

## AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF e-GOVERNANCE INITIATIVES

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### VI. NAME OF CATEGORY- 'INNOVATIVE USE OF GIS TECHNOLOGY IN e-GOVERNANCE'

#### 1. Coverage—Geographical and Demographic:-

(i) ) Comprehensiveness of reach of delivery centres,  
**One (1) for an area of 216.79 Km<sup>2</sup> under Jurisdiction of Guwahati Municipal Corporation.**

(ii) Number of delivery centres: **1 (One)**

(iii) Graphical

(a) National level—Number of State covered

(b) State/UT level- Number of District covered

(c) District level- Number of Blocks covered

Please give specific details: - **Guwahati Municipal Corporation Area (216.79 Km<sup>2</sup> of Guwahati City)**

(iv) Demographic spread (percentage of population covered)- **The application is for Administrative purpose covering the entire city**

(v)

2. Situation Before the Initiative (Bottle necks, Challenges, constraints etc with specific details as to what triggered the Organization to conceptualize this project):

- **No GIS database was there with the organization**
- **No clear documented demarcation of Boundaries like Wards, Zones etc.**
- **Fleet management of Solid Waste Management vehicles monitored manually**
- **No proper Water Logging Data for decision making**
- **For every activities field visit was required. The process was time consuming. To expedite the entire process the application of GIS was introduced.**

3. **Scope of Services** (Relevance of application for e-governance, extent to which service is delivered through GIS)

- **Integration of Spatial and Non-spatial data in single platform**
- **Asset Management- Collect, Organize & Exchange Data**
- **Planning & Analysis- Transform data into actionable information**
- **Field Mobility- Get information in and out the field**
- **Constituent Engagement- Get feedback and make informed decision**

4. Strategy Adopted

(i) The details of baseline study done,

- **The earlier boundary for 60 Wards accessed**
- **Discussion with the stakeholders**
- **Nagar Raj Act. Was discussed and deliberated**
- **The earlier way of Fleet management for Solid Waste management were discussed**

- **Meetings & Presentation**
- **Extensive Field visit for Slum boundary demarcation**

(ii) Problems identified,

- **No GIS database was there with the organization**
- **No clear documented demarcation of Boundaries like Wards, Zones etc.**
- **Fleet management of Solid Waste Management vehicles monitored manually**
- **No proper Water Logging Data for decision making**

(iii) Roll out/implementation model,

(iv) Communication and dissemination strategy and approach used.):

## 5. **Technology Platform used-**

(i) Description,

- **GIS**
- **GPS**

(ii) Interoperability: Yes

(iii) Security concerns:

- **GIS Data is internally used**
- **For Vehicle Tracking System is password protected and user level access. Firewall, Protection from spyware/malware**

(iv) Any issue with the technology used: **No**

(v) Service level Agreements (SLAs) (Give details about presence of SLA, whether documented, whether referred etc.#)

- **Service level agreement with Soft Track Solution for operation & maintenance of Vehicle Tracking System**
- **Service level agreement with Administrative Staff College of India for slum mapping under SFCPoA**

6. **Demonstrate Innovation in use of GIS Technology for e Gov**(Give details of technology used- Architecture, Platform, Open Source tools, Front-end development, Remote Sensing & Mobile Technology integration, SMS & email)

- **Open sourced software Like Q-GIS, Map Window, Global Mapper is used to make it cost effective**
- **Google Earth has been used widely to make the technology interesting and effective**

7. **Interoperability & security**(Give details about ability to leverage sharing amongst stakeholders in accordance with map policy, Token services, SSL)

- **Data shared only to authorized stakeholders**
- **Only readable format shared to all**
- **For Vehicle Tracking System is password protected and user level access. Firewall, Protection from spyware/malware**

8. **Scalability**(Give details with respect to technology(Platform, Hardware & software) & data(high and low Geographical and Demographic scale)

- **Platform- Open source**
- **Hardware- Desktop and Laptop with sufficient configuration to view, edit, store Data and Map**

- **Software- Q-GIS, Map Window, Global Mapper, Autodesk etc**
- **Geographical and Demographic scale subject to requirement**

9. **Sustainability & adaptability**(Give details w.r.t architecture/technology, updation of spatial data, training, human resource, research, local language )

- **Data updation is a continuous process, all data updated from time to time.**
- **Training provided as per requirement for the knowledge and skill enrichment of the human resource**

10. **Adaptability Analysis**

(i) Measures to ensure adaptability and scalability

- **System adapted is user friendly and simple and can be replicated; initially the application of Vehicle Tracking System was applied to 20 numbers of vehicles now the same has been scaled up to 70 numbers of vehicle.**

