

# SOUTHERN AFRICA REVENUE PROTECTION ASSOCIATION

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## SUMMARY OF THE SARPA CONVENTION HELD 24-25 AUGUST 2016 - MANGAUNG

### 1. WELCOME BY PRESIDENT

### 2. WELCOME FROM HOST CITY

### 3. KEYNOTE ADDRESS - by Provincial MMC

- Mentioned that the Urban plans in the province need financial “muscle” to make them more effective
- The Challenges of the different Metros and Municipalities were highlighted
- It was stressed that the aspect of Revenue Management was very import
- The first question to ask is “What skill sets are needed”?
- The second question is “How to use new technology”?
- The third question is “What measures need to be taken to ensure an increase in revenue and reduction in losses?”
- The way ahead for any Municipality would be to provide an excellent service to consumers and create a “culture of service payment”
- The concept of the “Great mind theory” was explained, where service providers provide solutions that are different and unique
- The ultimate goal should be to please the consumer in many ways, a happy person will not mind to pay
- In conclusion the Convention should identify solutions and best practices that could assist in minimizing losses

### 4. ROB SHONGWE

- The presenter stressed the fact that “Cost Management processes” should be done at Customer Centre Level
- He explained a simple network diagram and typical network scenario
- He also explained the feeder balancing processes and data architecture
- Mapping of substation switching systems, stats meters and feeders were also discussed.
- The presentation focused on a Case study of a “Systemised Management Process”
- It was stressed that Non-technical losses must be addressed at DX level
- It is important to do Balancing Calculations through the use of stats meters
- Analysis of the input versus output must be analysed at the end to determine the impact of the processes

### 5. PEARSON SIBANDA

- The presentation was based on a case study in the Matjhabeng Local Municipality of copper theft in SA

- The impact of “Copper theft” on the economy and the consumers was explained. (R 10 billion)
- 370 prosecutions from 1300 arrests (28% conviction)
- Increases in labour and other costs, threat to emergency services and negative to investment in the country
- It was mentioned that issues like these “warrants serious attention”
- The problems were highlighted
- It was said that the drivers of Copper Theft can relate to the term “Wicked Problems” (no understanding of real problems /no definitive solutions/use expensive solutions/requires teamwork/cannot be solved but managed
- He explained the “small wins approach”
- The speaker highlighted the fact that involving the Community is the best weapon against this crime
- The challenges experienced was highlighted such as no mission, little communication, no task team, lack of tools and manpower.
- In conclusion it was pointed out that the biggest problem in the project was to get full cooperation from the police

## **6. HENDRIK GREYLING**

- The presentation was based on a case study of a Revenue Enhancement Project in Naledi Local Municipality in the Stella and Vryburg areas
- He related to the Revenue Recovery plans in Naledi
- It was highlighted that 41.6% of the losses have been recovered, while R105 million are not recovered
- Average recovery was 50% and R50 million not recovered.
- Related to the Vryburg project
- The recovery problems related to several issues, of which the major problem is the 20% metering issues
- Revenue recovery was enhanced from 54% to 99%
- The biggest successes were achieved through the installation of pole mounted split metering systems, community understanding
- The biggest challenge was to address the mistrust of the community towards the Municipality
- The new technology which was introduced in the project namely smart meters was explained
- Also the “smart wallet concept” was explained (using the banks to assist with payments)
- Furthermore, the successes and the “Consumer Dashboard” utilized in the project was analysed
- In conclusion the “lessons learned’ were highlighted e.g. how to effectively install and utilize the hardware, as well as to get the most out of the data management systems

## **7. Dr CROUS**

- The presentation started off by focusing on the “lessons learned” in audit project in Mangaung Metro
- The project was focused on Water Demand Management
- He stated that “to measure is to know, if you cannot measure you cannot improve it”
- He spoke on water provision, customer types, water accountability, meter types and reading types
- Altogether 15 000 meters were involved in one geographical area
- The benefits listed were equitable payment, a higher level of accountability for utility staff members and finding a balance between what is lost and what has to be done to address such issues
- He explained the different GIS options utilized and the spatial outputs
- In the project it was found that “Non- revenue water” related to 35% (R 7.2 billion) per annum
- It was highlighted that the main goal of the project was to mainly focus on the low income areas
- The main challenges were accessibility to premises, the condition of the installations, the lack of policies and the funding
- It was stressed that in such projects communicating with the community should be done upfront

