

Infrastructure Works Program Monitoring System(IWPMS)

Introduction

AP. State Housing Corporation Ltd (APSHCL) is a Government of Andhra Pradesh agency for construction of houses to the Rural and Urban poor in the State. Currently agency is responsible for implementation of various housing programme initiated by State Government aimed at construction of Pucca houses to Rural/Urban poor to ensure that all the houseless families in the State are provided with Pucca houses.

In order to achieve this objective, the department has taken up the housing program in a massive way by constructing housing colonies in both rural and urban areas. Infrastructure facilities like water supply, internal roads, drainage & power supply are very much essential to these housing colonies. These infrastructure facilities are being taken up with the help of other government agencies like Panchayati Raj, Rural Water Supply, AP Transco, Public Health etc.

After Government accords administrative sanction, APSHCL award these works to the concerned Executing agencies and monitor the works progress/program. APSHCL proposes to have an e-solution for effective planning, tracking and monitoring of the infrastructure works program. Accordingly, CGG developed and deployed an e-solution **Infrastructure Works Program Monitoring System (IWPMS)** to the requirements of the department.

Infrastructure Works Program Monitoring System (IWPMS)

The e-solution facilitates

- Centralized data base for effective Planning, tracking, monitoring and evaluation of work Programs
- Generation of Pay Release Orders (PRO) against bills(Advance/work done)
- Speedy and transparent manner of release of funds (HO →Division offices) through Corporate Internet Banking (CIB)
- Ensures timely payments to the Executing agencies/Contractors
- Decision Support System (DSS) at various levels in the department

The e-solution has following forms in order to capture the relevant data and the functionality of these forms is as follows

1. Executing Offices: The offices of the Executing agencies in a district responsible for execution of works i.e., PR, RWS, PHC etc. are the executing agencies
2. Habs/Layout/Requirements: It a form with three sub forms i.e., Habitations, Layout and Work requirements.
 - a. Habitations/Colonies in a village
 - b. Proposed Layouts in a habitation
 - c. Proposed Work requirements in a layout.
3. Works Sanction/Progress: This is a form with three sub forms i.e., Admin. Sanction, Award of work and Work Progress.
 - a. Admin.Sanction: Administrative Sanction details of the works
 - b. Award of work: Technical sanction, Executing agency/office and Contractor details of the works.
 - c. Work Progress: Physical and financial progress of work.
 - i. Physical Progress: In terms of Percentage progress
 - ii. Financial Progress: Bill amount (Advance & Work done) for a work. Based on the bill amount (advance/ work done), Pay Release Orders (PRO) will be generated by the System for a particular work.

4. PRO Confirmation: Check and confirmation of PRO details by Division office before forwarding to head office for release of payment.
5. Allocation/Releases: District wise allocation amounts for each program. Entry of Work sanctions will be restricted to the allocated amount.
6. Bank Accounts: Internet Banking Account details of the district offices to arrange electronic transfer of funds using CIB
7. Funds transfer: Based on PRO confirmation, system generates the consolidated statement of funds transfer (bank/ office wise) which enables the HO to arrange for transfer of funds to the respective division office bank accounts.

The application can be accessed at <http://housinginfra.apcgg.gov.in>

Stake holders:

APSHCL officials, Government Agencies like PR, RWS, PHC, R&B, APTRANSCO, Social Welfare department etc.,.

Accessibility:

APSHCL officials at HO/Division offices are privileged to add and update information in the system. As per role based security mechanism, privileges have been assigned to the officials to access the forms.

1. Executive Engineers: All the in-charges of the division offices can access Executing Offices, Habs/Layouts/Requirements, Work Sanction/Progress and PRO confirmation forms.
2. Finance wing @ head office: Managers of Finance wing of head office can access the Bank accounts and Funds transfer forms.
3. Program Managers @ head office: The program in-charge i.e., Superintending Engineer in the head office can access all the forms except Bank Accounts and Funds transfer forms.

Reports: The system provides the following reports with drilldown feature(District-> Division--> Mandal) for information, evaluation and decision making at various levels in the organization.

- Requirements/Sanctions/Progress
- Physical progress
- Physical Progress (Mile Stone wise)
- Works Fact Sheet
- Allocation and releases
- PRO's generated
- Funds Transfer – District/bank Wise
- PRO Confirmations
- CBS accounts (Bank Accounts of EEs)

Technology/Tools:

The solution is developed using .NET technologies with SQL Server 2005 and Windows Server 2003 Active Directory for user authentication. The SQL Reporting Services have been used in generation of reports.

Conclusion:

IWPMS provides a Decision Support System (DSS) on works requirements, Sanctions and physical & financial progress etc., The unique feature of this solution is release of funds on real time basis through Internet banking system after PROs are generated against the bills. The transfer of funds will take place from central office to the respective division offices in speedy and transparent manner.