FLEET MANAGEMENT SYSTEM

WEB Based Software Designed and Developed by O/o CGM (IT Project Circle), BSNL, Pune.

General

Fleet Management System is a web based software application. The design and development of software for BSNL's Fleet (Vehicle) Management System (FMS) is prepared by O/o CGM IT Project Circle, BSNL, Pune. The application enables to data administrators at SSA levels who can have access through dynamic web pages to manage vehicle inventory, month wise history of costs on oil, fuel, etc., and containing instructions and guidelines for vehicles. The application also guide in asset management by tracking vehicle records and planning to put scrapping/replacement schedules, workout fleet justification in future and the month wise record on private hiring vehicles and expenditure on them.

Software Environments

The FMS software has (a) HTML as front end, (b) JavaScript for client side validation, (c) PHP for server side scripting, (d) oracle-9i as database and (e) Linux as operating system.

Hardware Requirement

Minimum requirement for user side machine is that it should have Pentium-II or better configurations with 64 MB RAM and Web browser like Internet Explorer 5.0 and above.

How to access the application?

The user can access the application through internet on dial-up/dedicated connection by typing URL http://mis.bsnl.co.in or http://210.212.237.86 and click on Fleet Management System link then the user will get login screen.

Login

(a) By accessing login page, he has to enter correct username and password and then user can use the application.

(b) If user makes a mistake while login in, he will be redirected to the login page with ‘invalid login’ message.

Users at Various Levels

Before inputting records, keep the following list of items ready: Registration no, date of registration, make, model, euro I or II, on/off road status, engine no, chassis no,
controlling authority, designation, progressive KM, progressive cost, accessories, cost of purchase, meter reading at the time of purchase, dealer name.

The details of functional features of this application are described below. The Users of this application are: (1) SSA Admin (2) SSA Users (3) Circle Office Admin (4) Circle Office Users (5) BSNL HQ Admin, (6) BSNL HQ Users and (7) Super User

The roles of the above users are as follows:

SSA Admin

(I) Admin (User Management)

(a) Create User: Can create users in SSA by assigning username, password, and all roles (for monthly entry sheets of history, to view reports, admin etc.), name, designation etc.

(b) Edit User: User’s name, designation, contact no, E-mail ID can be edited by selecting from existing list of usernames.

(c) Edit Role: Can edit (change) the role of user assigned. By default, all roles such as to view report, to enter monthly history sheets, user management are given to users, but can be restricted to particular role.

(d) Reset Password: Can reset the password of existing users as their usernames. Means for user of username \textit{abcd}, username and password will be the same \textit{abcd} and can be changed by the user as and when required.

To reset password, SSA Admin has to contact Circle Admin and Circle Admin has to contact IT Circle, Pune.

(II) Fleet Record

Vehicle Detail: The necessary information regarding vehicle should be started from vehicle detail form. Once the registration no. (e.g. DL01AN0270) entered in this form, then that registration no. appears in the later forms. Generally, registration number of vehicle should be entered like this: DL01AN0270. Enter date of registration of vehicle in the form of \textit{DD-MM-YYYY} (e.g.01-05-2005). This date format is same everywhere in the software. The user of this package has provided the calendar to choose the date in \textit{dd-mm-yyyy} format. Once make of vehicle is selected, models of that make appear in the list of model. Euro standard or status of vehicle can be selected from multiple options. Controlling authority of vehicle and designation may be entered as per the availability. Progressive run in KM (Km run from the date of purchase till-to-date) and progressive cost in Rs. (expenditure occurred on maintenance \textit{excluding} fuel, oil till data entry), accessories (e.g. Fan, AC unit, extra wheel, tape recorder etc.) if any with vehicle that can be entered.
Vehicle Purchase Entry: Select registration no. (e.g.DL01AN0270) from the drop down of registration no. list. Entries for cost of purchase (in Rs.), date of purchase which are mandatory to fill. Initial Meter Reading (in Km) at the time of purchase, dealer name, remarks for the vehicle can be entered.

