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Regional training workshop on geographical information system for energy planning

UNIVERSITÉ DE GENÈVE

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Data and metadata collection guidelines

Data need explained

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Bruno Chatenoux
Université de Genève
UNEP/GRID-Geneva

Data need explained

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The list is impressive, but we only need to access existing data

Priorities are given

DATA TYPE	POTENTIAL SOURCE	DESCRIPTION	FORMAT	UNIGE needs score: 3 fundamental, 2 useful	UNIGE supplementary infos
1.0 Base Map Data	International, national and departments responsible for keeping map data.	The map data are the datasets showing the various geographic features with their metadata (such as the map projection parameter)	This is usually shapefile with associated database in (excel, access or sql) or other format as indicated: Raster (georeferenced format, jpeg, gif)		Any paper map containing non GIS information, digitized and georeferenced
Regional / district boundaries with attributes	Various Survey Departments/Town & Country Planning	This shows the boundary of the various regions/countries with their names and coordinates as well as map projection information. Data are usually polygon features dipicting the extent	maps in .shp (Shapefile), excel, access, word etc	3	Administrative boundaries
Towns / communities with attributes	Statistical Service / Survey Departments/Town &	This data will show the location of the various towns and communities in a particular district. They are usually points features	maps in .shp (Shapefile), excel, access, word etc	3	Location of the various towns and communities + their Electrification
Road Network with Attributes	Survey Departments/ Highway authority/ Ministries in Charge	These are datasets that show the various surface routes such as vehicular and rail lines. They are usually polyline or polygon features. The hierarchy of the networks will not be strictly adhered	maps in .shp (Shapefile), excel, access, word etc	3	Road and rail network (possibly with hierarchy)
Road infrastructures	Survey Departments/ Highway authority/ Ministries in	Road and rail infrastructures (tunnel, bridge, train station)	Vector (point)	3	Aded by UNIGE
Infrastructure and its Attributes	Respective Survey Departments/Town & Country Planning	These are data showing structures with interests in commercial buildings and public facilities including small and medium scale enterprises etc.	maps in .shp (Shapefile), excel, access, word etc	3	Commercial buildings, public, enterprises, school, hospitals, ... + their Electrification Status (Electrified/Un Electrified)
Water bodies	Respective Survey Departments/Town & Country Planning	These are data that will show the various water bodies within a region. Their names and location should be present	maps in .shp (Shapefile), excel, access, word etc	3	lake, rivers (possibly with hierarchy), wetlands
Land use	Ministry of Agriculture, Soil, crop and or rock research institutes, district assemblies, and national departments for Agriculture	These dataset or layer will keenly show farmlands either irrigated or not (size of farmlands and locations) and other commercial lands	maps in .shp (Shapefile), excel, access, word etc; Raster files are also fine (GeoTiff, ASCII, etc)	3	Land use including industrial, commercial and transport units, port and airport areas, Mine, dump and construction sites
2.0 Demographic Data					
Population	National Statistical offices /Census Offices	Count of People in Towns / communities	excel, access	3	Population per regional /district boundaries, including urban/rural subdivisions
3.0 Social services Data					
Health	Health Ministry/Statistical Service	Hospitals and clinics with and without access to electricity	excel, access, word, maps in .shp (Shapefile)... etc	3	
Education	Ministry in charge /Statistical Services	Basic & Secondary schools with and without access to electricity	excel, access, word, maps in .shp (Shapefile)... etc	3	
Portable Water	Water Companies / Statistical Services	Towns/Communities with and without access to potable water	excel, access, word, maps in .shp (Shapefile)... etc	2	
ICT	Communications Ministry, Telecom Industries, Ministry in Charge, District Assemblies	Availability and powering of telecommunication systems at community levels (e.g. e-care, repeater stations)	maps in .shp (Shapefile), excel, access, word etc	2	
4.0 Economic activities Data					
Business Enterprises	Ministry in charge /Statistical Services	Large, Micro and small scale enterprises with and without access to electricity	maps in .shp (Shapefile), excel, access, word etc	3	
Income or Gross Domestic Product (GDP)	Ministry in charge /Statistical Services	Income or GDP per regional/district boundaries	excel, access	3	Aded by UNIGE
5.0 Access to Electricity					
Electricity Transmission Network	Ministry of Energy; Electricity/Power Companies, Energy Commissions	Network map from National To local levels	Maps in .shp (Shapefile), excel, access, word etc	3	
Electricity substations	Ministry of Energy; Electricity/Power Companies, Energy Commissions	Substation map from National To local levels	Maps in .shp (Shapefile), excel, access, word etc	3	
Electricity production site	Ministry of Energy; Electricity/Power Companies, Energy Commissions	location and type of production (thermal, solar, hydro, ...)	Vector (point)	3	Aded by UNIGE
Hydro stations	Ministry of Energy; Electricity/Power Companies, Energy Commissions	locations of Mini and small hydro dams	Maps in .shp (Shapefile), excel, access, word etc	3	
Access to Thermal energy /mechanical power (Animal, engine)	Energy Ministry, Electricity/Power Companies, District Assemblies, Statistical Service Dpt.	towns/communities with access to thermal energy (e.g. Ovens, stoves, boilers)/mechanical power (e.g. diesel engines for grinding mills)	maps in .shp (Shapefile), excel, access, word etc	3	
6.0 Access to Cooking Fuels /Technology (LPG DATA)		This excludes Electricity			
Number & Location of fuel stations	Ministry of Energy, Energy Commissions, National Petroleum Authorities	Number and Location of LPG Stations	maps in .shp (Shapefile), excel, access, word etc	3	
Household level access	Statistical Service Dept., Ministry of Energy, Energy Commission	Households using LPG	maps in .shp (Shapefile), excel, access, word etc	2	
Improved stoves distribution	Statistical Service Dept., Ministry of Energy; UNDP; Energy Commission	Households with access to improved stoves	maps in .shp (Shapefile), excel, access, word etc	2	

