

# CASON DIWICON-W

## Water Management System

### PAEW – Oman

(Public Authority for Electricity and Water)

### Smart Metering / AMI System

The water, especially the good quality potable water is more expensive than the fuel in Oman.

The existing household water measures are not suitable for the requirements appearing in the last few years.

Some of the metering devices are not working perfectly and this fact makes the exact billing procedure more difficult.

In addition, there is no possibility for checking and planning the water consumption without real measuring data.



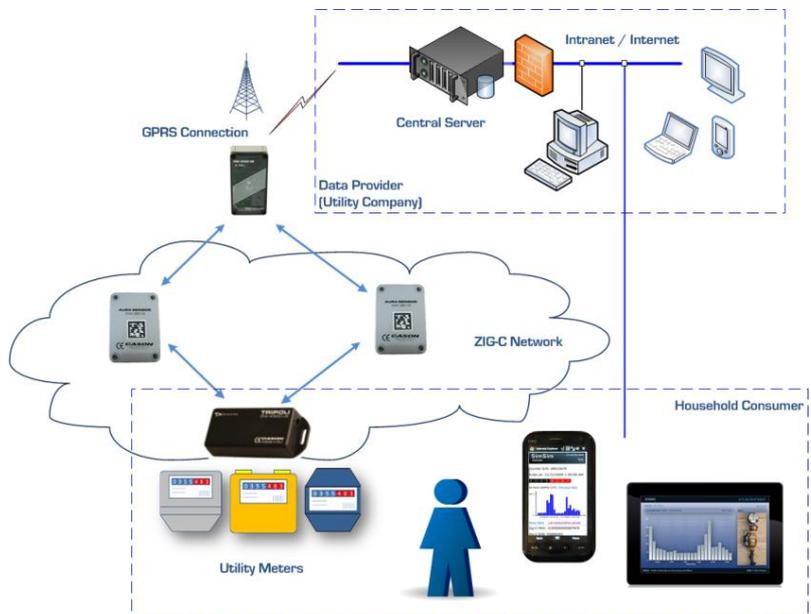
### Solution

To answer this challenge, the optimal solution was to install wireless **DIWICON AMI system**.

There are short range **wireless meter reading devices** installed into the water meters.

These autonomous devices are operated by built-in batteries.

**Wireless communication infrastructure** was implemented for transferring data from meter reading devices to the central database. This infrastructure is an efficient combination of the short range RF network and the world wide range GPRS.



### EXAMPLES

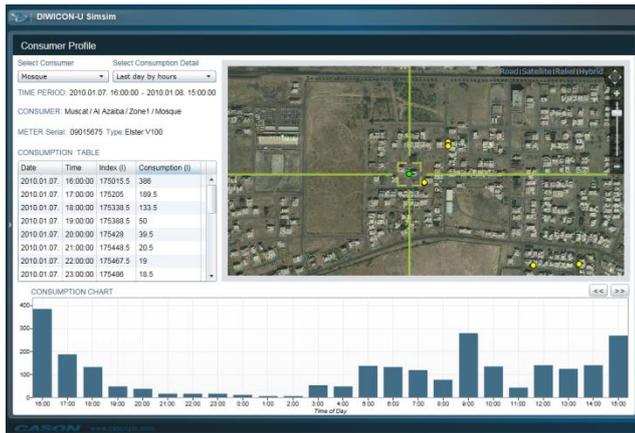
*This system structure offers benefits not only for the **utility companies** but also for the **household consumers** because all the collected and processed data is available via Internet.*

*The **web based SimSim application** helps the consumers to supervise their water consumption and also helps them to plan and to reduce the consumption and to become a more **conscious consumer**.*

#### Features:

- Automated meter reading for household water meters
- Wireless data acquisition system
- No power or communication lines are required
- Cutting edge web based client interface (Cloud technology)
- Easy and fast installation
- Autonomous, care-free operation
- Real-time and historical consumption data





Consumer/consumption profile is presented in SimSim application. Consumption points are displayed on the map. Consumption data can be seen in tables and on a bar graph.

### Water supply failure on trend diagram.

The water supply of Zone 1 was cut off. The roof tanks supplied water for the consumers during this time. When the water supply was enabled again, the roof tanks had to be refilled. These are the peeks which can be seen after the zero consumption trends.



Anomalies can be easily detected observing consumer trends. **500 l/h continuous consumption** can be seen even during the night at this consumer. This can be caused by leaks and breaches in the water supply lines of the household.

PAEW achieved very precise monitoring of the water distribution network, got comprehensive tools for detailed and exact billing, optimized planning, and an increased and balanced revenue stream.