Vehicle RTO Entry: Select registration no. (e.g.DL01AN0270) from the drop down of registration no. list. Select the state for registration of vehicle. Select the road tax type and enter road tax paid in Rs. The date entered for tax validity should be later than today's date.

Vehicle Insurance Entry: Select registration no. from the drop down of registration no. list. Select insurance company name and insurance type from the drop down list for vehicle. Enter insurance paid in Rs., insurance policy no and future insurance validity date and submit the entries.

Vehicle Control/Allotment: Select registration no. from the drop down of registration no. list. Enter Officer's name, designation and allotment date, if vehicle is allotted to the Officer ABC. In future, if this vehicle is surrendered by ABC Officer, click on radio button check for surrendered date and then enter surrendered date and submit the entries. Again make entries for new Officer’s name XYZ, desg., allotment date etc. and again submit the data.

Scraping Date Entry: In future, when vehicle is scrapped, select registration no. of scrapped vehicle from the drop down of registration no. list. Enter scrapping cost in Rs. scrapping date of vehicle.

(III) History Sheets

(a) Running Information of Vehicle If SSA Admin is filling the monthly transaction entries for his SSA, then he has to ask the Circle Admin for the month and year from where the monthly transaction should start. The transaction month and year will be the same for the Circle Office and all of its SSAs.

The application will not allow leaving a month's gap without transaction of data that means every month's monthly transaction should be submitted. The Admin has to select the running detail menu from History Sheets and then has to select registration no, year and month (allotted by Circle Admin to his SSA). All SSAs of the Circle including Circle Office will have the same year and month as start up to make the transaction of run detail and hired vehicle entries.

(b) Expenditure Detail of Vehicle

(1) Expenditure on Fuel: The SSA Admin can submit his monthly transaction for the fuel entry. The Admin has to select the registration no for which the monthly fuel entry is to be made. VIN no is automatically selected. The bill no, bill date, fuel/oil details, their
rates, meter readings at the time of last and current filling of fuel, oil co name, cost of yellow cloth, name of fuel station all these entries can made for this transaction.

(2)Expenditure on Maint/Repair The SSA Admin can submit his monthly transaction for the maintenance/repair entry. The Admin has to select the registration no for which the monthly maint/repair entry for which VIN no is automatically selected. The maint date, meter reading on maint date, bill no, bill date, charges for service, labour, spare parts, misc., name of workshop, fault reason all these entries can made for this transaction.

(3)Hired Vehicle The SSA Admin can submit his monthly transaction for the hired vehicles. The Admin has to click on hired vehicle menu, and then has to select the month and year for which the monthly entry is to be made. The start up month and year for hired vehicle entry will be same as that start up month for run detail of vehicle. This start up month and year is allotted from Circle Admin to his all SSAs. The Admin has to feed the monthly total no vehicles and expenditure on them and has to submit the details.

(IV) Reports

Listing of Vehicle

(a) Make wise report: The SSA Admin can view the make wise (e.g. TATA, MAHINDRA etc.) report of his SSA by VIN no, reg. no., model, model year, fuel type, on/off road status, euro standard, engine no., chassis no. The Admin has to click on make wise sub-menu and then has to select make for which the report is desired.

(b) Model wise report: The SSA Admin can view the model wise report of his SSA by VIN no, reg. no., model year, fuel type, on/off road status, euro standard, engine no., chassis no. The Admin has to click on model wise sub-menu and then has to select make and model for which the report is desired.

(c)Group wise report: The SSA Admin can view the group wise report of his SSA by VIN no, reg. no., model year, on/off road status, capacity(CC), BHP, seating capacity, gross weight, euro standard, scrapped date if any. The Admin has to click on group wise sub-menu and then has to select group of vehicle and then model for which the report is desired.

(d) Registration wise report: The SSA Admin can see the registration no. wise report of his SSA by VIN no, reg. no., make, model, fuel type, purchase date, purchase cost, on/off road status, capacity(CC), BHP, allotted to, desg., unit name. The Admin has to click on registration no sub-menu and then has to select registration nos. of vehicles for which the report is desired.

