

**Minutes of the IT Review Meeting held on 06/03/2023**

Present:

1. Sri. Venkatesapathy. S, IAS, Managing Director
2. Smt. Sheeja Rani C.R, Secretary, KWA
3. Sri. S. V. P. Jithendriyan, ADBA 1
4. Shanti. V. P, AEE IT
5. Sri. Rahul K.R, A.E
6. Remote & HQ IT Team Members and Developers.

The meeting Started at 10.30 PM through VC.

At the outset the Managing Director welcomed all the participants and discussed the following points in detail.

SI No	Project	Person Responsible	Deliberations and Decisions
1.	Presentation of Kotak Mahindra Bank	Binu Kumar/ Lekshmi/ Raazia	<ul style="list-style-type: none"><li>AEE IT informed that the Kotak Team has handed over the scope of work and hands on session has been started. Smt. Raazia and Lekshmi has been entrusted in this regard .</li><li>Smt. Lekshmi informed that there are 3 modules in the billing system as per the scope submitted by the Kotak Mahindra and they are working on the first module.</li><li>MD directed to set a timeframe to finish the three modules and to plan the works accordingly.</li><li>Smt. Lekshmi informed that the Kotak team will present a direct demonstration to MD on 16/03/2023. The time frame should also be presented during demonstration.</li><li>The file for the legal vetting is pending under the DLO .</li></ul>
	Proposal from the ICICI bank as a service provider	Binu Kumar	<ul style="list-style-type: none"><li>ADBA2 has informed that the ICICI team has visited KWA on 13/03/2023 and they have submitted a detailed proposal to the FM. After getting the approval from FM, they will share the payment integration Kit with KWA.</li><li>The file for the legal vetting is pending under the DLO now.</li></ul>
3.	K-SELF and K-METER Apps	Jithendriyan	<ul style="list-style-type: none"><li>MD enquired about the status of K-self and K-meter mobile application.</li><li>SMS delivery issue - For upgrading OS version 7 to version 9 renewal of SSL certificate has to be done and is in progress and can be completed by 8th March.</li><li>Revised water charge tariff-testing - Testing started in start up server .</li><li>Security auditing as reported by K-Disc one more issue to be solved cannot be fixed by MIROX and startup and have to test run the whole application after fixing the issue and can be completed by 8th March.</li><li>Upload issue to e-Abacus - Issues related to reading updation and sending response from e-Abacus to k-Disc is solved.</li><li>Email delivery failure - Created new Gmail domain and forwarded to K DISC for testing</li><li>Financial commitment for the additional requirement- reply from kdisc is not received yet.</li></ul>



			<ul style="list-style-type: none"> <li>MD directed to schedule a meeting with the K-DISC team to sort out the issues for rolling out of the applications statewide.</li> <li>ADBA 1 informed that the Green bill related SMS has been sent to about 21 Lakhs consumers and can be completed with in a week.</li> <li>AEE informed that around 5000 mails have received in the IT unit regarding the request of Green bills opted consumers back to Physical bills. MD directed to enable an option to revoke the greenbill only after completing atleast one bill cycle. MD entrusted ADBA 1 to verify it.</li> </ul>
4.	Virtual IT Team	Shanti.V.P	<ul style="list-style-type: none"> <li>AEE IT informed that Sri. Ayyoob V.M, a new member has been identified in the Virtual team and server related works has already been handed over to him by Sri Kaushik.</li> <li>MD directed to add Sri Ayoob in the IT team after discussing with ADBA 1 and ADBA2 and to relieve the members who express unwillingness to continue in the team and also to assess the performance of other virtual IT members.</li> <li>The proceedings for detaching the Virtual members Smt Krishna and Sri Anil Kumar who express unwillingness to continue in Virtual team and including Sri Ayoob in the IT cadre put up for approval.</li> </ul>
5.	Plumber license application	Binu Kumar	<ul style="list-style-type: none"> <li>AEE informed that the plumber license exam has been conducted by the training Centre. The practical exams are to be conducted region wise and are expected to be completed before 15/03/2023. The results can also be updated via this online application.</li> </ul>
6.	API Integration with Banks	Aneesh/ Viju	<ul style="list-style-type: none"> <li>AEE informed that Sri. Kaushik has been relieved. The API for Federal bank has been developed and is now listed in the payment site.</li> <li>The remaining Banks can also be listed one by one in the site with the help of Sri. Viju, Aneesh and Ayyoob.</li> <li>ADBA1 informed that the next Priority bank can be integrated within fifteen days.</li> <li>MD directed to incorporate as many banks as possible for the payment gateway.</li> </ul>
7.	Comprehensive IT Solution	Shanti V.P & Binu Kumar G.S	<ul style="list-style-type: none"> <li>No further discussions were made with the K-DISC team regarding this.</li> <li>MD expressed his deep dissatisfaction with the IT Team for its inability to take the project forward and provide lame excuses.</li> </ul>
8.	Fine implementation in e-Abacus	SibiV/ Jithendriyan	<ul style="list-style-type: none"> <li>ADBA 1 informed that the tariff revision has been implemented on 01/03/2023 and one week required for addressing queries. Implementation of fine can be done after this.</li> <li>MD enquired about the number of bills generated after the tariff revision and update the count in the official Whatsapp group.</li> <li>MD directed to implement the fine before March 15. after taking downtime on March 11 and 12th.</li> </ul>



