

Product Profile:

MerchantPRO Smartphone E-vouchers

In early 2013, Mercy Corps conducted a pilot in Nepal to test e-vouchers and partnered with Transversal, a Haitian company, as our SP. The e-vouchers required vendors to have a smartphone loaded with Transversal's "VoucherPRO" application and access to a mobile connection. A participant received his or her unique voucher number and PIN code on a paper card from Mercy Corps. To complete a transaction, the vendor entered the voucher code and purchase amount into the application and handed the phone to the beneficiary for PIN entry. The e-vouchers worked well with a small group of program participants in an urban environment with reliable mobile networks.



A vendor enters voucher information into the MerchantPRO e-voucher application on a smartphone.
Nepal – Suraj Shakya for Mercy Corps

MerchantPRO E-voucher Product Details:

- Connectivity requirements: Requires continuous connection to data mobile networks.
- Hardware requirements: Requires an Android smartphone for vendors. Participants can be equipped with voucher codes and PIN numbers on paper or scratch cards.
- Power requirements: Vendors need a regular power source to charge smartphones; batteries typically last three to seven hours.
- Authentication process: Participant can be assigned a PIN number or can be required to show ID at the time of transaction.
- Accessibility issues: Low if photo ID verification option is selected. Medium if touch screen PIN entry is required.

FEASIBILITY ASSESSMENT

We have introduced you to some general e-transfers considerations and specific e-transfer products. Now, it is time for you to determine if e-transfers are feasible and likely to deliver benefits to your program. To do this, you will need to analyze a range of factors, including local infrastructure, service providers and their capacity, the costs of different systems, time and staffing requirements, and your program participants' capacity to engage with different types of technology. The tools to assess each factor are presented below; you may use them all or pull from only those necessary. When you have the required information, proceed to the decision tree to complete your overall assessment.

Infrastructure Requirements

Ensure that your local community has the necessary infrastructure to support an e-transfer program. This includes communications networks, electricity, and pay points or cash-out points. To map your existing infrastructure, consult Annex 2: Infrastructure Survey.

Service Provider Capacity

The primary difference between programs that use e-transfers and those that do not is their reliance on a service provider (SP). SPs perform a range of program activities in e-transfer programs, including distributing cash or vouchers, processing transactions, providing reports and offering customer service. They may also distribute hardware (like SIM cards) to program participants, enroll and train them as clients, and/or manage a network of agents or ATMs. SPs play a critical role in participants' program experience and directly impact your ability to operate on-time and within budget. A capable SP can add tremendous value to a program and an unreliable one will almost certainly damage it.

Given the nature of where we work, most countries have a limited number of SPs offering e-transfer products, and the quality of service is often low. As a result, Mercy Corps often plays the dual role of customer and capacity builder. Initial contact with SPs is generally through sales representatives, rather than technical or operational staff. Sales staff may not be aware of the product's technical limitations or may be overselling their team's capacity. Requesting to speak with technical staff early in discussions can lead to more informative conversations.¹¹ As a general rule, accept initial assurances from your SPs with caution.

Initial assessments of SP capacity should concentrate on understanding the type of services available from local SPs, and classifying them as low, medium or high risk. This exercise can help you decide if e-transfers are a good idea for your program and determine the level of effort needed to successfully deliver humanitarian assistance through your SP. We recommend several tools to guide this process:

- Annex 3: Analyzing E-transfer Service Provider Capacity. This tool will help field teams evaluate their SP's risk level.
- NetHope's "Service Provider Capacity Assessment" (Step 5 in their E-payments Toolkit).¹² Includes a statement of requirements for a bulk e-cash products and specific questions to guide SP assessments.
- The "Feasibility Assessment Tool" in Mercy Corps' Private Sector Engagement Toolkit.¹³

If, following your assessments, you discover your preferred SP is high risk, it does not mean you should abandon working with it. It does mean, however, that you should build in adequate staff time and resources to manage the relationship, and build that SP's capacity. Recommendations for doing so are laid out in Chapter 2: Implementing E-transfers.

Tip: Consider Data Protection and Management Early.

Analyze your SP's data needs and the data flow between organizations to understand the risks associated with collecting, storing and using data with a SP. What is the likelihood the data may be given to the government, used for marketing, or used in ways Mercy Corps does not intend? What are the consequences of errors in recipient data? CaLP's Privacy Impact Assessment¹⁴ and other tools will help you gauge these risks. Mercy Corps has also adapted, based upon CaLP's guidelines, a draft data protection statement, based upon CaLP's guidelines, which you can use with high-risk SPs or those without clear data protection protocols. See Annex 4: Data Protection and Security Statement

¹¹ Mercy Corps' senior director for program technology can be a resource in these technical conversations. <https://thehub.mercycorps.org/user/10457>.