(e) Monthly Cost/KM wise report: The SSA Admin can see the monthly cost/Km wise report of his SSA by reg. no., make, model, purchase date, group, km run during month, expenditure on fuel/maint. During month, cost per Km (Rs./Km), remark if any for the
vehicle. The Admin has to select on registration no. wise sub-menu and then has to select for one or many vehicles by pressing control button for which the report is desired.

(f) Scrapping of vehicle: The SSA Admin can view the scrapping report of his SSA by reg. no., VIN, make, model, purchase date, purchase cost, BHP, scrapping date, scrapping cost, and unit name. The Admin has to click on scrapping vehicle sub-menu and then has to select for one or many vehicles by pressing control button for which the scrapping report is desired.

(g) Total km run wise: The SSA Admin can view the progressive cost/Km by selecting model year of vehicle. The report consists of SSA’s model year all vehicles with reg. no., VIN, make, model, on/off road status, fuel type, purchase cost, progressive Km, progressive cost and progressive Cost/Km for individual vehicle.

Monthly MIS Report: The SSA Admin can view or forward the monthly MIS report of SSA to his Circle Office. The report consist of no of hired vehicles and expenditure on them and for departmental vehicles, reg. no., purchase date, make, model, group, Km run during the month, expenditure run during the month, cost per Km (Rs./Km), remarks if any for the vehicle. The Admin has to click on Monthly MIS Report and has to select year and month for which the report of his SSA is required. Then SSA Admin has to click on ‘Forward the Transaction to Circle’ button to forward the report. The transaction cannot be forwarded to Circle Office, if the following transactions are incomplete (a) hired vehicle sheet, (b) run detail for all departmental vehicles. Proper messages are available for particular incomplete transactions.

Vehicle Expenditure Report: The SSA Admin can view or print the vehicle's annual expenditure report of his SSA in between the financial year (months April to March). The Admin has to click on Vehicle Expenditure Report and has to select registration no of vehicle and fiscal year. The SSA Admin can see the report which consists of the selected vehicle's reg. no., purchase date, make, model, group, progressive Km run, progressive cost per Km, length of service etc.

Hired Vehicle's Reports:

(a) Monthly Report: The SSA Admin can view or print the hired vehicle's monthly expenditure report of his SSA. The Admin has to click on Hired Vehicle Report menu and has to select monthly report sub-menu and then has to select year and month for which the report is desired. The report consists of no of hired vehicles and the monthly expenditure on them for the SSA.

(b) Annual Report: The SSA Admin can view or print the hired vehicle's annual expenditure report. The Admin has to click on Hired Vehicle Report menu and has to select annual report sub-menu and then has to select fiscal year for which the report is desired. The report consists of no of hired vehicles and the expenditure on them for the selected fiscal year or up to the last month of the current fiscal year.
SSA Users

SSA Admin can create and define the roles to users to access the application. There is limited no. of roles, but there can be more users to use the application with same roles. As described above, the SSA user can access the application.

Circle Admin

The Circle Admin may use the user management and can feed the data for fleet record, history sheets of vehicles for Circle Office as described for SSA Admin.

Reports for Circle Office

Listing of Vehicle:

(a) Make wise report: The Circle Admin can view the make wise (e.g. TATA, MAHINDRA etc.) reports for all SSAs or a particular SSA/Circle Office.

(b) Model wise report: The Circle Admin can view the model wise (e.g. SUMO, BOLERO etc.) reports for all SSAs or a particular SSA/Circle Office.

(c) Group wise report: The Circle Admin can view the group wise (e.g. A, B, C, D) reports for all SSAs or a particular SSA/Circle Office.

(d) Registration wise report: The Circle Admin can see the registration no. wise report of a particular SSA/Circle Office which consist of VIN no, reg. no., make, model, fuel type, purchase date, purchase cost, on/off road status, capacity(CC), BHP, allotted to, desg., unit name.

(e) Monthly Cost/KM wise report: The Circle Admin can see the monthly cost/Km wise report of a particular SSA/Circle Office which consists of reg. no., make, model, purchase date, group, km run during month, expenditure on fuel/maint.

