

# “MIMS IS COMING - LOOK BUSY!”



*Paper Presented by:*

**Jacqueline Jeffrey**

*Author:*

**Jacqueline Jeffrey, MIMS Co-ordinator,**

Wannon Water



*75<sup>th</sup> Annual Water Industry Engineers and Operators' Conference  
Bendigo Exhibition Centre  
4 to 6 September, 2012*



## **1.2 Background**

The Systems Operations Team at Wannon Water previously used paper based forms to collect and record all data in relation to works completed in the field. In particular for customer enquiries, or otherwise known as reactive works, the process was as follows:

1. Customer relations receive an enquiry from a customer. A Customer Enquiry Maintenance (CEM) form is then filled out with all customer's details and information of the job.
2. CEM's form is then emailed and/or faxed to team leader, as well as telephone call to team leader notifying them of the job.
3. Team leader then notifies operator of the job by telephone. Operator returns to the depot to collect CEM form and then attends job.
4. After the job is complete, the operator returns to the depot to enter all information on Operation Maintenance (O&M) form.
5. Data from O&M forms are then put into an access database where network traces and GIS asset information is then entered for the purposes of reporting.

This created significant double handling of information which can easily lead to human error in recording data.

A solution was requested to allow Wannon Water to manage information effectively, improve data integrity and improve resource efficiency in the field.

## **2.0 DISCUSSION**

### **2.1 Objectives**

It was found that Wannon Water needed to meet the following objectives in order to move forward in managing information effectively:

1. Automated method for collecting data for reporting to the Essential Service Commission (ESC);
2. Electronic method for collecting data associated with maintenance and inspection of Wannon Water assets;
3. Distribution of electronic data to the field workforce;
4. Ability to track progress of field works;
5. Improved work force efficiencies and safety;
6. Improved asset management system.

### **2.2 Solution**

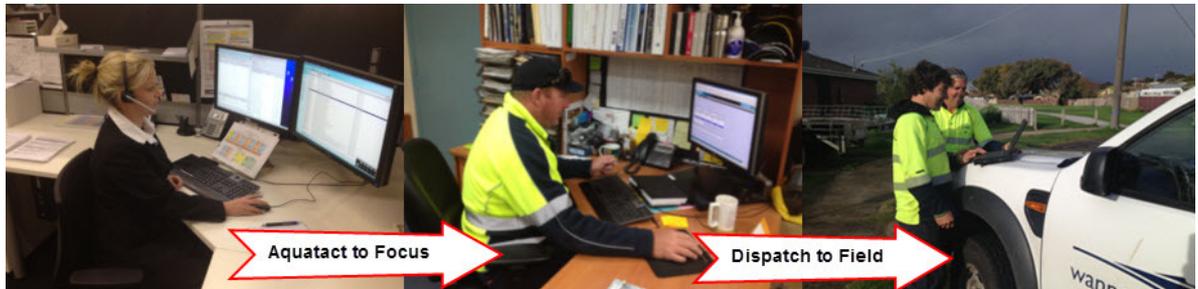
In order to meet the above objectives, Wannon Water decided to implement a Mobile Information Management System (MIMS).

The way in which the 3 Systems Operation teams, being Central, East and West worked needed to be evaluated as to how MIMS would be able to facilitate their work. The structures of the teams remained the same however the process in which information was obtained, collected and recorded changed significantly.

## 2.3 Reactive Works

MIMS was initially rolled out to Systems Operations for reactive works only. The first 5 months were only for works completed during business hours. This allowed operators the time to familiarise themselves with the system whilst full support was available to them. Once they became familiar with the system it is then rolled out to duty officers to handle all reactive works completed round the clock.

Figure 2 shows a flow chart outlining how MIMS is to be used for reactive works.



**Figure 2:** *Photo of MIMS process for reactive works*

The process when dealing with reactive works is as follows:

1. Customer relations team is notified by phone, email or in person by customer that there is a job.
2. Information is entered in to Aquatact directly by customer relations, and then a phone call is made to the Systems Operations Team Leader.
3. Customer relations publishes job in Aquatact causing it to appear in the Dispatch screen in Focus.
4. Team leader then notifies Systems Operations Officer by phone and dispatches job to them in Focus. Job is then available on the field device for Systems Operations Officer to see and use.
5. Systems Operations Officer accepts job and enters in information as required. Once job is complete it is then sent to admin to close.

The process for after hours does not change significantly. However, instead of customer relations entering information in to Aquatact, it is the duty officer that is responsible for this role outside of normal working hours.

This process has eliminated a lot of double handling and copying of information which happened previously. The information entered in to Aquatact is validated in GIS and with the customer account number to ensure accuracy. This also enables GIS to automatically locate the property in Focus. This has major benefits to operators as house numbers and streets can often be unmarked or not visible. It also allows operators the visibility to see where pipes are located in GIS and add affected properties.

Information being available electronically to operators also allows for travel efficiencies. Wannon Water covers a vast amount of kilometres including approximately 23,500 square kilometres, as mentioned previously, and thus having to return to the depot to collect information can often waste time. This also assists in ensuring we are meeting our response times in terms of key performance indicators (KPI).

