

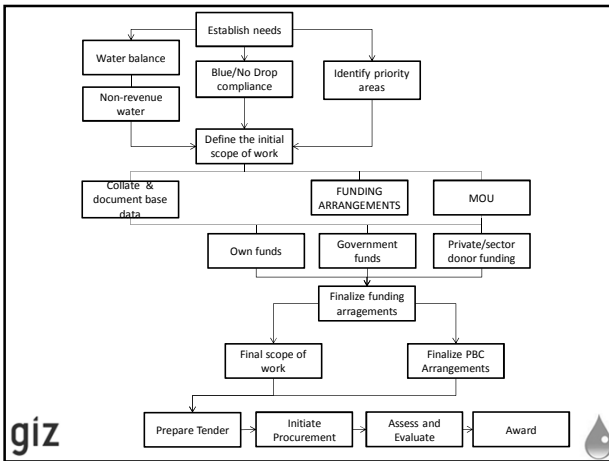
## Performance Based Contracting for Water Conservation and Demand Management

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### Aim of Presentation

- Performance-based contracting as tool for municipalities in WCWDM
- Process steps towards PBC; how does it complement funding models
- Details on Model Performance-based Contract
- Possible applications and way forward



### Project Context

#### Partnership: Emfuleni Municipality



- Problem: Full economic allocation of water in Vaal River system; water shortages restrict economic activity
- Sasol: critical energy supplier, relies on 4 % of river yield and cannot mitigate risks by onsite efficiency gains
- Opportunity: Excessive municipal water losses between 35 and 40 %
- Government saving target 15%



### WCWDM Measures Taken



Pressure management



Repair visible leaks on the reticulation system



Retrofit plumbing & fixtures (public buildings +70,000 households)

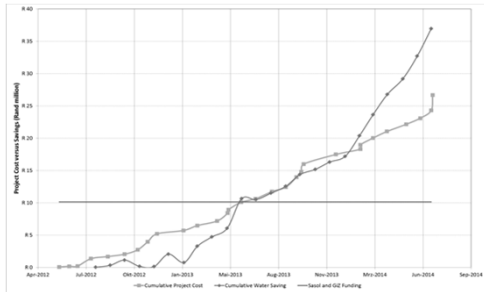


Launch education & awareness campaign (53 schools and 100,000 households)

### Results achieved until June 2014

- Investment R 5 million of donor funds, plus same amount from Sasol
- **Reduced abstraction** from Vaal system by 7 million m<sup>3</sup> to date
- About 400,000 people will benefit from a more **reliable access**
- R 37 million cumulative cost **savings** for municipality
- **Job creation** in water-related services: plumbers; water warriors

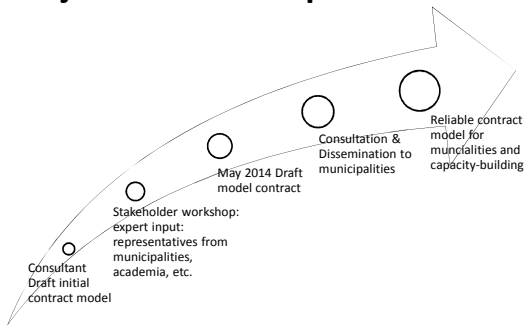
### Results achieved until June 2014



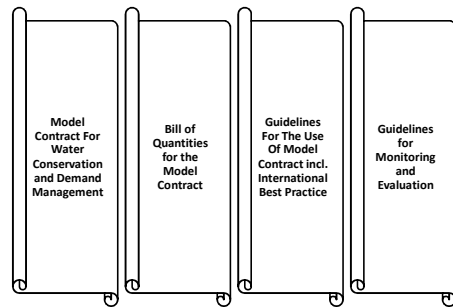
### Role of Performance-based Contract

- Full competitive tender and evaluation process for the service provider undertaking and managing the aforementioned processes
- Managing consultant reimbursed for **time & all expenses incurred as per the bill of quantities**
- Additionally: performance-based element: for up to 10 % saving in water cost - 10 % of the savings, for savings between 10 and 25 % - 20% of those; performance bonus capped at 25 %
- Need (and challenge) to establish a **baseline**
- **Stronger buy-in of managing consultant:** direct investment, strong performance incentive

### Project Goals & Steps

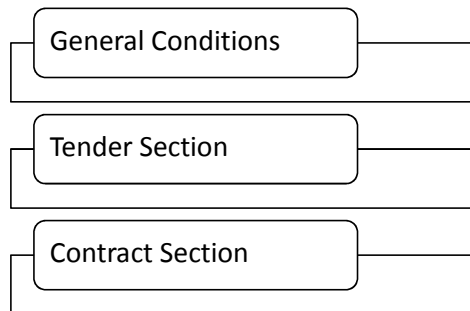


### Project Outcome



REFERS TO:  
 General Conditions of Contract for Construction Works, 2<sup>nd</sup> Edition 2010  
 Standard Conditions of Tender (CIDB) (Included)

### Key Elements of the Model Contract



### General Conditions of Contract

- **Standard Conditions of Contract** generally used in the construction industry
- Produced and sold by SA Institution of Civil Engineering
- Endorsed by the Institution of Municipal Engineers of South Africa
- **Generally known and used by most municipal engineers**
- Defines the **functions, responsibilities and obligations** of the parties to the contract
- Defines requirements and responsibilities for matters related to **time, payment and quality**
- Defines the **allocation of risk** between the parties
- Sets out the processes to be followed in respect of **termination, claims and disputes**

### Model Contract – Tender Section

- Sets out correct tender procedures
- Sets out tender pricing requirements
- Returnable Documents and Schedules
  - For Evaluation Purposes
  - For Incorporation into the Contract

- *Allows for a range of 0 to 100% Performance Based pricing*
- *Bill of Quantities allows for specifically required items*
- *Performance bonus covers other work and incentivises level of saving achieved.*
- *Standard calculation of price to enable equitable comparison of tenders*

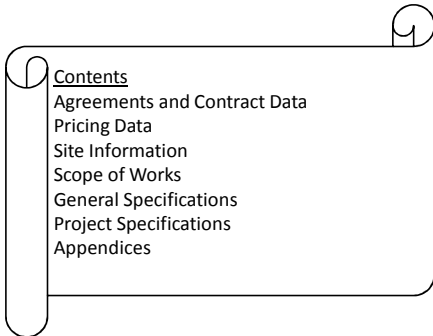


### Tender Price Calculation

	Item	Calc.	Unit	Amount
A	BoQ Total		R	5,000,000
B	Baseline vol. projection		kl	56,807,534
C	Expected Efficiency Gain		%	10%
D	Expected Water Saving	B x C	kl	5,680,753
E	Performance bonus rate		R/kl	R0.75
F	Expected Performance Bonus	D x E	R	4,260,565
G	Tender Price (excl. VAT)	A + F	R	9,260,565



### Model Contract – The Contract



### Model Contract – Key Elements

- Sets out correct tender procedures
- Establishes a process to exclude tenderers not experienced in WCWDM work
- Allows for a combination of priced items and performance-based reward
- Establishes a method of comparing tender prices on an equitable basis
- Uses a tested contract format that can be applied to all types of related work

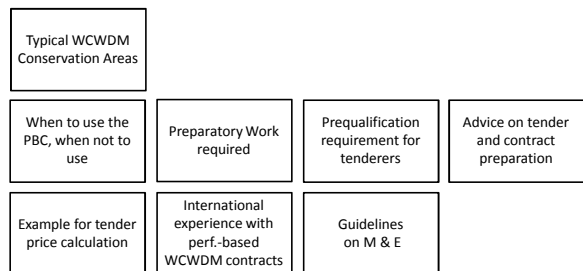


### Bill of Quantities

- Support tool
- Gives a list of typical measurable items that may be required
- Provides for anticipated quantities for each item
- Allows for rates to be provided against each of these items
- Allows for the calculation of the estimated/tendered total cost of all of these items



### Guidelines



### Way Forward

- Uptake within the SWPN
- Endorsement/Recommendation by key government departments
- Engage in discussions with SALGA
- Solicit feedback from municipalities
- Dissemination of product (conferences, workshops etc.)
- Capacity-building program (incl. education, awareness-raisin)
- Replication of approaches

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### Benefits of the Model Contract

- Ensures proper tender process thus minimising possibility of challenges
- Uses a proven contract system which reduces possibility of failure
- PBC reduces risk to Municipality if results are not achieved
- PBC incentivises Contractor to achieve results
- Guidance on impact of PPP

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Thank you,  
question?

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