(f) Scrapping of vehicle: The Circle Admin can view the scrapping report of a particular SSA/Circle Office which consists of reg. no., VIN, make, model, purchase date, purchase cost, BHP, scrapping date, scrapping cost, and unit name.

(g) Total km run wise: The Circle Admin can view the progressive cost/Km by selecting model year of vehicle of SSA/Circle Office which consist of reg. no., VIN, make, model, on/off road status, fuel type, purchase cost, progresive Km, progresive cost and progressive Cost/Km for individual vehicle.

Monthly MIS Report: The Circle Admin can view or forward the monthly MIS report of his Circle Office. The report consist of no of hired vehicles and expenditure on them and for departmental vehicles, reg. no., purchase date, make, model, group, Km run during the month, expenditure run during the month, cost per Km (Rs./Km), remarks if any for the
vehicle. The Admin has to click on Monthly MIS Report and has to select year and month. Then Circle Admin has to click on ‘Forward the Transaction to BSNL H/Q’ button to forward the report. The transaction cannot be forwarded to BSNL CO Office, if the following transactions are incomplete (a) hired vehicle sheet, (b) run detail for all departmental vehicles, (c) all SSAs should forward the monthly MIS to circle office. Proper messages are available for particular incomplete transactions.

**Vehicle Expenditure Report** The Circle Admin can view or print the vehicle's annual expenditure report of his CO in between the financial year (months April to March). The Admin has to click on Vehicle Expenditure Report and has to select registration no of vehicle and fiscal year. The Admin can see the report which consist the selected vehicle's reg. no., purchase date, make, model, group, progressive Km run, progressive cost per Km, length of service etc.

**SSA/Unit MIS Report** The Circle Admin can view or print the SSA wise vehicle's monthly report for his SSAs. Click on submenu; select SSA, select month and year to see the report. The report consist of hired vehicle expenditure data of SSA, the vehicles of SSA with reg. no, purchase date, make, model, group, km run during the month, expenditure during the month, cost/km, etc.

**Hired Vehicle's Reports**

(a) **Monthly Report**

The Circle Admin can view or print the hired vehicle's monthly expenditure report of his CO and all of his SSAs. The Admin has to click on Hired Vehicle Report menu and has to select monthly report sub-menu and then has to select year and month for which the report is desired. The report consists of no of hired vehicles and the monthly expenditure on them for the SSAs.

(b) **Annual Report**

The Circle Admin can view or print the hired vehicle's annual expenditure report of his SSAs and CO. The Admin has to click on Hired Vehicle Report menu and has to select annual report sub-menu and then has to select fiscal year for which the report is desired. The report consists of no of hired vehicles and the expenditure on them for the selected fiscal year or up to the last month of the current fiscal year.

**Circle Users**

Circle Admin can create and define the roles to users to access the application. There is limited no. of roles, but there can be more users to use the application with same roles. As described above, the Circle user can access the application.

**BSNL HQ Admin**
The BSNL HQ Admin (hereafter Admin) may use the user management and can feed the data for fleet record, history sheets of vehicles for BSNL HQ Office as described for SSA Admin.

**Reports for BSNL HQ Office**

**Listing of Vehicle**

(a) **Make wise report**: The Admin can view the make wise (e.g. TATA, MAHINDRA etc.) report of his HQ, Circle Offices and all SSAs of Circles.

(b) **Model wise report**: The Admin can view the model wise (e.g. SUMO, BOLERO etc.) report of his HQ, Circle Offices and all SSAs of Circles.

(c) **Group wise report**: The Admin can view the model wise (e.g. A, B, C, D) report of his HQ, Circle Offices and all SSAs of Circles.

(d) **Registration wise report**: The Admin can see the registration no. wise report of his HQ, Circle Offices and their SSAs by VIN no, reg. no., make, model, fuel type, purchase date, purchase cost, on/off road status, capacity(CC), BHP, allotted to, desg., unit name.

(e) **Monthly Cost/KM wise report**: The Admin can see the monthly cost/Km wise report of his HQ, Circle Offices and their SSAs by reg. no., make, model, purchase date, group, km run during month, expenditure on fuel/maint.

