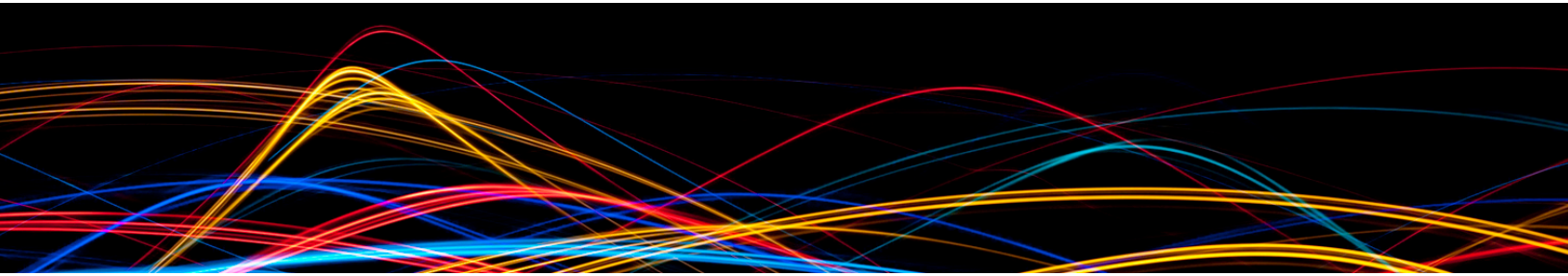


**State of Minnesota
Guide for Implementing
Electronic Payments**



December 2013

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Section 1. Introduction

This document was developed as an informational and instructional resource for agencies and boards interested in implementing Minnesota's electronic payment (E-Payment) application. A successful project is dependent on fully understanding the steps and players involved. This implementation guide was developed by Minnesota Management & Budget and compliments the guide provided by the state's e-payment vendor US Bank. It describes the state's e-payment solution and what agencies need to do to implement it. It is important to remember this e-payment guide is an overview in identifying common requirements across various e-pay solutions; the business solutions vary greatly across agencies and boards and these unique requirements will be resolved as part of a cooperative effort between agency business and technical staff as well as our current vendor US Bank.

Section 2. Background

The Minnesota E-Payment solution is a business tool that allows state entities to accept and process credit cards and other electronic financial transactions over the Internet. It provides convenience to customers by giving them an additional payment channel and allows them the option to pay by electronic check (e-check) or credit/debit card. The e-check process is an electronic payment process where the customer makes a payment by providing bank account and routing information on the payment screen. Funds are electronically taken from the customer's account and deposited into a state account.

The Minnesota E-Payment solution also provides many benefits to agencies. It streamlines business processes by automating the collection, accounting, and reconciliation processes. Agencies no longer need to manually handle receipts and make deposits as the funds are electronically deposited into the agencies accounts. Application forms are completed by customers over the web and electronically loaded to the agency's systems eliminating the need for data entry. An interface is created that electronically enters a cash receipt into SWIFT. The reconciliation process is simplified as a detailed report is provided to the agency that agrees with the deposit and SWIFT entry.

The state contracted with US Bank to provide the secure architecture for e-payments. US Bank provides a "hosted" solution where a customer is passed from the agency's website to the US Bank website to make the actual payments. The "hosted" solution passes most of the risk of obtaining credit/debit card and bank account information to US Bank and relieves the state of liability for such information. The pass to US Bank appears seamless to the customer and the customer can be returned to the agency's website from the point in the session it left if the business need requires.

All state agencies should process their Internet credit and electronic financial transactions through US Bank's e-payment architecture, unless Minnesota Management and Budget grants a waiver allowing the agency to use another entity.

The E-Payment service is designed to process payments using either credit/debit cards or electronic checks (e-checks). Currently, VISA, Master Card, and Discover are accepted. American Express may be added in the future.