			<ul style="list-style-type: none"> <li>MD expressed dissatisfaction with the slow progress.</li> <li>ADBA 1 informed that the fine can be implemented on 22/03/2023.</li> </ul>
9.	Issues related to e-Abacus	Jithendriyan	<ul style="list-style-type: none"> <li>ADBA 1 informed that 3 steps to be taken for sorting out the prevailing issues in the e-Abacus:               <ol style="list-style-type: none"> <li>1. Delinking of JJM and E-TAPP software from e-Abacus - to be completed by 13/03/2023.</li> <li>2. Separation of reports from the e-Abacus - to be completed by 22/03/2023.</li> <li>3. Migration of Oracle 11G to 19 Cloud versions- to be completed by the end of March.</li> </ol> </li> <li>ADBA 1 informed that out of 47 issues, 21 are long term issues and 26 are short term issues. Out of 26 issues, 8 have been resolved and 16 are yet to be resolved.</li> <li>The short term issues can be rectified before April 30, 2023.</li> <li>AEE informed that we have requested a server from SDC with high specifications. Reminder mail also has been sent from the IT unit and waiting for reply from SDC.</li> </ul>
10.	Decentralization of report generation in e-Abacus	Jithendriyan	<ul style="list-style-type: none"> <li>ADBA 1 informed that the report generation works are pending. The finalisation of report generation can be done after discussing with Sri. Kaushik.</li> <li>MD directed to set a time frame and to include one more resource in the discussion so that further developments can be made faster.</li> <li>ADBA1 informed that no open source user customizable reporting platform is available in the market now. Paid utility is available named Power BI. But the paid utility is very costly and its costs around 5 Lakhs per Month.</li> </ul>
11.	Bill Posting	Aravind R Kumar	<ul style="list-style-type: none"> <li>Slab-wise consumer list is needed to identify the high priority consumers and RMC has requested for availing the data from e-Abacus after availing the data, the analysis can be made regarding the bill posting,</li> <li>A mail has been sent to DBA unit in this regard on 15/03/2023.</li> </ul>
12.	Incentive system for online payment.	Aravind R Kumar	<ul style="list-style-type: none"> <li>The file is pending at the Water resources B department under the ASO. File number B2/150/22.</li> </ul>
13.	Ranking Systems in PASK, MARCH and O&M	Binu Kumar G.S	<ul style="list-style-type: none"> <li>ADBA2 informed that the development of dashboard related to the Ranking system can be completed by 31/03/2023.</li> </ul>
14.	Purchase of Tablets for ERP and	Aneesh Kumar, AE	<ul style="list-style-type: none"> <li>AEE informed that the AE, Purchase has intimated that the covers for the tablets can be purchased from the head "e-Governance".</li> <li>MD suggested to purchase the covers using the office expenses of head Division concerned if there are no other means. From next purchase onwards, the tablets should be purchased along with the covers to avoid physical</li> </ul>