(f) **Scraping of vehicle**: The Admin can view the scraping report of his HQ, Circle Offices and their SSAs by reg. no., VIN, make, model, purchase date, purchase cost, BHP, scraping date, scraping cost, unit name.

(g) **Total km run wise**: The Admin can view the progressive cost/Km by selecting model year of vehicle. The report consists his HQ, Circle Offices and their SSAs of selecting model year wise of vehicles with reg. no., VIN, make, model, on/off road status, fuel type, purchase cost, progressive Km, progressive cost and progressive Cost/Km for individual vehicle.

**Monthly MIS Report** The Admin can view or print the monthly MIS report of his HQ. The report consist of reg. no., purchase date, make, model, group, Km run during the month, expenditure run during the month, cost per Km (Rs./Km), remarks if any for the vehicle. The Admin has to click on Monthly MIS Report and has to select year and month for which the report of his HQ is required.

**Vehicle Expenditure Report** The Admin can view or print the vehicle's annual expenditure report of his HQ in between the financial year (months April to March). The Admin has to click on Vehicle Expenditure Report and has to select registration no of vehicle and fiscal year. The Admin can see the report which consist the selected vehicle's
Circle/Unit MIS Report The Admin can view or print the vehicle's monthly report for his HQ, Circle Offices and their SSAs. Click on submenu, select Circle, SSA, select month and year to see the report. The report consist of hired vehicle expenditure data of SSA, the vehicles of SSA with reg. no, purchase date, make, model, group, km run during the month, expenditure during the month, cost/km, etc.

Hired Vehicle's Reports

(a) Monthly Report

The Admin can view or print the hired vehicle's monthly expenditure report of his HQ, Circle Offices and their SSAs. The Admin has to click on Hired Vehicle Report menu and has to select monthly report sub-menu and then has to select Circle, year and month for which the report is desired. The report consists of name of SSA, no of hired vehicles and the monthly expenditure on them.

(b) Annual Report

The Admin can view or print the hired vehicle's annual expenditure report of his HQ, Circle Offices and their SSAs. The Admin has to click on Hired Vehicle Report menu and has to select annual report sub-menu and then has to select Circle, fiscal year for which the report is desired. The report consists of no of hired vehicles and the expenditure on them for the selected fiscal year or up to the last month of the current fiscal year.

BSNL HQ Users

The BSNL HQ Admin can create and define the roles to users to access the application. There are limited no. of roles, but there can be more users to use the application with same roles. As described above, the BSNL HQ user can access the application.

Help

The user may take the help of documentation or may contact on telephone with the following Officers at O/o CGM (IT Project Circle), Pune:

Shri D S Kul, System Analyst (IT) (020-27457585)

Shri B D Badhe, System Analyst (IT) (020- 27441585)

Shri Pramil Gupta, DGM (IT) (09422516655, 020-27443433)
After accessing the application, the user may logout properly by pressing Logout menu. By clicking logout, the current session closes and the user logs out of the system. Here if the user wants to access the application, the user has to login again or otherwise the user can close the present window.

Glossary

Group A: Heavy Commercial Vehicles fitted with engine of 120 BHP and above (life cycles 12 years, 2, 40,000 KMs for plains and hills)

Group B: Light Commercial Vehicles fitted with engine above 75 BHP, but below 120 BHP (life cycles 10 years, 2, 20,000 KMs for plains and hills)

Group C: Multi-Utility Vehicles/Vans fitted with engine less than 75BHP (life cycles 7 years, 1,50,000 KMs for plains and 5 years, 90,000 KMs for hills)

Group D: All Staff Cars/Inspection Cars (life cycles 7 years, 1, 50,000 KMs for plains and 5 years, 90,000 KMs for hills)

FAQ for Fleet Management System

Q. How to access the software for BSNL's Fleet (vehicle) Management System (FMS)?

Solution:: The user can access the application through internet on dial-up connection by typing URL http://210.212.237.87/fleet (or) http://210.212.237.86 and click on Fleet Management System link or http://mis.bsnl.co.in then the user will get login screen.