¹² "Making the Journey From Cash to Electronic Payments," <http://solutionscenter.nethope.org/programs/c2e-toolkit>.

¹³ "Feasibility Assessment Tool," Mercy Corps' Private Sector Engagement Toolkit, <https://mcdl.mercycorps.org/gsd/ docs/PSEFeasibilityAssessmentTool.doc>.

¹⁴ "Protecting Beneficiary Privacy: Principles and Operational Standards for the Secure Use of Personal Data in Cash and E-Transfer Programmes," (Oxford: CaLP, 2013), http://www.cashlearning.org/resources/library/389-protecting-beneficiary-privacy-principles-and-operational-standards-for-the-secure-use-of-personal-data-in-cash-and-e-transfer-programmes?keywords=beneficiary+privacy&country=all§or=all&modality=all&language=all&payment_method=all&document_type=all&sourced=1&x=55&y=3.

Costs

E-transfers can have both obvious and unanticipated costs. Those that are easily measured include hardware (SIM cards, POS terminals), software licenses, operating fees and transfer fees. Hidden costs, or costs that can be difficult to measure, include training materials and events, staff time required to resolve technical issues, travel costs to supervise distributions, and management of troublesome SPs. Different tools can be used to measure these costs and should be used across the program life cycle to evaluate whether overall cost efficiency using e-transfers is achieved.¹⁵

Two recommended tools for cost analysis are:

- Annex 5: The Costing Scenario Planning Tool:¹⁶ Useful for a quick comparison of predictable e-transfer costs, including hardware and transfer fees. This tool provides a way to assess the SP's fixed and variable costs to both Mercy Corps and program participants. It takes one to two days for SPs to gather the required information to complete the tool. Once completed, your team can compare the costs associated with various SPs in one hour.
- NetHope's Costing Utility Analysis Tool:¹⁷ A more comprehensive cost-benefit analysis that looks at both financial and non-financial e-transfers costs. This tool was originally designed to compare electronic and traditional transfer methods, but could be modified to compare different types of e-transfers (or compare e-transfer SPs). It may take several days to gather the information necessary to complete this tool.

Time and Staffing Requirements

Planning appropriate time and staffing structures for e-transfer programs is critical. Key questions include:

- How quickly can you get e-cash (or e-vouchers) to participants in emergencies?
- What level of effort is required for both setup and implementation?
- What skills are needed?

While answers to these important questions vary by program, we have begun to see patterns. Though our recent e-transfer programs took place in countries as varied as Haiti, the DRC, and the Philippines, all experienced significant lags between initial testing and full program startup. The program details and timeline below highlight these findings.



Mercy Corps Philippines team member Roxie Diaz assesses damage from Typhoon Haiyan. December, 2013. Philippines — Sara Murray, Mercy Corps

15 "E-transfers in Emergencies: Implementation Support Guidelines," 37, <http://www.cashlearning.org/2012-2014/cost-effectiveness-of-cash-transfers-and-specific-delivery-mechanisms#e-transfer>.

16 Ibid. Originally developed by Oxfam and explained in the CaLP e-transfer guide.

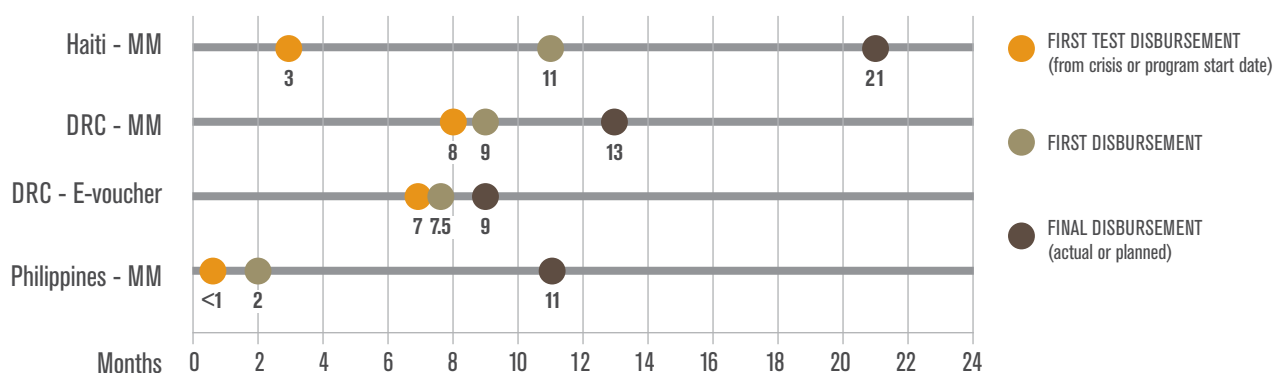
17 "Making the Journey From Cash to Electronic Payments," <http://solutionscenter.nethope.org/products/view/653>.

