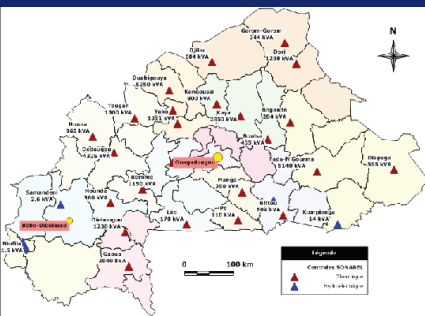


# GEOGRAPHIC INFORMATION SYSTEMS (GIS) AND CARTOGRAPHY OF VILLAGES



## TRAINING OBJECTIVES

The usefulness of GIS as decision support tools in the development sectors (health, education, water, transport, power, etc.) is now widely recognised. The functionalities of GIS provide users with a wide range of alphanumeric and spatial analyses, as well as the possibility of illustrating analyses and studies with maps and visual representations of data. This course covers all of the GIS tools and practices necessary to carrying out cartography work: GIS manipulation, use of satellite photos or Google Earth, use of GPS and transfer of data to a GIS.

## TRAINING CONTENT

### 1/ Introduction to Geographic Information Systems (GIS)

- General overview
- Basic theory: geodesy, cartography, IT, sources and databases
- Examples of applications (rural electrification)

### 2/ Introduction to the MANIFOLD software

- Structure and main functionalities
- Geographical databases

### 3/ Practical session: working with the data

- Importing data (in the GIS format, from a GPS, Google Earth etc.), manipulating the GPS
- Creating / updating the database
- Using non geo-referenced data (satellite images, scanned maps, etc.)
- Creating thematic maps
- Exporting data and maps for reproduction
- Organising data thematically
- Performing alphanumeric and spatial analyses: query concept

### DURATION

7 days

### SOFTWARES USED

Manifold, Mapsource, Google Earth

### PUBLICS

Ministries in charge of public services planning (health, education, water, transport, energy etc.)  
Rural Electrification Agencies  
National electricity companies  
Engineering firms  
Engineering schools  
Operators of electricity systems  
Independent consultants

### TRAINERS

The training programmes offered by IED draw on the actual experiences of the instructors. They combine theory and practice.

### CONTACT AND INFORMATION

IED  
2 Chemin de la Chauderaie  
69340 Francheville  
FRANCE

Phone: 33 (0) 4 72 59 13 20

Fax : 33 (0) 4 72 59 13 39

www.ied-sa.fr

ied@ied-sa.fr