Section 3. How it Works

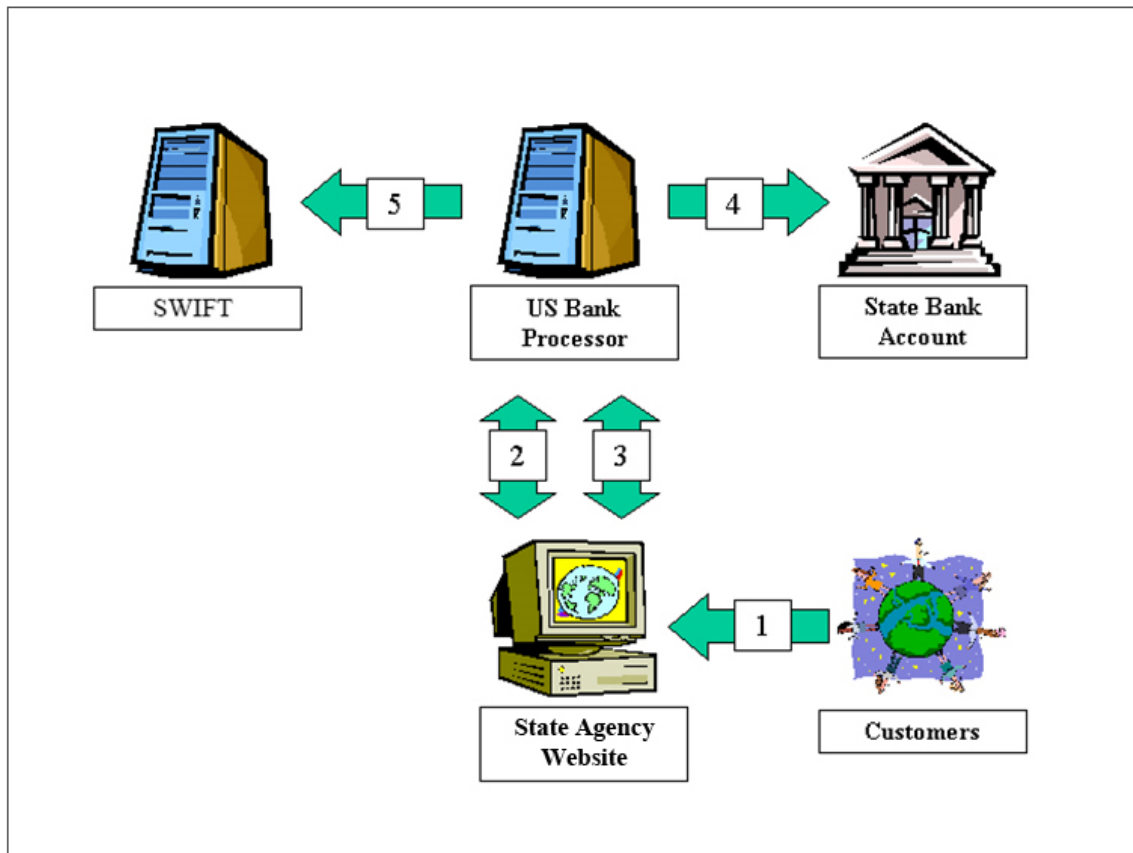
- a. **Customer conducts business transaction:** A customer accesses a state agency's website to conduct a business transaction which could include requesting a license or permit, paying taxes or fines, registering for services, or purchasing merchandise. The agency's website gathers non-financial business information from the customer including the customer's identity and the business they would like to conduct. The customer then selects a "pay" button that sends them to US Bank for payment. Financial information is passed to US Bank along with the customer. This information includes fields that will be passed back to the agency as well as fields that will be used to create an interface entry in SWIFT. All business activity for a day will be summarized and interfaced into SWIFT by accounting string the following morning. Agencies will also receive a remittance file that can be used to update their subsystems. The SWIFT interface and agency file should always agree with the amount deposited in the bank for that day's activity; this will simplify the reconciliation process.
- b. **Authorization of Payment:** Once at the US Bank website, customers will be required to select a payment option and enter credit/debit card information or bank routing and account information.
 - For credit/debit cards, US Bank will perform field validations, verify the funds are available to cover the payment amount, and place a "hold" on those funds.
 - For e-check, US Bank will validate the routing number is for a valid bank but will not verify if there is sufficient funds in the account to cover the payment amount or put a "hold" on those funds. A "shared secret" is required on e-check transactions as a security measure.

If the payment is approved, US Bank will notify the agency of a successful transaction by sending a real-time confirmation within a second of the successful transaction or by sending a remittance file at day's end identifying all successful transactions for that day's business.