6 main categories

Base map data

Demographic Data

Social services Data

Economic activities Data

Access to Electricity

Access to Cooking Fuels /Technology (LPG DATA)

Base map data

Regional/district boundaries with attribute

Administrative boundaries at the lowest level available

Base map data

Towns/communities with attributes

Possibly with hierarchical information

Base map data

Road Network with Attributes

Road infrastructures

Infrastructure and its Attributes

Water bodies

Land use

Demographic Data

Population

Social services Data

Health

Education

Potable Water

ICT

Economic activities Data

Business Enterprises

Income or Gross Domestic Product (GDP)

Access to Electricity

Electricity Transmission Network

Electricity substations

Electricity production site

Hydro stations

Access to Thermal energy /mechanical power (Animal, engine)

Energy consumption

Access to Cooking Fuels /Technology (LPG DATA)

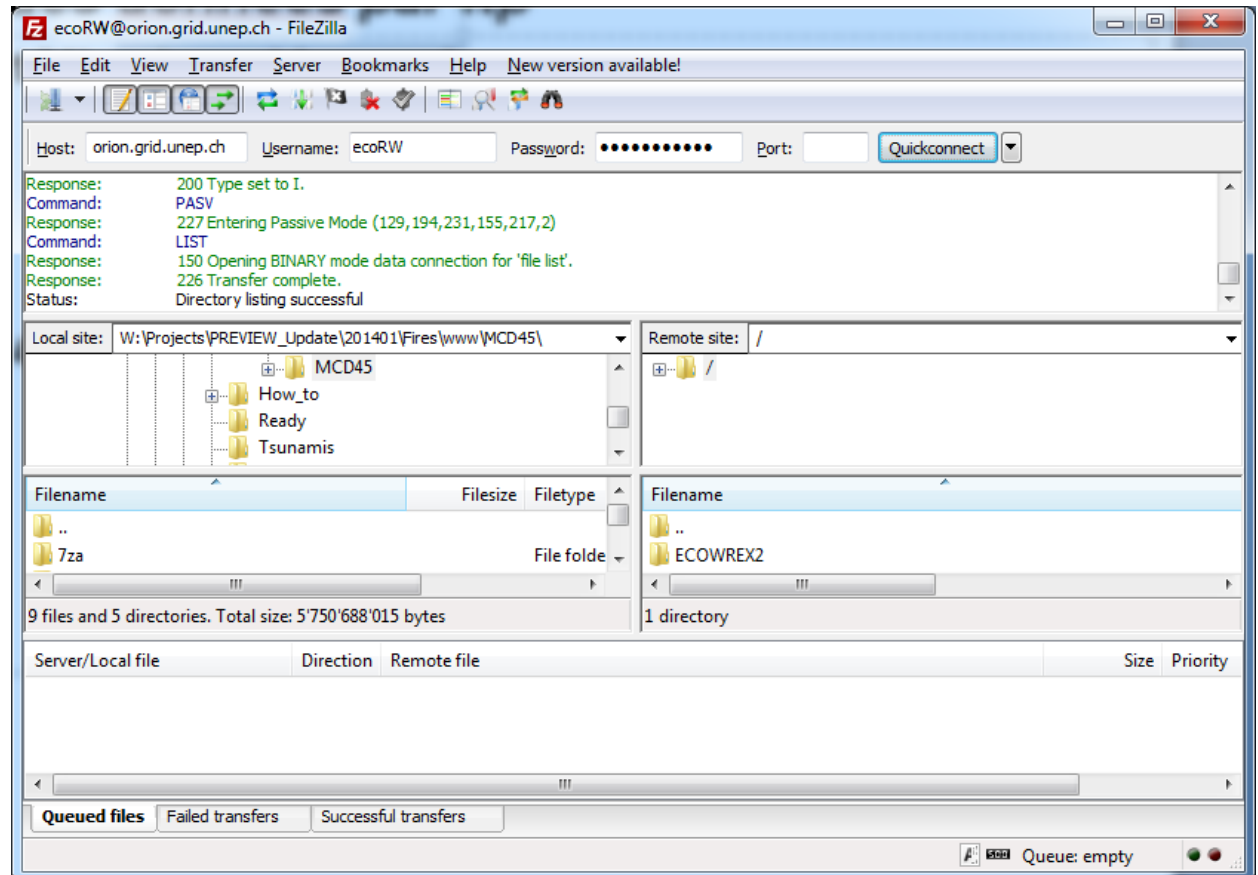Number & Location of fuel stations
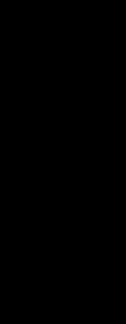
Household level access

Improved stoves distribution

Partage des données par ftp

ftp: orion.grid.unep.ch

Read and Write

Read only

Thanks

www.grid.unep.ch

bruno.chatenoux@unepgrid.ch

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