

Project Phone Management

This page will describe some of the key external issues to consider when setting up a CommCare project.

Phone Procurement

It is recommended that projects purchase an additional 10% more phones than the total number of target users. This is to account for broken, lost and/or stolen phones, phones to be used during trainings, potentially phones to be provided to supervisors or administrators for technical troubleshooting. This is not to say that 10% of phones get lost or stolen by users. For projects that have tracked this information over 3 years, we have found lost/stolen cases to range from 2-3%.


Phone Management Protocol

A phone management contract and protocol can be an important tool to help manage the expectations of phone use and create standard protocols for certain situations. It is important to identify a process for when a phone and/or associated equipment is lost or damaged.

There are various options including:

- **Create protocols for lost phone, lost SD card, lost battery, etc.**
- Please read the following page for examples of policies that have been used in the previous projects: [CommCare User Contracts](#)

See the last 4 sections of the attached document for an example of phone management protocols.

File	Modified 
Microsoft Word Document EXAMPLE Project Phone Management Plan.docx	Feb 16, 2012 by Nick Amland

Selecting Network Provider

It's important to carefully select the network provider because network coverage quality between areas throughout a country can vary widely depending on the carrier. A partner's field staff or FLWs may be able to recommend a network provider based on their familiarity. Dimagi can also provide recommendations based on our mobile phone deployment expertise in various regions. The [Commcare Users Forum](#) can be used to ask other implementers if they have run a project in your project area.

There are some tools that can assess the coverage and strength of network providers in your region, such as [OpenSignal](#). They also have a useful [app](#).

Power Requirements (charging mobile phones)

Mobile users will need to charge their mobile phones on a periodic basis, so they will need access to electricity. It is important to consider this requirement because this will require some information gathering or consulting field staff. Two main considerations are proximity to mobile users and cost of electricity.

There are various options including:

1. **Mobile users have access to electricity at home.**
 - a. Electricity access through the local grid can be very sporadic and unreliable.
 - b. Depending on the project, mobile users will likely require reimbursement for money spent charging.
 - c. In case electricity is not available in their homes, mobile users may have to charge mobile phones at a central office.
2. **Mobile users have access to local charging stations (or shops).**
 - a. Is usually the most available, low cost solution as charging stations/shops have become widely available with the proliferation of mobile electronics.
 - b. We have experienced the chance of mobile user phone theft higher at charging stations/shops.
 - c. Again, depending on project, mobile users will likely require reimbursement for money spent charging.
3. **Provide solar chargers if electricity access is otherwise not an option.**
 - a. Usually a last option because of the complexity this introduces. With the wide availability of reliable, lower cost solar chargers, the complexity is now on how to effectively manage them.
 - b. Read the following page for more information on solar chargers: [Powering phones](#)

See the "Recharging Phone Battery Protocol" section of the attached document for an example.

SIM Credit Recharge Method

CommCare uses phone credit to submit forms over a GPRS connection, so it is essential that a recharging credit strategy is designed. There are two main considerations: cost and logistics. Implementers and practitioners should be clear and upfront about recharge schemes associated with new SIMs that are procured, recharge commitments, data submission charges and balance recharge schedules. If something is unclear, they should be proactive about clarifying right away. Confusion in this area can be frustrating for mobile users, especially if commitments are not withheld.

Additionally, to better limit the use of the credit provided, there is a way to convert the credit purchased into "data". This conversion into data will restrict the use of the credit to "data services" only and that credit can no longer be used towards voice or SMS services. This is a good solution for more tightly controlling the use of the purchased credit. But, this conversion can be difficult to perform and must be performed on the actual phone.

There are various options for recharging phones including:

- **Hand out new credit during scheduled, routine "user meetings"** (i.e. top up vouchers)
- **Mobile users buy their own credit and are reimbursed for cost**
- **Project coordinator remotely sends credit to the mobile users' phones on a schedule.**
- **Network provider sends credit to the mobile users' phones on a schedule.** (i.e. post paid SIMs with closed user groups only)

See the "Phone Credit Recharge Protocol" section of the attached document for an example.