## 2.4 Planned Maintenance

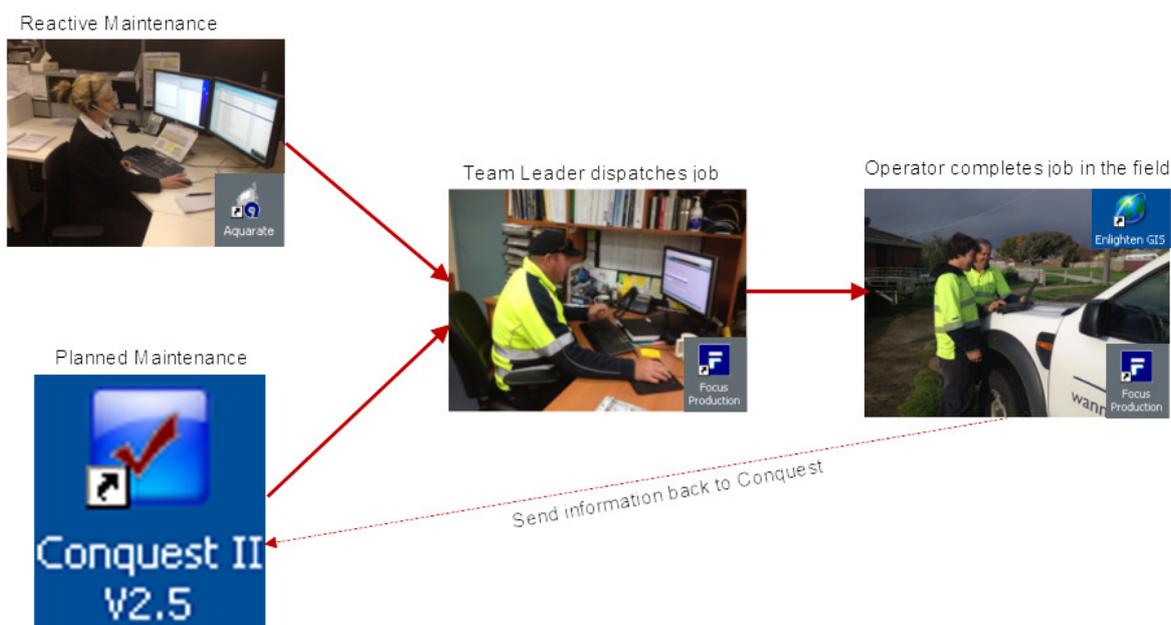
The purpose of MIMS is to in the future have jobs come in via Conquest in order to complete planned maintenance. As this project is in its early stages, we are currently in the process of establishing how the interface will work.

Conquest is an asset management system used by Wannon Water for possible asset replacement and planned maintenance. It has the capability of scheduling works to be completed based on known asset lifecycles as well as our current planned maintenance programs.

The plan is to schedule work orders in Conquest in a yearly cycle that will then send them to Focus the same way that Aquatact currently sends jobs to Focus. In addition Focus will then send information about assets back in to Conquest. This will allow for better maintenance of our assets and also keep accurate records of the state of our assets.

## 3.0 CONCLUSION

MIMS will be used for Systems Operations works completed in the field including reactive and planned maintenance. Figure 3 shows the process of how this will work.



**Figure 3:** *MIMS Process for Systems Operations*

All works completed in the field will all be stored in one location to allow for efficient reporting and accessibility to information.

There are considerable benefits in having this system in place, including:

1. Efficient travel time for operators as information is available on the field device as opposed to travelling back to the depot, which can easily be over an hour's drive due to our large geographical area.
2. Accurate data being sent to operators with the address validated prior to job being sent. Property is also visible in GIS if operator is unsure or unable to find address.
3. Proactive maintenance allowing for less failure of assets in the future.
4. Efficient reporting for KPI's and ESC.

5. Accurate information recorded for future planning.
6. Visibility of current jobs in GIS.
7. All information is easily accessible from one source.

In the future, we will be expanding MIMS to also cover other departments in Wannon Water. This will allow for further efficiencies within the business.

#### **4.0 ACKNOWLEDGEMENTS**

I would like to take this opportunity to thank the Systems Operations Team for all their support and help in ensuring a seamless and successful rollout. Your help has been invaluable. In particular the Team Leaders and Co-ordinators have been fantastic in welcoming me and helping me with everything I have needed.

There are a few people I am going to name as without them I could not have achieved this. Robyn Logan has always been there for me to help me with any thing I ever needed, personally and professionally. I couldn't have done this without you. John Whitewood, Rod Van De Hoef and Fred Sadler, and as mentioned all the team leaders and co-ordinators, you have provided me with guidance, help and support.

And finally, a few more mentions that make my job so enjoyable. Kurt Haberfield thank you for helping me with all the testing and for taking me to so many sewer pump stations. I still can't forget the smell. Andrew Povey and Mick Mahoney I can always count on you two to give me feedback on anything I send to you. I really appreciate this. I also enjoy our silly emails. Portland boys, you know who you are, I always enjoy our visits.