Identification and authentication

The registration process needs to create a unique link between the properly targeted person and a unique identifier for that person. Each of these is then linked to a form of authentication. The authentication process seeks to ensure that the person requesting funds is indeed the properly registered person at the point of payment. The financial service provider will often make identification/authentication documents available for beneficiaries to access financial services.

## Manual personal identification

Identification and authentication can be carried out using community members or committees but these methods tend to be slow and lack flexibility, since the payment time and place has to be pre-arranged and fixed. In order to prevent duplications and omissions of records, it is preferable that the registration and identification take place at the same time. Due to anti-money-laundering regulations, most countries require that anyone opening a bank account provides at least a form of identification and, in some cases, a proof of residence.

## Official identification cards

In some countries, such as Pakistan, there are widely held national identity cards (NICs), which are linked to an online database. The cards give each adult a unique number and photograph and provide additional information such as the address and birth date. In many countries, there is no national identity card system, or many people do not have identity cards. Following disasters, people may have lost key forms of identification. In such cases, the government sometimes may be prevailed upon to provide a special and urgent registration, as happened in Swaziland in the Save the Children drought aid project (2008) and in Indonesia after the tsunami (Red Cross). In cases where there is no NIC or there is a child head of household who is not old enough to have an NIC, agencies have issued their own forms of identity card, although this is not as secure. The card may contain a photograph and/or a copy of the fingerprint. Also, it could also have a specially printed and unique bar code.

## Plastic card and PIN or bar code

Another option is to issue a prepaid card or bank card with a Personal Identity Number (PIN) at the time of registration. It will not be loaded with funds until the registration has been validated, and therefore there is no risk of theft. Also, the issuing of a card can be combined with the taking of a fingerprint (using an electronic reader attached to a laptop), which is linked to that card and can be used later, instead of a PIN, for authentication. As a third alternative, the card could have a unique bar code that can be read by a portable-bar code reader. The fingerprint, PIN and bar code are linked to the unique card number on either a central database or a database, which resides on the card reader, or Point of Sale (PoS) device. Typically, a card with a magstripe (such as a debit card or prepaid card) will require online communications from the reader to a central database, whereas a smart card can be authenticated offline by the card reader.

## Plastic card and biometrics

In the case of a smart card, the chip on the card itself holds the information on the fingerprint biometric. The transactions from a smart card are recorded both on the card and on the card reader, so that they can be updated when the reader is eventually linked to a channel of communications. It is important not to select a proprietary smart card system where the smart card can be read only by proprietary card readers, since this limits the infrastructure on which they can be used. This may be acceptable when the payments are one-off or for a short time in an area with poor banking infrastructure, but it does mean that recipients will not be able to use their cards at credit and debit card merchant PoS or ATMs. Since these cards and readers are usually supplied by the vendor, there is also a danger that the pricing may not be attractive, especially once the investment in the technology has been made and there is a need to expand or replicate the project. There are smart cards that can be read by a wide range of PoS devices and ATMs, but this should be verified in the specific country. The cost of smart cards depends on the size of the memory on the chip and, therefore, careful decisions need to be made about exactly what information is required.

## Mobile phone SIM

The unique identifier may be linked also to the mobile phone number of the beneficiary. This does not mean, necessarily, that they have to own a handset but that they need to have access to a SIM card on which they will receive a password. This password can then be entered into either a PoS device at the point of payment or a special application loaded onto the cell phone of the paying agent.