- c. **Customer Confirmation:** The customer will see a confirmation screen if the transaction is successful. The agencies can build logic on the US Bank confirmation screen to bring the customer back to their website, if necessary. If not, the customer will print the confirmation and the transaction is complete.

- d. **Payment Settlement:** At the end of each day, all transactions accumulated are batched for settlement. The payment processor provides a settlement confirmation file that can be electronically “pushed” to the agency or can be accessed via the US Bank website. State agencies use the settlement file to reconcile authorizations with settlements and update their agency-specific applications.

Figure 1. Electronic Payments Process



- e. **Electronic Transfer of Funds to State:** Following the confirmation of settlement, funds are delivered electronically via an Automated Clearinghouse (ACH) transaction to a state bank account selected by the Treasury Division of Minnesota Management and Budget. For credit/debit cards, the cut-off time is 1:30 a.m. and for e-checks the cut-off time is 5:00 p.m. with funds settling the morning of the next business day. For example, Monday’s business would end at 5:00 p.m. for e-checks and 1:30 a.m. Tuesday morning for credit cards with the funds settling Tuesday morning at around 8:00 a.m. Deposits for all agencies are made to the same state bank account.
- f. **Posting Receipts to SWIFT:** US Bank uses “item keys” submitted by agencies during the payment process to create a formatted file that is sent to SWIFT each day. A single customer transaction may be directed into multiple chart of account codes by assigning multiple item keys (see Appendix A). US Bank stores the item

key information and produces a summarized accounting entry that equals the funds deposited into the bank and the daily remittance file. Agencies are responsible for reviewing the entries in SWIFT daily to ensure the transactions were successful and to reconcile the SWIFT entry to their agency-specific applications. Minnesota Management and Budget’s Treasury Division is responsible for reconciling the bank deposit to the accounting entry in SWIFT. The chart below illustrates the timing of the settlement and SWIFT entries. Bank holidays are treated like weekends and are combined with the next business day.

Table 1. Timing of events following payment authorization.

Payment Authorization	Settlement File/SWIFT Load	Bank Deposit
Monday	Tuesday	Tuesday
Tuesday	Wednesday	Wednesday
Wednesday	Thursday	Thursday
Thursday	Friday	Friday
Friday through Sunday	Monday	Monday

Section 4. Fees and Costs

The credit card and bank charge fees are automatically withdrawn from the state’s bank account at the end of each month with an interface file recording the charge in the agencies SWIFT accounts. These interface transactions are processed as cash receipts and are not able to reference an encumbrance. Therefore, a purchase order is not required for these fees pursuant to Statewide Financial Policy & Procedure 0803-01.

Agencies have the authority to pass a fee onto to the customer through a “convenience fee” under M.S. 16A.626 (d) equal to the transaction fee charged by the processing contractor.

There are no start-up fees or monthly maintenance fees for the E-Payment solution; all fees are transaction based.

Merchant Funded Pricing Model: Under the merchant funded pricing model, US Bank will collect the amount of fees due from the state agency by directly charging the state’s bank account on a monthly basis. Use of the merchant funded pricing model does not preclude an agency from assessing those fees to their customer as a convenience fee as permitted by M.S. 16A.626.

Table 2. Merchant Funded Pricing Model

Type of Payment	Cost per Transaction	Notes
Electronic check transactions	\$.19 per transaction	
All credit and debit card transactions	\$.23 per transaction	Plus additional cost identified below based on type of card.
Visa Card Fee	\$.05 per transaction	
Visa Interchange Rate	1.43% of amount	This is the base rate only. The actual rate will vary based on card type and is subject to change quarterly.
Mastercard Card Fee	\$.10 per transaction	
Mastercard Interchange Rate	1.55% of amount	This is the base rate only. The actual rate will vary based on card type and is subject to change quarterly.
Discover Card Fee	\$.05 per transaction	
Discover Interchange Rate	1.45% of amount	This is the base rate only. The actual rate will vary based on card type and is subject to change quarterly.

Convenience Fee Pricing Model: Under the convenience fee pricing model, US Bank will add the fee to the amount the customer owes and retain this amount to cover all fees associated with the transaction.

