Project Summary

Project Background
The Nigerian Energy Support Programme (NESP) aims at enabling and fostering investments in the renewable energy, energy efficiency and rural electrification sectors. The objective is to create an investor friendly environment to enable investments in the mini-grid sector. NESP has established a Unit on Electrification Planning that is assigned with data gathering in order to identify areas suitable for the development of mini-grids and to enable local developers to implement projects. NESP is co-funded by the European Union and the German Government (Bundesministerium für Zusammenarbeit, BMZ), and implemented by the GIZ (Gemeinschaft für Internationale Zusammenarbeit). Our services are implemented on behalf of the Federal Ministry of Power of Nigeria (FMP).

Project Objectives
The overall goal is to enable the roll-out of privately led mini-grids in Nigeria to provide sustainable and reliable energy access to previously unserved people and rural businesses that are currently using inefficient sources of energy. INTEGRATION and its partners will support the FMP on Electrification Planning to provide a comprehensive data set (mainly primary data from surveys) and a data management tool with according web-interfaces (web-maps and data management system) to its stakeholders while allowing access to the public.

Project Results
In the absence of fundamental planning data, data gathered primarily through remote sensing, remote mapping and on-the-ground survey (both geo-tagging and statistical surveys) will enable electrification planners and private sector investors to make informed decisions and locate investments in the electrification sector more efficiently. In this, the inaccuracy of secondary data will be overcome by the application of latest geo-spatial data sets, remote sensing and mapping and through a massive roll-out of primary data gathering activities. Access to accurate data with open access through a Centralized Data Management System (CDMS) and its visualization through a state-of-the-art web-map interface with strong user experience (UX), will have a transformative impact on the sector.

Services Provided
• Developing the approach on the electrification data gathering and management, accounting both for the challenging data acquisition situation and the high diversity and complexity of the different actors involved.
• Developing a cloud-based CDMS solution with an open data access that solves questions of ownership and responsibilities among stakeholders.
• Setting up a data management and a data gathering manual which will define business processes and quality standards.
• Gathering of data using geo-spatial instruments (remote sensing, remote mapping and of geo-tracking), as well as surveys for the socio-economic characterization of unelectrified areas.
• Ensuring continuous updating of electrification data by stakeholders through co-management of the CDMS and, therefore, considering the different objections of the stakeholders in view of its design.
• Providing training to partners, stakeholders and particularly the private sector on the use of the developed applications for data gathering and the data management tool.
• Publishing the data on NIGERIAISE4ALL.GOV.NG, a domain procured by INTEGRATION on behalf of FMP.
• Ensuring that the data quality complies with the requirements through spot tests and statistical outlier detection as well as supervision of the partners.
• Extending the approach to further areas making use of the lessons learned.