**Functionalities**

DB

1. DB that will match the requirements for spatial and none-spatial revenue collection (2013)
2. The new DB layout should allow the current format from LUPMIS to be imported.
3. District table , region table add the data to the DB (2013)
4. Table with receipt book with number of tickets issued to which collector.

Application

1. Start page will be Log in page with username and password. Possibly have a map of Ghana in the back, blurred and zoom into the respective district after log-in. District information is stored in the user table. (2013)
2. Main page will consist of several parts: Header, footer and leftmost column, central column and rightmost column. Left most column will contain the Menu. Central column will contain the map. Right most column will contain some of the functionalities that depend on the map layers. (2013)
3. Application will match the user to the role and area. Depending whether there will be one server or separate district servers.

5a. User roles should be: Administrator, Collector / Cashier, Manager and Regular-User.

Adminstrator – can change the labels use in the application, add / remove and modify regions, districts and subdistricts, together with their name and code. Add / remove and modify Fee and Fine code and their values. Add / remove and modify users and their roles and areas.

Collector / cashier – can add the new revenue that has been collected at collection points. Collector may be able to see only data in his district / sub-district or zone.

Manager – overviews a larger area up to level of district and can see the collected revenue, but cannot enter any revenue data into the system.

Regular-user – can be from region, or national level and they will be able to see only their area with the summary of data displayed.

5b. Users that belong to one area such as district, should be able to see only their district data. Users at the region level, should only see the data of that region. Regional users, should be seeing only the summary data (based on several indications: total paid, total unpaid, business, property, instalments etc) of several district areas.

1. Log everything the user changes. Stage one, log every time the user logs in and out. Stage two log in every change such as payment, modifications etc.
2. Home link, should close all the open windows and bring the user at home page (2013)
3. User should have a session timed to 3 minutes of inactivity, after that time the application will log out the user automatically.
4. Report facility should be displaying the summarised data in the table structure in the middle cell and also PDF format (for printing). Reports that can be displayed should depend on the users role and area.

8a. previous years reports will summarise the previous year and periods.

8b. current year reports will produce data based on day, week, month etc

8c. future year reports will produce the data based on same or changed indicators.

1. Search facility will allow search based on 4 indicators: upn, subupn, owner name and address. It will search the entire DB for these 4 indicators and return many results in text and visual format on the map. Text can be either as pop-up or in the right most column. Visual representation on the map will be in distinctive colour e.g. Yellow (2013).
2. User manual should be available for the users from the system. Small and detailed one. (2013)
3. Map should include layers for Property, Business, Rent, Lands, Investments and other. (2013)
4. Map should include a layer with collector zone information, like collector name, telephone nr, total of expected revenue for the zone, and total of collected revenue (2013)
5. From the map, on click on the property the user will see the basic information about the property. (the same is valid for other layers) There should be two buttons one to receive new payments and the other to view details of the previous payments. Third button modify / delete payments. Both printable for the client from the latest DB data update (2013).
6. Input of property data from valuation process; collaborate with Global Communities on their tool developed for STMA (also perhaps seek input from Land Valuation Board)
7. System should have alert functionality, like SMS or email
8. Enhance printing of demand notices (2013)
9. System allows monitor status of payment on a map (2013)
10. Security features, like authorization of users, access to the database, physical access to the server (2013)
11. System should have monitoring tools for revenue projection, same as future report.
12. ~~Import facility to transfer data from legacy system~~
13. Engage NITA for hosting the application (2013)
14. Import from LUPMIS – established format should be kept. The DB design should take into account this and keep the original LUPMIS tables intact, with any additional new columns added at the end of those tables. From the application.
15. Export to GIFMIS – exact format should be established. From the application.