Clearing House Payments Company L.L.C.
# List and Usage of ISO and Proprietary Reason Codes

<table>
<thead>
<tr>
<th>ISO Message</th>
<th>Reason Code</th>
<th>Description and Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacs.002</td>
<td>AG03</td>
<td>Transaction type not supported / authorized on this account – This is used by RTP® if the FI is not supporting/certified for RFP. Could also be used by FI to indicate end customer account does not support. In this case, the FI will have to determine in &lt; 5 seconds if customer is not digitally enabled. If not, FI could accept the RFP and send back pain.014 with a reject code (refer to pain.014 codes)</td>
</tr>
<tr>
<td></td>
<td>AM09</td>
<td>Amount received is not the amount agreed or expected</td>
</tr>
<tr>
<td></td>
<td>AM14</td>
<td>Transaction Amount exceeds limit agreed between FI and client. This is used to reject a pain.013 if the amount exceeds the amount that the payer would be permitted (by the payer FI) to send in a pacs.008</td>
</tr>
<tr>
<td></td>
<td>NOAT</td>
<td>Receiving Customer Account does not support/accept this message type. Used in response to a Request for Payment when the Debtor customer has not authorized RFP on the account or for the particular initiator of the RFP</td>
</tr>
<tr>
<td>Pain.014</td>
<td>AC06</td>
<td>Blocked account; Account specified is blocked, prohibiting posting of transactions against it</td>
</tr>
<tr>
<td></td>
<td>AG01</td>
<td>Transaction forbidden on this type of account (formerly NOAT / NoAgreement)</td>
</tr>
<tr>
<td></td>
<td>AG03</td>
<td>Transaction type not supported / authorized on this account – to be used for customer not digitally enabled</td>
</tr>
<tr>
<td></td>
<td>AM09</td>
<td>Amount received is not the amount agreed or expected – used by customer if problem with amount of the RFP</td>
</tr>
<tr>
<td></td>
<td>CUST</td>
<td>Customer Indicates Payment will not be made</td>
</tr>
<tr>
<td></td>
<td>MD07</td>
<td>End Customer Deceased</td>
</tr>
<tr>
<td></td>
<td>NARR</td>
<td>Narrative reject with additional information provided</td>
</tr>
<tr>
<td></td>
<td>SL12*</td>
<td>Creditor on black-list of debtor [Exact description to be updated]</td>
</tr>
<tr>
<td>Camt.056</td>
<td>AM09</td>
<td>Wrong Amount – Amount in Request for Payment was not correct</td>
</tr>
<tr>
<td></td>
<td>DUPL</td>
<td>Duplicate – Creditor FI submitted a second unique RFP for a single customer request</td>
</tr>
<tr>
<td></td>
<td>UPAY</td>
<td>Undue Payment – Payment has been made through another payment channel</td>
</tr>
</tbody>
</table>

*To be part of pain.014 message spec changes in the 2022 release*