



SMART METERING SOLUTIONS

Empowering the Agricultural Sector



SMART CONTROL



SMART MONITORING



SMART PLANNING



Rowan Everts & Zane Zandberg
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WHO WE ARE

A proudly South African company with the aim to become an independent pioneer in the smart metering industry in South Africa by utilizing World Wide technology.

- **Zane Zandberg (business development)**
- **Rowan Everts (technical development)**

We believe in innovative, sustainable and cost-efficient solutions providing our customers with intelligent, robust and convenient feedback on how to better manage their resources.

OVERVIEW

- Background & Needs
- Water meter types
- Solutions: Communication
- Solutions: Analyze & Plan
- Solutions: Apply Control
- Summary



BACKGROUND & NEEDS

- Comply with DWS metering regulations for irrigation purposes
 - Standards and accuracy
 - Site investigation, selection and design
 - Measure, record and report
 - Retain data for a minimum of 5 years
- Collect meter data remotely
- Linking measurement with control
- Reduce response time with problems
- Make intelligent decisions regarding water usage
- Create District Metering Areas (DMAs) and optimize
- Improve financial gain in the long run
- Positively impact the environment

WATER METER TYPES

MECHANICAL



WOLTMAN TYPE

- Supply networks, agricultural, industrial
- Accurate
- Size 50 - 300 mm
- Flow rate $q_{\text{permanent}}$ 50 - 1000 m³/h
- Measurements:
 - Accumulative
 - Real time flow
- Straight pipe requirement

SIZE	50	65	80	100	150	200	250	300
SPR	5 d before & 2 d after					10 d before & 5 d after		

WATER METER TYPES

ELECTROMAGNETIC



SharpFlow

- Sewage systems, agricultural, industrial
- Accurate
- Size 25 - 300 mm
- Flow rate $q_{\text{permanent}}$ 10 - 1600 m³/h
- Measurements:
 - Accumulative
 - Real time flow
 - Numerous outputs available for connecting SharpFlow to different recording/analysing systems.
- Straight pipe requirement

SIZE	50	65	80	100	150	200	250	300
SPR	5 d before & 2 d after					10 d before & 5 d after		

WATER METER TYPES

ULTRASONIC

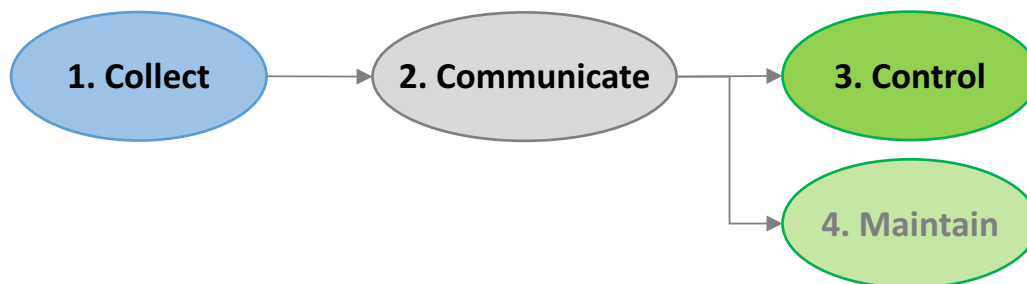


OCTAVE

- Agricultural, industrial, low quality water
- Accurate, Reliable
- Size 50 - 300 mm
- Flow rate $q_{\text{permanent}}$ 40 - 1000 m³/h
- Measurements:
 - Accumulative
 - Real time flow
 - LCD Programmable Display
 - Flexible Data Formats
- Straight pipe requirement

SIZE	50	65	80	100	150	200	250	300
SPR	Minimal to Zero D depending on installation							

Solutions: Communication



- Remote telemetry units (RTUs) for monitoring
 - Mains & battery powered
 - Easy installation and maintenance
 - Pulse, Mod-Bus, 4-20 mA
- Installation in existing pump houses or pits
- GPRS reception needed
- Transmits measurements to central collection point



