

## **eAwas – Government Accommodation Management System (GAMS)**

### Executive Summary

**eAwas is a Government to Employee (G-2-E) eGovernance tool. It has created a transparent, corruption free and efficient allotment system for the entire housing stock available with the Directorate of Estates. The tool has proved that better-managed system results in increased credibility, enhanced satisfaction, rule-based system and more revenue generation, which in turn leads to less paperwork, efficiency and reduced litigation.**

## **"eAwas" – Government Accommodation Management System**

**Background:** The Government of India (GoI) owns a large number of residential units (65000 plus) under General Pool Residential Accommodation (GPRA) at New Delhi. GoI allots them to Hon'ble President, Hon'ble Vice President, Hon'ble PM, Hon'ble Ministers, MPs, Supreme Court and High Court Judges, senior government officials and other employees of the Government of India and its attached / subordinate organisations, through the Directorate of Estates (DoE), which is the Estate Manager of the GPRA under the Ministry of Urban Development & Poverty Alleviation (MUD&PA).

DoE receives application from all the eligible applicants for various types of residential units (more than 0.2 Million) from all eligible offices, prepares waiting list and allots residential units to the applicants. It is desired that the whole process of allotment is transparent, rule based and hassle free. It may be noted that during the 1990s, there was problem in the allotment process and the Hon'ble Supreme Court of India had to intervene and it ordered to make the allotment process transparent, simple and rule based.

**Existing System:** The computerisation in the DoE started in the early 1990s. However, it could not stop the malpractice prevailing in the system, as the computerised system implemented during those days did not attempt to map the business process involved in the allotment of these residential units in totality. The system was more for the internal usage and was not open to the applicants. The allotment was not trouble free and Public Interest Litigation was filed in the year 1994 - 1995 and the Hon'ble Supreme Court intervened and many allotments were cancelled or allottees were forced to pay exorbitant house rents.

**New Beginning: eAwas** is a computerised system for government accommodation management automating all the activities starting from the submission of the application to the vacation of the residential unit by the allottee. This system is radically different from the earlier system which updated databases in offline mode making it less current and therefore of not much use. The required software has been designed and developed in-house by the National Informatics Centre, the premier eGovernance organisation of the GoI.

**eAwas** has been developed with the following objectives:

- Automating all the business activities / processes involved in the allotment of GPRA;
- Facilitating easy maintenance and prompt updating of housing records;
- Making housing records / transactions tamper proof and genuine; and
- Allowing applicants easy access to all relevant information either through Internet or Information Kiosks.

**Scope of the Project: eAwas** cover the following activities related to the allotment of GPRA houses:

- Business Process Reengineering of the application form itself;
- Reducing the number of forms;
- Simplification of the application form;
- Registration of applications for initial allotment, change of accommodation, and allotments on medical / functional and other grounds and printing of acknowledgement slips in real time;
- Registration of vacation of house for any category;
- Preparation of waiting lists for initial, change and adhoc allotments;
- Preparation of proposal for allotment according to various waiting lists;
- Allotment as per the finalised proposal for allotment;
- Acceptance / technical acceptance of allotment by the employee;
- Printing of authority slip for the possession of house;
- Reconsideration for re-allotment by the employee;
- Preparation of first rent bill and revised rent bill in future;
- Allotment of Allottee Account Number (AAN) to all the allottees;
- Cancellation of allotment;
- Retention / extension of house after cancellation;
- Regularisation of house allotted to an employee upon death, retirement and transfer as per rules;
- Accounting of license fee recovery from allottees;
- Subletting and litigation cases; and
- Printing of letters at various stages with signatures embedded in the letter of allotment.

Apart from automating the above activities, **aAwas** also provides:

- MIS Reports for different sections and decision makers of the MUD&PA;
- Online registers of housing stock, list of allottees, list of occupied houses, vacation, cancellation, retention / extension, license fee recoveries, etc.;
- Information dissemination to all applicants either through Internet or Information Kiosks; and
- Search engine for making various online queries.

**Technology Used: eAwas** uses the state-of-the art IT. It is implemented using 3-tier architecture as a web-enabled application. These are:

- The database server uses Oracle 9i Database Server on RedHat Linux Advance Server;
- The application server uses Oracle 9iAS Application Server on RedHat Linux Advance Server; and
- The front end is the Internet Browser on Microsoft Windows.

The application has been developed with the Developer Tool Oracle Internet Developer Suite.