Q. What is the scope of the FMS application?

Solution:: The package is divided into hierarchical design of SSA, Circle and BSNL HQ. All the information fed at the SSA level can be forwarded to Circle Office. The Circle Office can feed the information about the vehicles at Circle Office and receives the information of its SSAs /Units and then all this collective data regarding detailed information of departmental vehicles and a brief information about hired vehicles (no of hired vehicles and expenditure on them) in Circle can be forwarded to BSNL HQ.
Q. Where is the location of Web/Database server of FMS application?

Solution:: The location of Web/Database server of FMS application is at IT Cell, BSNL, Kerala Circle.

Q. How to get username and password?

Solution:: The SSA Admin of every SSA has to contact for their Circle Admin to get username and password. And every Circle Admin has to contact IT Project Circle, Pune, for username and password for their Circles.

Q. Who can create the users at SSA/Circle/HQ levels to access the application?

Solution:: The SSA/Circle/BSNL HQ Admin can create their users.

Q. Will it be possible to assign the different roles for creating users?

Solution:: Yes, the Admin can assign the different roles to his users. The assigned role may be to view the reports or to enter the history sheets and view reports or feed data in fleet record, history sheets and view reports.

Q. Is there reset password facility available in the software? Whom to contact?

Solution:: Yes, the reset password facility is available for respective Admin only for his created users. For Circle Admin, contact to IT Project Circle, Pune.

Q. Will it be possible to fill up the data for old vehicles?

Solution:: Yes, the application is for old as well as new vehicles.

Q. Can users edit the data once entered by him in fleet record menu?

Solution:: No. He may contact to his Admin only for modification.

Q. As a SSA Admin, from which month and year, the data input entry for run detail/hired vehicles should be started under history sheets menu?

Solution:: If the SSA Admin is filling the monthly transaction entries for his SSA, then he has to ask the Circle Admin for the month and year from where the monthly transaction should be started. The transaction start up month and year will be the same for the Circle Office and all of its SSAs.

Q. As a Circle user, from which month and year, the data input entry for run detail/hired vehicles should be started under history sheets menu?
Solution: Circle Admin has the choice to select the start up month and year. This selected month and year will be the start up month for his Circle Office and all of its SSAs/Units.

Q. As a SSA/Circle Admin can forward the incomplete data of run detail/hired vehicles to hierarchical order?

Solution: No.

Q. As a SSA Admin, how to forward the monthly reports to Circle Office?

Solution: In monthly MIS report, submenu under report menu, the SSA Admin has to select month and year for which the monthly transaction is to be forwarded to Circle Office. Click on the button 'Forward the Transaction to Circle' located at bottom of the report. If the data for run detail, hired vehicle is submitted for the month and year for which the Admin wants to forward the transaction to Circle Office, then and only then the data is forwarded to Circle Office.

Q. As a Circle Admin, how to forward the monthly reports to BSNL CO Office?

Solution:: In monthly MIS report submenu under report menu, the Circle Admin has to select month and year for which the monthly transaction is to be forwarded to BSNL HQ Office. Click on the button 'Forward the Transaction to BSNL HQ' located at the bottom of the report. If the data for run detail, hired vehicle is submitted and all SSAs already forwarded to circle office for the month and year for which the Admin wants to forward the transaction to BSNL HQ Office, then and only then the data is forwarded to BSNL CO Office.

Q. How to change password?

Solution:: Any user of this application can change his password by clicking on change password link on home page.

Q. Whom to contact regarding any queries/doubts about the FMS application?

Solution:: The user may take the help of documentation or may contact on telephone with the following Officers at O/o CGM (IT Project Circle), Pune:

Shri D S Kul, System Analyst (IT) (020-21111700, 27457585)

Shri B D Badhe, System Analyst (IT) (020-21111617, 27441585)

Shri Pramil Gupta, DGM (IT) (09422516655, 020-27443433)

Or mail us at: (1) kulds@bsnl.in (2) badhe_bd@bsnl.in (3) pramil_gupta@bsnl.in (4) itpc@bsnl.in