 **metasphere** **Point**
make data count colour

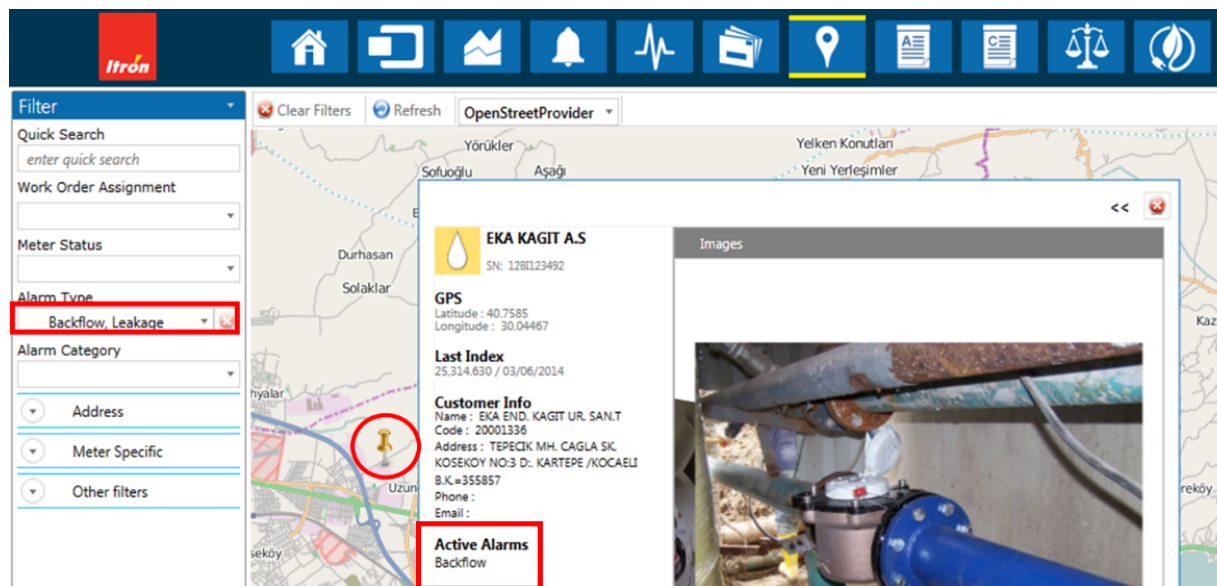
Solutions: Analyze & Plan

- Remote monitoring of meters
 - Accumulative flow (m3) & flow rate (m3/h)
- Analyze water trends & water balances with DMAs
- Set overflow thresholds & custom alarms



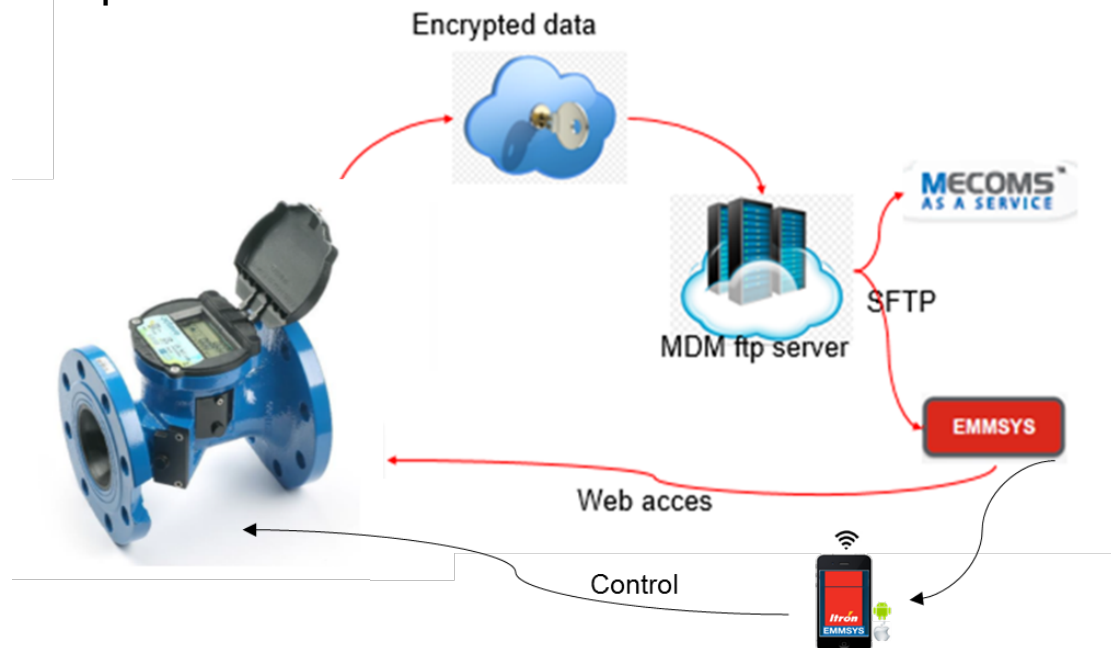
Solutions: Apply Control

- Control units (CUs) for monitoring and control
 - 200x200x150 mm CU IP67 box
- Control assets & performance
 - Email / SMS
 - Review installation
 - Assign work-orders from portal



Summary

- One access point
- Visualization, reporting and decision support
- Flow usage trends
- Custom alarms
- Control assets, network and performance



Questions





We provide the full service and installation
24/7 Service & Support

Contact us

Office:	+27(0) 66 3022819 admin@zzeesmetering.com
Zane Zandberg:	+27(0) 71 3638263 zane@zzeesmetering.com
Rowan Everts:	+27(0) 76 0612903 rowan@zzeesmetering.com
Website:	www.zzeesmetering.com