(ii) Measures to ensure replicability

- **System adapted is user friendly and simple and can be replicated**

(iii) Restrictions ,if any in replication and or scalability

(iv) Risk Analysis

- **Data is password protected**
- **Data is not shared or divulged to all. Only authorized person can access.**

11. **Accountability** (Give details in regard to roles, responsibility, facility for audit trails )

- **The technical team is responsible for precision and accuracy, Security of data handled by the team**

12. **New Models of service delivery** (Give details about Public/private/NGO/academic linkages/citizens)

- **Only maps in readable format is available through website for the citizen**
- **For any specific purpose data and service delivered as per demand**

13. **Citizen Centricity**(Give specific details on the following#)

(i) Impact on effort, time and cost incurred by user,

- **Free access to some data**
- **Free of cost**

(ii) Feedback/grievance redressal mechanism,

- **Through Guwahati Municipal Corporation portal**
- **Telephone**

(iii) Audit Trails,

(iv) Interactive platform for service delivery,

- **Through e-mails**
- **Meetings**
- **Three tier hierarchy of Elected body**
- **Local offices**

(v) Stakeholder consultation

- **Meetings, Discussion & Consultation on regular basis**

14. **Efficiency Enhancement** (Give specific details about the following#)

(i) Volume of transactions processed,

- **MIS report on Vehicle Tracking System for last one year**

(ii) Coping with transaction volume growth

➤ **The system can cope up with the increase in numbers of data**

(iii) Time taken to process transactions

➤ **Real Time**

(iv) Accuracy of output,

➤ **5-10 meters of positional accuracy**

(v) Number of delays in service delivery

➤ **No**

**15. User convenience**(Give specific details about the followings #)

(i) Service delivery channels (Web, email, SMS etc.)

➤ **Web site, E-mail, SMS and Telephone**

(ii) Completeness of information provided to the users,

➤ **As per availability**

(iii) Accessibility(Time Window),

➤ **Within 24 Hours**

(iv) Distance required to travel to Access Points

➤ **Maximum 10-15 Kms if physical media is required**

(v) Facility for online/offline download and online submission of forms,

➤ **Online Download is available**

(vi) status tracking

➤ **Through E-mail and Telecon**

**16. Result Achieved/Value Delivered** to the beneficiary of the project-(share the results, matrices, key learning's, feedback and stakeholders statements that show a positive difference is being made etc):

(i) **To organization**

➤ **Expedite the entire process of decision making.**

➤ **Organization has the data base to proper planning of the projects**

➤ **Robust Asset data**

➤ **Planning & Analysis- Transform data into actionable information**

➤ **Field Mobility- Get information in and out the field**

(ii) **To citizen**

➤ **Maps available for different purpose**

➤ **Prompt response to grievances of citizen**

(iii) **Other stakeholders**

➤ **Planning & Analysis- Transform data into actionable information**

➤ **Time saving with the existing data**

**17. Extent to which the Objective of the Project is fulfilled**-(benefit to the target audience i.e. G2G, G2C, G2B, G2E or any other, size and category of population/stake holder benefited etc):

➤ **G2G- All Stakeholders benefitted with Data & Maps. Data may be provided to other stakeholders for any development activities. Application of GIS, proper planning and monitoring has minimized many grievances like Artificial Flood, Cleanness of city etc.**

➤ **G2C- The grievances of citizen has been addressed promptly. People have clear view of Wards and Area Sabha Boundary to contact the concerned elected representative and officials for addressing the issues.**

➤ **G2E- The decision making process of the GMC officials has become fast. This has minimized the number of field visits which saves the precious time and money for organization. All respective officials can view the problem in single platform to find out proper solution.**

18. Comparative Analysis of earlier Vs new system with respect to the BPR, Change Management, Outcome/benefit, Change in legal system, rules and regulations

➤ **Before the implementation of GIS, extensive field visits were needed for collection of data for any planning. The process was time consuming and redundancy of data was less. Boundaries were not clear to address any specific issues. The process was cumbersome.**

➤ **After Implementation of GIS, the process has become easier and the organization is now equipped with robust database.**

19. Other distinctive features/accomplishments of the project:

- 1. Fleet Management can be monitored for Solid Waste Management from the Control room itself**
- 2. Field visit has been reduced to a considerable extent which saves time and manpower**

# This is just an indicative list of indicators. Applicant can add on more information based on suitability of the project nominated.