**Implementation Challenges of eAwas:** Each user was provided a PC connected to the Private Local Area Network (LAN), for using **eAwas**. Rolling out the application to 26 different sections dealing with 14 different category of houses and involving more than 500 working staff and officers was a challenge, as the allotment of house could not be stopped even for a single working day. **eAwas** was first implemented in one section as a pilot case and subsequently, it was implemented in all other sections one by one. The master record updations were done. Available data was migrated from the old working system during non-working hours. Rules had to be embedded in the system in the form of database. Updation of records of 65000 houses, their occupant details and license fee rates were done. The whole exercise called for imparting intensive training, change management, domain knowledge grasp by the developers, detailed SRS preparation and business process reengineering and for bringing about an attitudinal change management and adaptability amongst the staff of the DoE. The MUD&PA and the Cabinet Secretariat monitored the implementation of the project at the highest level.

### **What is Unique to eAwas?**

- **Authentication with a difference – Virtual Private Database and Role-based Menu:** The **eAwas** software incorporates the concept of data access according to Oracle user account and the associated set of rules & policies implemented through Virtual Private Database (VPD). Each authorised user of the system has been given a username with password and has been assigned specific roles to operate on **eAwas**. Based on the set of rules and policies associated with his / her account, he / she gets a specified housing stock and based on the roles, he / she gets a customised menu option which helps him / her to do the activities allocated to him / her. He / she cannot see or operate on the housing stock assigned to any other user. He / she cannot do the activities not assigned to him / her;
- **No more Hand Written Records / Letters:** All letters, registers, records and MIS reports are generated by the system;
- **Accounting of License Fee Recovery:** The DoE levies License Fee for the houses allotted by it. It results in the collection of crores of rupees for the Government. **eAwas** helps in tracking and accounting the License Fees recovered. Further the allotment is done much faster, thereby reducing the number of days a house remains vacant;
- **Allotment of Allottee Account Number (AAN):** **eAwas** allots an Allottee Account Number (AAN) to each allottee of the government accommodation. Once allotted, the AAN shall remain the same

throughout the entire service of the government servant. This shall facilitate the accounting of the license fee recovery and also tracking of the movement of government servants from one accommodation to another; and

- **Dissemination of Information to the Applicant – Citizen Interface:** Information is available through the helpdesks available in the Information Facilitation Centre (IFC) of the DoE. The web-site of the DoE has been totally revamped to display information available through **eAwas**. All forms needed in connection with the allotment are available on the website for download by the applicants. Information Kiosk has been installed to provide information to the applicants through the touch screen with self-help in the IFC. Plans have been drawn to install these kiosks in various bhawans to disseminate the information to non-Internet users.

**Rollout status: eAwas** has been implemented in all sections of the DoE dealing with GPRA.

#### **Benefits accruing out of eAwas:**

- DoE has replaced Block Allotment Year with Rolling Allotment Year in which the applicant can now apply at any time of the year, instead of waiting for the call of applications;
- Applicant can now submit application and can get acknowledgement in real time on the spot;
- Waiting lists are generated in time, resulting in faster allotment process;
- Applicants can now view the waiting lists / allotments through the Internet or Information Kiosk, thus implementing the Right to Information and making the allotment process transparent and corruption free;
- Applicant can now see the trends in allotments helping in judiciously exercising options for change allotment;
- Vacant houses are better tracked and quickly allotted than before which has resulted in better satisfaction level by meeting the demand of houses and also better revenue collection for the Government;
- Unauthorised occupation of houses beyond the permitted period of occupancy is better tracked than ever before;
- Cancellation and eviction proceeding are done without delay resulting in lesser loss of revenue to the Government;
- **eAwas** created a more responsive DoE, providing a better service to the Government allottee;
- A comprehensive database is now available for planning and policy making;
- And many more....

**Conclusion:** The successful implementation of the **eAwas** has attracted the attention of many senior level officers in the GoI. It has established credibility of the DoE. **eAwas** can be further integrated with Central Public Works Department's (CPWD's) cpwdsewa created for the maintenance of these houses by the maintenance agency CPWD for online transmission of Occupation and Vacation reports. This shall reduce the delay in receiving as well as the loss of these information submitted to DoE in the form of reports resulting in delayed allotments and thus reducing any loss of government revenue and human intervention. Requests have been received to implement a similar system in the regional offices of the Directorate and also from some other agencies and other sections like Markets and Land & Development Office.

**Future Plans:** The system is easily replicable to other geographical locations. The system can be run in both ownership- through-license mode as well as ASP mode. The system is going to be made available to 8 regional estate offices of the Directorate of Estates in ASP mode. Subsequently, it will be made available to other organizations having considerable housing stock in their possession.