

Program Management for the Assam PWD Computerization Project

GCS was awarded the project to undertake Program Management for the phase I of the Assam PWD Computerization Project to implement the Enterprise Wide Solution for automating PWD functions.

The Assam PWD computerization process involved automation of the Project Management function including preparation of CAR, DPR and Project Approval process, Procurement process, Project Management process. PWD maintains a Measurement Book for all the roads projects. The Measurement Book was also automated as part of this project. In addition to the Project Management function the APCP project included automation of project financial management processes, HRMS, Inventory control system, Roads Information Management and Roads Maintenance Management system.

As part of the assignment GCS was involved undertaking a detailed study of the organization structure of Assam PWD, processes followed, workflow of these processes, problems faced by Assam PWD and objectives of the computerization process. GCS prepared RFP document with the detailed scope of work including functional requirements, technical requirements, training requirements, high level architecture of the system including data center architecture, application architecture, security architecture, evaluation criteria and various terms and conditions of the procurement process. The RFP was prepared based on the World Bank procurement guidelines. Thereafter GCS supported Assam PWD in Bid Process Management to select the implementation vendor.

To implement the above functions in a span of one year, the packaged software were evaluated and implemented for project management, financial management, HR Management, logistics and Inventory Management modules. The Measurement Book, Roads Information and

Roads Maintenance management system were developed and integrated with the packaged software modules.

The program management of the entire project included preparation and management of project plan for the entire project, review of all the deliverables, conducting Project steering committee meetings to ensure that the project progresses as per the schedule and all issues are resolved to ensure successful implementation.

GCS also conducted the training review using a feedback survey and monitored the progress of the generic and application training. Training feedback was conducted and analyzed periodically.

GCS was involved in execution of the Integration testing of the application. The Integration testing activity was carried out at the Assam PWD Data Center. All modules of the Project Management module, financial management module, HR module, RIMS, RMMS, Measurement Book, Inventory Management module etc were tested by GCS consultants. The integration between these modules was tested using sample test data. On completion of the integration testing a detailed test report was prepared and given to Assam PWD and Implementation vendor for corrective action.

At the end of the customization, development, testing and integration User Acceptance testing was planned. GCS supported Assam PWD in carrying out the detailed UAT for the developed and customized enterprise wide application for the Assam PWD. GCS consultants prepared the UAT plan and UAT test data. This test data was used by GCS consultants and Assam PWD consultants to test all the user requirements specified in the To BE process document at the beginning of the project. The UAT testing involved testing the complete lifecycle of the project and related financial, HR and inventory modules with the sample data. During the UAT GCS consultants supported Assam PWD in testing the performance, integrity, backup, recovery and security aspects of the enterprise wide application. This activity enabled the Assam PWD to thoroughly test the application before the Go-Live (Roll out) phase.

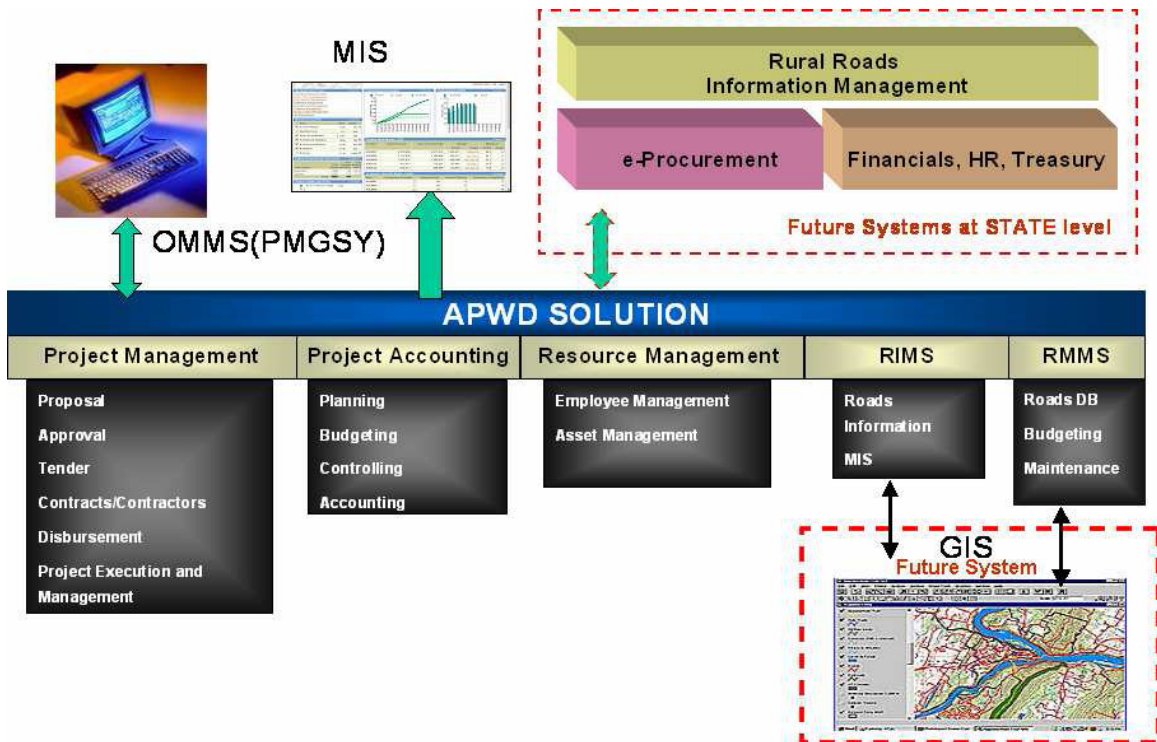
Success of any E'Governance project depends on the effectiveness of Change Management Process. GCS supported Assam PWD in preparing a Change Management Strategy and conducted Change Management workshops for the Assam PWD engineers.