Haiti, 2010: Following the 2010 earthquake, no functioning MM system existed. Mercy Corps partnered with Voilà, an MNO, and Unibank, a local bank consortium, to develop and roll out a MM system called T-Cash. Mercy Corps used T-Cash to deliver MM transfers to 8,937 households.

DRC, 2013-14: Mercy Corps used e-vouchers and MM to transfer assistance to 4,000 conflict-affected households. In the DRC, MM systems exist, but are nascent.

Philippines, 2013-14: Following Typhoon Haiyan, Mercy Corps partnered with BankO – the Philippines' only branchless mobile bank -- to transfer cash to 25,000 affected households. Compared with to many places where Mercy Corps works, the Philippines has a highly developed e-transfer infrastructure.

E-transfer Program Timeline



As demonstrated in the timeline, time requirements varied significantly between deployments. The following tactics can help you adequately staff and plan for successful e-transfer programs:

- **Evaluate the capacity of your SP and allocate staff time accordingly.** New or untested e-transfer services almost always require months before participants receive their first transfer. As noted in a report on Mercy Corps' MM program in Haiti, "Be prepared to take on added responsibilities when working in a nascent MM ecosystem. ... It is necessary to plan to support the development of local MM infrastructure. This adds extra operational and startup costs."¹⁸

Mercy Corps teams using new MM systems in Haiti and the DRC assumed several unexpected responsibilities, including ensuring that MM agents had sufficient SIM cards in advance of participant registration to developing alternative offline procedures when technical systems failed. Tools for assessing your SP's capacity are included throughout this Guide. If you are working with a high-risk SP, we recommend building in a full-time senior management position – in addition to the overall Program Manager – to manage the SP relationship and support MM infrastructure development.

- **Include a staff position to manage distribution documentation and approvals.** CTP teams (including those using traditional paper and cash distributions) often include a Payment Officer who plays a hybrid finance/program role. This type of position can help speed internal processing of

¹⁸ Dalberg Global Development Advisors, "The Use of Mobile Money Versus Vouchers for Cash Transfers: Comparative Cost and Time-Savings Analysis," Mercy Corps' Digital Library, <https://mcdl.mercycorps.org/gsd/docs/USAIDFFP2010HaitiKimbelaHanginThereEvalDalberg.pdf>.

payments while maintaining segregation of duties and ensuring proper documentation and consistent distribution monitoring. This position can also support troubleshooting as unexpected challenges and needs arise. In large programs, it is advisable to request that the SP assign an Account Manager to do the same on its end. Suggested position descriptions are included in Annex 6: E-transfer Staffing Resources.

- **Consider phasing in e-transfers.** The e-transfer program timeline shows that two months is the quickest Mercy Corps has been able to establish an e-transfer program (and this was in an area with a number of well-established SPs). Since e-transfers often take more time to set up than traditional distributions, you may consider creating two parallel teams: one to work on physical distributions of cash and/or goods and the other to establish the e-transfer program. This approach may be particularly appropriate in rapid-onset emergencies, where your first goal is to meet immediate needs. The benefits of an e-transfer program can be incorporated later.

Program Participant Capacity

New technologies can make it difficult for some e-transfer recipients to access their aid. While these barriers can often be overcome with training and other types of support, you will need to evaluate the potential difficulties for all the system's users (including vendors and program participants).

Mercy Corps has found that e-transfer recipients often have difficulties memorizing and using PINs. In Mercy Corps Nepal's e-transfer program, 89 percent of targeted SMS voucher recipients (many largely illiterate) needed trusted "helpers," such as family members, to assist them in completing purchases. Oftentimes helpers entered participants' secret PINs on their behalf. Participant capacity assessments can help you adjust training and program strategies to accommodate accessibility challenges.

Some participant assessment tools include:

- Annex 7: User Capacity Survey: This tool will help you gauge the ability of both program participants and vendors to successfully use e-transfers. It will also uncover the level of support required to help familiarize them with the system.
- Step 8, "Preparing and Testing the System" in NetHope's E-payment Toolkit.¹⁹ This resource contains useful tools for preparing training and accommodating vulnerable populations.



A poster explaining the e-voucher program participants in Nepal. It was posted in vendors' shops.

19 "Making the Journey From Cash to Electronic Payments," <http://solutionscenter.nethope.org/programs/c2e-toolkit>.