1.1.1 Workflow Example - Field mapping buildings and POI with OpenMapKit

The following workflow showcases the tools and processes used in a long-term field mapping project to map buildings and points of interest using OpenMapKit with government and local partners.

Local Empowerment for Government Inclusion and Transparency (LEGIT)

The Liberia Local Empowerment for Government Inclusion and Transparency (LEGIT) project supports the Ministry of Internal Affairs and Governance Commission as they lead, monitor and coordinate the implementation of the government's decentralization agenda.

HOT, in close coordination with the LEGIT project team, have contributed to several areas of the project, working with the Ministry of Internal Affairs (MIA)'s Department of Urban Affairs, city administrations in the cities of Gbarnga, Ganta and Zwedru, and selected CSOs and CBOs. HOT's objectives within LEGIT are to map administrative boundaries and service delivery infrastructure or points, support our Liberian partners to conduct mapping, develop a service delivery database and to support the development of urban resilience strategies for each city.

Project page:

Supporting Decentralization in Liberia

Dates: January 2017 - February 2019

Status: Complete

Tools used:

- Software
  - ODK
  - OMK
  - OSMAnd
  - Maps.Me
  - [JOSM]
  - QGIS
  - [TileMill]
- Hardware
  - [POSM] (used as an external hard drive)
  - Tecno C9

Field Mapping Workflow

1. Technical Set-up

- Remote digitization through HOT Tasking Manager
- Development of data model (in coordination with project partners and stakeholders)
- Creation of ODK & OMK Forms
- OMK set-up
  - Creation of mbtiles using TileMill (no aerial imagery, just vector layers)
  - Creation of .osm layers used JOSM
- Set up phones
- Created map assignment areas in QGIS to guide teams in data collection
- Created print maps of assignment areas (aerial imagery in background)

2. Field Mapping

- Field mappers grouped into teams with leaders
- Use of OMK (full survey) and OSMAnd (tracking field movement) by field mappers on a daily basis
- Extracting field data from phones on a daily basis
- Uploaded field data to POSM as a back-up on a daily basis

3. Data Cleaning

- Manually merging field data files and resolving conflicts in JOSM at end of mapping activities
- Data cleaning and upload procedures
- Data cleaning in JOSM

4. Map Creation

- Download data from OSM via QuickOSM
- Creation of maps in QGIS using Print Composer & Atlas