Table 3. Convenience Fee Pricing Model

Type of Credit or Debit Card	Cost per Transaction
E-Check transactions (US Bank/Elavon)	\$1.50 per transaction
Visa Signature Debit Card	\$3.95 per transaction
Credit Cards and Other Debit Cards	2.49% of amount

Section 5. Chargebacks, Returns, and Refunds

The risk of payment reversals exists for all methods of payment. A *chargeback* is defined as the return of payment initiated by the customer. In the event of a chargeback, all transaction funds and fees issued by the payment processor regarding chargeback's will be debited from the state's bank account. Credit card chargeback's require agencies to make manual adjustments in SWIFT. *Returns* are US Bank-generated e-payment transactions where money is reversed due to lack of funds or bad account information. E-payment returns are handled automatically by the US Bank solution and do not require manual SWIFT entries by the agency. The agency may pursue recourse against the customer as a result of non-payment as they would for paper checks they receive. *Refunds* are agency-initiated transactions entered through the E-Payment administrative website. Partial refunds should be transacted outside of the E-Payment solution as these transactions create incorrect SWIFT entries.

Section 6. Getting Started

The first step for agency E-Payment projects is to contact Minnesota Management and Budget. Contact either Cindy Farrell (651-201-8098) or Ron Mavetz (651-201-8204) to establish a meeting to discuss and assess the project and develop an action team to deal with the details of the initiative. The team will consist of members from Minnesota Management and Budget, US Bank, and the specific board or agency (agency staff generally includes business as well as IT participants). The mission of this team is to ensure best practices already developed are followed and new challenges are identified and efficiently dealt with. This team will address the following issues:

- Project timelines, lead responsibilities, and launch date (see Appendix A)
- Website application/development (e.g., resources needed and responsibilities)
- US Bank connectivity (e.g., customer pass and confirmations)
- Information to be passed to and from US bank-required formats
- Payment methods (e.g., credit/debit card and e-check)
- Decide whether a convenience fee will be charged
- Reconciliation process
- Problem resolution contacts and training
- Funding accounts for monthly payment of fees

Section 7. Information required to be passed to US Bank

When an agency application passes a customer to US Bank, it also passes information with the customer. Below is a list of fields the agency is required to pass to US Bank. Be aware there are optional fields that may also be included.

Figure 2. Fields Required to Pass to US Bank.

Field 1: Merchant ID. This field is assigned by US Bank.

Field 2: Request ID. This field is unique for each request.

Field 3: Invoice Key. A unique identifier assigned by agencies to identify a transaction.

Field 4: Item Key. Information needed for the interface to SWIFT (variable in number)

The ItemKey fields are used to create interface files for SWIFT. The ItemKey is expressed as an asterisk (*) delimited string containing 8 individual fields. The fields are populated differently based on the type of transactions you are passing to SWIFT. There are separate field layouts needed for a miscellaneous receipt, a receipt referencing individual receivable lines, and a receipt referencing a receivable pay to reference. A SWIFT speedchart must be utilized for miscellaneous receipts. See US Bank Interface Fields for more information.

Appendix A

Table for Appendix A. U.S. Bank E-Payment Implementation Process Contact and Timelines.

Task	Responsibility	Timing
Agency requests new E-Payment application along with Business Rules and Requirements. If a new agency, the E-Payment Service and Data Transmission Questionnaires need to be completed.	Agency	Day 1
US Bank requests new E-Payment application from Technical Implementation	US Bank	Day 2
US Bank requests agency payment information to be added to existing SWIFT interface through US Bank EDI Operations.	US Bank	Day 3
US Bank requests Merchant ID from Elavon (if applicable).	US Bank	Day 3
US Bank receives Merchant ID from Elavon. Merchant ID provided to Technical Implementation.	US Bank	Day 7
Agency tests application in conjunction with US Bank Technical Implementation.	Agency and US Bank	Days 8 to 42
US Bank Data Distribution Services (DDS) contacts agency with transmission instructions for remittance file.	US Bank	Day 14
Agency tests remittance file transmission with US Bank using test transactions.	Agency and US Bank	Days 15 to 42
US Bank tests agency SWIFT file content with Minnesota Management and Budget (MMB).	MMB and US Bank	Days 25 to 30
Agency approves E-Payment application/product.	Agency	Days 28 to 42
US Bank migrates agency application/product to production.	US Bank	3 business days from receipt of agency approval.

The timeline assumes the agency provides graphics and real-time payment confirmation URL within first 10 days of implementation.

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