	Computer revamping	Purchase	damages. <ul style="list-style-type: none"><li>Secretary informed opinion of CE HRD that the computers can be reallocated to new AEs and officers recruited for JJM Works after taking back from officers to whom Laptops are already are issued.</li><li>MD directed to purchase tablets using the E-Governance and ERP Head.</li></ul>		
15.	Migration to cloud	Navajyoth/ Shanti	Software to be Audited	Status	Expected Completion Date
			PASK	Moved to SDC	Completed
			O&M	Moved to SDC	Completed
			MARCH	Moved to SDC	Completed
			E-TAPP	Migrated to server in CCU	31/03/2023
			AQUALOOM	Testing yet to be started. Work order issued.	31/03/2023
			Website	Auditing completed and moved to SDC	Completed
			Quick pay	VM has availed	31/03/2023
			GIS	Testing ongoing	31/03/23
			<ul style="list-style-type: none"><li>MD directed to speed up the progress and follow up with the auditing Team</li></ul>		
16.	SBI Banking Solution	Aravind R Kumar	<ul style="list-style-type: none"><li>AEE IT informed that as SBI has identified a vendor and after the examination of the URS, they have estimated around 1 crore rupees for the developments.</li><li>The dormant accounts of KWA are closed and the amount in the accounts has been credited to the KWA Account on 15/03/23.</li></ul>		
17.	GIS- Real Time Water Utility Model	Rahul K.R A.E, Ashish Babu, Divya Shankar	<ul style="list-style-type: none"><li>AE informed that the filtering of data has been enabled in district level, constituency level and Panchayath level.</li><li>MD explained the scope of GIS in rectifying the water leakage. By linking the GIS with O&amp;M software, KWA can find the exact location of water leakage and by overlaying the pipeline spatial data layer, the frequency of leakage in particular pipe network can be identified. By this, the reason of the water leakage (such as leakage due to aging of the pipes or any other reasons)can be identified. Real time leakage can be collected by using O&amp;M software.</li><li>Ashish informed that the option for filtering the data for the last 6 months is under development.</li><li>MD directed to create a database for identifying the sections having most leakage in the last six months.</li><li>Asish informed that a training will be given on 08/08/23 regarding the JJM data collection for making a database.</li><li>Plan of Action is attached in Annexure I</li></ul>		
18.	LIMS development/Quality module	Revathy	<ul style="list-style-type: none"><li>AEE informed that the work has not been started yet .</li><li>Rate revision in the quality module has been implemented.</li></ul>		



19.	K-FON	Haridasan/Prakash	<ul style="list-style-type: none"><li>AEE informed that there are no further developments in the K-FON connectivity from K-FON side. Only one site has been updated as connected when compared with the last meeting's update.</li><li>MD directed to intimate the subject matter to the Government.</li><li>Sri. Prakash informed that the cable connectivity in the Public office has started and thus the CCU Building can be connected with 1 GB speed.</li><li>The details of connections availed by K-FON is as follows</li></ul> <table><tr><td>Total sites in KWA</td><td>Cable to FTB connection</td><td>Total rack mounted</td><td>ONT installed</td><td>ONT to FTB</td><td>ONT discovered at NOC (KFON)</td><td>KWA Tested &amp; Connected</td></tr><tr><td>556</td><td>111</td><td>223</td><td>223</td><td>103</td><td>84</td><td>17</td></tr></table> <p>MD expressed that the situation has to be reported to the K-FON and get it cleared.</p>	Total sites in KWA	Cable to FTB connection	Total rack mounted	ONT installed	ONT to FTB	ONT discovered at NOC (KFON)	KWA Tested & Connected	556	111	223	223	103	84	17
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556	111	223	223	103	84	17											
20.	Cash Back of Deposit Amount (Special Connection)	Sachin	<ul style="list-style-type: none"><li>Sri. Sachin informed that the development of the module has been completed and handed over to website for publishing. It can be published in the website by 10/03/2023.</li></ul>														
21.	Online Booking of Guest House	Binu Kumar	<ul style="list-style-type: none"><li>AEE informed that the development could not be progressed due to the lack of resources.</li><li>MD expressed dissatisfaction about the non usage of open sources.</li><li>MD specified that free sources are available which can be downloaded and make the changes to the source codes.</li></ul>														
22.	Hike in Salary of Contract Programmers	AEE IT	<ul style="list-style-type: none"><li>AEE informed that the subject matter is pending under the Government. Md expressed that bench marking has to be done and levels of benchmarked aspect may be adopted.</li><li>MD directed to follow up the rules and salary package of NICSI as a standard base for hike in the salary of Contract employees as per the discussions made in the board.</li></ul>														
23.	BPL renewal	ADBA 1/ Lekshmi/ Raazia	<ul style="list-style-type: none"><li>ADBA 1 informed that around 1.05 lakhs People have applied for online BPL renewal so far. Around 4.5 Lakhs offline renewal requests have been received so far.</li><li>MD directed to follow up with the offline renewal applications also.</li><li>ADBA 1 informed that March 31,2023 is the last date to submit the applications for BPL renewal. By that date, all the section verified online applications will be enabled as BPL.</li></ul>														
25.	APT software modification	ADBA 2/ Sindu. V	<ul style="list-style-type: none"><li>Smt. Sindu informed that the APT billing module is under development. Also she is working on the reassigned duties issued from the IT unit.</li><li>The work can be completed by 15/05/2023.</li></ul>														



MD thanked all the participants and the meeting ended at 11.30 AM



The document is digitally approved. Hence signature is not needed.