As a result of the effective management of the entire project, close coordination with the Assam PWD, Implementation vendor and World Bank the project has gone live in a period of 9 months.

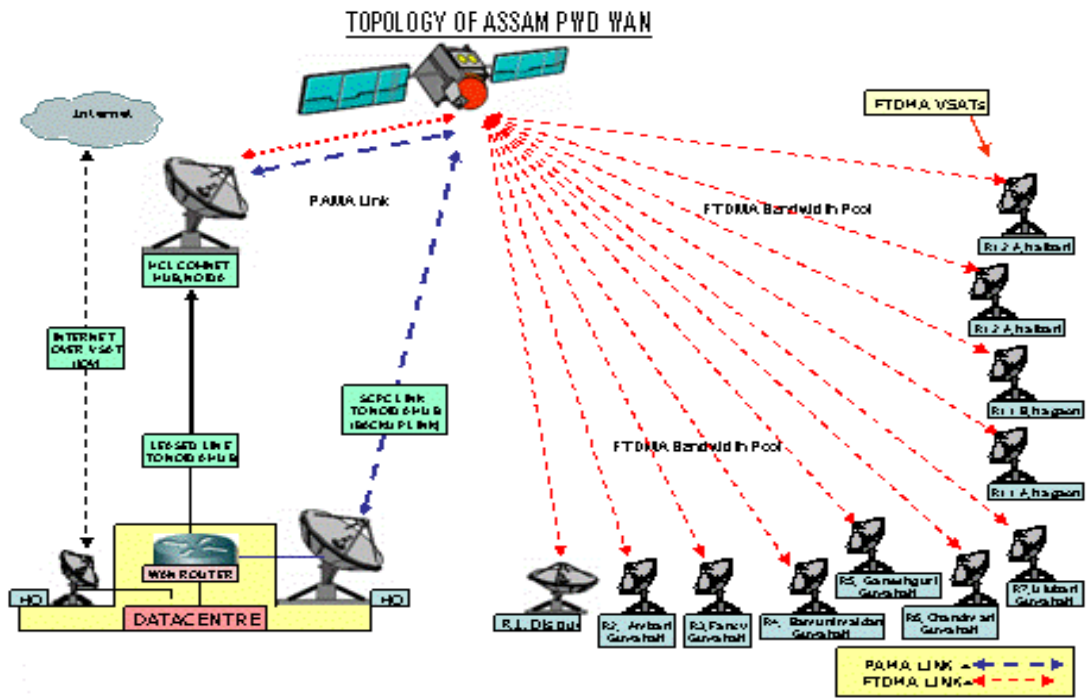
Technical Architecture

The technical architecture included implementation of various modules of Oracle Applications eBusiness suite 11i to cater to Assam PWD's business requirements. The Project Management functions were implemented using Prima Vera and some of the modules such as Measurement Book, Roads Information and Roads Maintenance Management System were custom developed using J2EE. The users of the Assam PWD locations access the system through Internet or through Intranet using browser (IE, Netscape etc), as the case may be. Their access will be secured through the use of HTTPs with SSL, User Authentication and Digital Signature (at Server side only) with Public Key Infrastructure. They can thus access system through Internet with or without VPN, through Intranet (on WAN, Leased Lines, LAN or Dial-up Lines).

The application architecture of all the modules as created by TCS (the implementation vendor of the project), under supervision of GCS was as follows:



The network architecture created by TCS under supervision of GCS for Assam PwD was as follows:



The entire network was managed by a data center created in the Head Quarter at Chandmari. The architecture of the data center created by implementation vendor is as follows:

