

# Local Hardware Manufacturers and Suppliers

## IRC Overview

Founded in 1933 at the suggestion of Albert Einstein, the International Rescue Committee (IRC) responds to the world's worst humanitarian crises and helps people whose lives and livelihoods are shattered by conflict and disaster to survive, recover, and gain control of their future.

Working in over 40 countries, the IRC is a leader in humanitarian relief - bringing sustained support to regions torn apart by conflict and disaster. In addition to our work overseas, the IRC also has 29 U.S. resettlement offices that help newly arrived refugees by providing immediate services. The IRC advocates on behalf of the displaced by addressing the root causes of conflict and standing up for the world's most vulnerable populations. The IRC's strategy centers on its ambition to continue to improve the scale and effectiveness of IRC programs worldwide with evidence of what works best to impact people's lives in conflict and fragile settings.

## Background & Program Description

[Pop-Up Learning](#) in Bangladesh is a technology-enhanced home-based learning program for out-of-school children fleeing violence. Pop-Up puts child-directed game-based learning software in the hands of children who need it the most, to enable them to gain foundational literacy, numeracy, and social-emotional skills. The goal of Pop-Up is to allow children to learn autonomously and with minimal supervision where a skilled teacher is not available.

During Pop-Up, caregivers and community members provide basic facilitation support, maintain technology and keep children accountable and engaged. Homes provide a safe and quiet place for children to learn and solve for the extreme density of the Rohingya camps which limits access to regular learning centers. Although solar power for tablet charging is a viable option in this context, regular electricity was available at approved and secure tablet storage locations. Intermittent connectivity using back-up user data from the tablets occurred outside the camp, as the use of mobile phones and other devices had been banned in the camp. Although the back-up data was used to track children's progress and provide targeted support for children to improve learning outcomes, the intermittent connectivity proved to be a major challenge and something that we look to simplify in future implementations.

In April 2019, the IRC Airbel Impact Lab launched the Pop-Up Learning pilot program in the refugee settlement of Cox's Bazar in Bangladesh. Findings from the [Pop-Up pilot study](#) provided evidence that localized, tablet-based autonomous learning software is a feasible and potentially cost-effective solution to help displaced out-of-school Rohingya children acquire foundational skills.

Although these findings are encouraging, there is still much we need to learn related to the implementation of Pop-Up before the IRC can roll out the program on a large scale. In particular, during the pilot process, our approach to storing and distributing tablets proved to be difficult and costly, demanding significant time and energy from the IRC Bangladesh staff. We therefore need to explore more feasible and cost-efficient solutions for tablet storage and distribution.

## Scope of Work

We are looking for local technology partners and hardware manufacturers to sell or lease tablets or other devices, support connectivity, storage and charging solutions, and assist with technology set-up, training and management.

The local technology partner should have technical capabilities to set-up devices with software, support any technology-related challenges that may arise in the field (remotely and/or in-person), and work with our design team to explore storage, connectivity and charging solutions in areas with low resources and high levels of constraints.

Our vision is to work closely with the local technology partner to develop and execute an optimized model in our next phase in Cox's Bazar. Based on a successful execution in Cox's Bazar, we hope to continue working with the local technology partner as we scale-up the program.

## General Requirements

We are open to form long-term partnerships with local organizations and people in the technology field and encourage anyone in that area to submit to this request for information. While we are looking for a local technology partner that fulfills the following general requirements, we are also very open to hearing from any local partner who may fulfill only a certain portion of the requirements outlined below.

- Devices
  - Low-cost tablet devices that can be leased (or purchased, but leasing is preferred)
  - Ability to be locked for WiFi in the camps, as connectivity is not permitted
  - Local data storage
  - Interoperable with standard hardware components
  - Functionality limited to intended use (e.g. device can only run pre-loaded software and content)
  - Technical specifications
    - Android 6 or higher
    - 2 GB / 16 GB
    - 5,000 mAh battery (at least 6 hours of daily usage)
    - Can withstand consistent use in less than ideal environments and hot & humid climates
    - Screen protectors
    - Silicone bumpers / protective case
  - Potential opportunities, but not required:
    - Access to a range of other mobile devices, like smart phones for future scale-up opportunities
    - Rechargeable solar power solutions
- Connectivity
  - Device can function when there is no connection to global internet
  - Intermittent, automated cloud backup

- Potential for remote access to content without global internet access by combining alternative local networks (e.g. mesh networks), local storage, and extending hardware.

#### Maintenance and management

- Ability to pre-load (or sideload) software and set-up devices for use
- Capacity for remote and in-person updates and maintenance
- Opportunity to work with design team to explore optimal storage, security, connectivity and charging solutions

### **Expected Activities & Deliverables**

The Pop-Up program in Cox's Bazar will run a short implementation pilot beginning October 2021 and running through January 2022. Before this phase, we would like to include local technology partners into conversations and workshops with our design research team. During the implementation phase, we hope to prototype and test connectivity, storage, security, and charging solutions. Finally, the randomized control trial will run from February 2022 through November 2022, at which point we hope to have partners who can fully support the deliverables outlined below.

- Provide and set-up tablet devices configured with the appropriate software
- Provide and set up appropriate connectivity solution to allow for device software updates and syncing of usage analytics
- Work with design team over the next coming months to explore and test storage, security, connectivity and charging solutions
- Provide tech support, including updates and maintenance, remotely and in-person
- Train program staff and provide training guides