# Smart Water Management Utility System



## **Vision:**

To be a modern state of the art of water management system and resources to facilitate Geo spatial informatics - (GIS) based sustainable development and management of water resources of the state.

## **Mission:**

Providing a GIS framework for planning, development, monitoring and management of water utility in the state. Integration of dynamic data available with in KWA to spatial data for a single window for comprehensive information of state's water utility network.

## **Smart Water Management Utility System-Concept Note**

Geographic Information Systems or GIS are a useful tool for utilities to capital plan and correlate data points in a visual way. With location intelligence, we can rebuild advanced utility model in water resources and create a more resilient and promising future. The system includes a variety of components for water delivery, water conservation, water quality and more.

It provides an extensive data repository and mapping capabilities to visualize, analyze, and communicate results. It enables businesses, utilities, and local governments to identify, assess, and manage their water resources with greater efficiency. The system also offers a range of services including dynamic data viewing, water demand forecasting and management, data visualization, water outage monitoring and analytics, optimization, and policy/decision support.

## **Goals:**

### **A. Dynamic Data Integration**

Integration of dynamic data available in institution with the available spatial data.

- 100% geocoded institutional data
- Representation of Institutional data over Web-GIS platform.

### **B. Field Inventory & Operations Solution**

Collect available data from varied sources, generate new databases, organize in standardized GIS format and provide scalable web-enabled information system.

- 100% Pipeline digitization.
- 100% assets digitization.
- 100% data availability in Web-GIS platform

### **C. GIS platform for Water Outage Monitoring**

Allow staff/public to report on suspected leaks and dispatch fieldworkers to record location and details. It allows public to be informed with an up-to-date view of areas with affected service.





#### **D. Development of Water Quality Dashboard**

Water Quality dashboard can be developed from the data collected from testing labs.

- 100% geotagged water quality data

#### **E. GIS Trainings**

To impart training and capacity building activities to find practical solution to diverse challenges in geospatial fields by equipping them to meet organizational needs.

### **Planning:**

#### **A. Dynamic Data Integration**

- Development of form for data inputs such as tank flow meters, water levels
- Connecting non spatial data into spatial data to form a dynamic spatial database
- Adding spatial index to all the database available in the institution
- Increase productivity in the field by getting to more assets on a daily basis.
- Know where assets are and how they are performing in real time.

#### **B. Field Inventory & Operations Solution**

- Development of android app for collecting new pipeline & assets data along with basic parameters for future analysis and new presentations.(office details ,material used, type of pipeline, diameter and assets details).
- Monitoring the data collection and analysis monthly performance of data collection.
- Development or incorporation of new spatial data to web platform.
- Development of water utility network data by incorporating customer location and details.
- Deployment of Iots or SCADA system to collect real time and represent data in GIS platform.

#### **C. Web GIS enabled Information System for Water Outage Monitoring**

- Development of GIS platform for monitoring water leakage.
- Remotely connecting water leak data from database to web enabled GIS System.
- Development of customer enumeration data for identify status & location of customers.
- Capturing exact location of water leak using geolocation services by public/staff.
- Development of isolation trace to detect area where customers will be out of service.
- Closed Valve status in pipelines

#### **D. Development of Water Quality Dashboard**

- Adding spatial information of samples.
- Development of form to collect test result and store in database.
- Water quality interpolation with available test samples to produce monthly results for the state.
- Development of Water quality dashboard with interpolation maps.



#### **E. GIS Trainings**

- Training in data collection with newly developed app to collect JJM pipelines and assets.
- Training sessions in Open Source Software to familiarize GIS and achieve organizational goals.



## One Year Work Plan

### GIS WORK PLAN @ KWA November 2022 - October 2023)

	Activity	Months											
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	Field Inventory & Operations Solution												
2	Development of Open Source Survey App for JJM												
3	Web GIS enabled Information System for Water Outage												
4	Development of Water Quality Dashboard												
5	Dynamic data integration												
6	Geospatial Data QC/updating and Publishing												
7	Training and Capacity building												