- The “Virtuous Metering Cycle” was explained (need assessment, meter audits, meter replacement, meter reading, efficient utility operation and increased funding for Engineering services)

## **8. JACOB LEHOKO**

- The presentation focused on how to “Safeguard infrastructure and enhance revenue” according to a case study in the Emfuleni Local Municipality
- The discussion points were:- causes of high revenue losses, Loss types, solution to curb infrastructure vandalism, revenue split and possible leaks
- The installation of robust substation doors, pepper spray system and electronic key systems were highlighted to curb theft and vandalism
- The successful use of Split and AMR meters were explained and the method of application used
- It was stressed that the use of the right strategies will successfully minimize revenue losses
- You also need to get the right resources to do the job

## **9. DILEEP JOHN**

- The presenter related to the fact that the paper will focus on the “customer compliance approach through Operation Khanyisa”
- The new innovative approach behaviour change approach was explained and the impact that it would make on the market
- Some research stats were shared regarding electricity theft issues
- Eskom’s response to the challenges identified was highlighted (Energy Losses Management Programme)
- The interventions to combat losses were highlighted
- The projects approach and phases of implementation were highlighted
- Revenue recovery of R618 million achieved
- Overall losses reduced from 7.12% to 6.43%
- Unique skills were developed in the process
- The process identified “Hotspots” and focus areas
- Effective planning went into dealing with such issues
- The presentation was concluded by highlighting the key learnings which were the difficulties coupled to the selection criteria and the considerations.

## **10. Dr ISMAEL POOLO**

- The presentation focused on how to fund the optimal metering technology
- The issues discussed were tariff misalignment and smart metering buildings
- The question is therefore to decide “What to fund”
- In this project altogether 22 Municipalities were surveyed on “smart meter enablers”
- The benefits of smart metering were explained
- The results pointed out that only 22% had no or little confidence in smart meters
- Leadership and Management with regard to viability and sustainability was defined as identifying the threat, risk and the vulnerability of the company
- He related to the fact that the lack of Leadership and Management usually results in revenue losses
- The tariff misalignment issues were also discussed and the differences between the Eskom and Municipal profiles were explained
- The presenter pointed out that one should not “outsource what you don’t understand”
- The concepts of “Tariff misalignment” and the “smart metering building blocks” were explained
- Closing all the aspects that impact on the way ahead was discussed

## **11. SHAWN O'NEILL**

- The presenter explained the concept of “choosing cheap in the short term versus a higher upfront cost with lower long term costs”
- He also explained the new STS Technology as well as the value of Security in metering systems
- The cost implications linked to meter replacements and Proprietary Solutions were also explained
- The difference between “known risks” versus “identified risks” were explained
- He explained where to utilize smart meters and where to not. Therefore, cash strapped utilities should choose wisely
- The risk of Cyber Crimes on new technology was also highlighted as it is impossible to recover from attacks
- Smart meters with the new STS 600 was explained
- The risks of the “TID Rollover” concept was discussed
- In conclusion the presenter stated “You can only save money that you have not spent”

## **12. KAMLAN MOODLEY**

- The presentation was based on the “Right to collect” Solution (RTC)
- The main objectives of the RTC solution was to increase collections and change cultures
- This can be seen as an innovative revenue enhancement program that can reduce losses
- The solution focuses on the quick recovery of payment as well as Cash Flow Management
- He pointed out the fact that the outstanding Debtors books were increasing
- These were created by debtor’s information inaccuracies, outdated indigent and pensioner databases, external economic factors and outdated municipal revenue management systems
- The risks are payment of invoices, political interferences, changing economic environment, increased unemployment and legislative changes
- In conclusion the concept of “Processes vs Risks” were explained

## **13. PANEL DISCUSSION**

- A panel discussion was held with Legal and Law enforcement specialists to discuss the new “Criminal Matters Amendment Act no 18 of 2015
- The Act was introduced on the 1 July 2016
- The different aspects of what the Act focuses on was analysed in detail e.g. the opposing of bail, higher fines for being found in possession of stolen items and longer jail sentences for those found guilty of such crimes
- The fact that the Act also refers to “tampering” was also highlighted
- It was explained that “test cases” will be needed before more clarity of its application will be clear to all the role players

## **14. NSIKAK UDI**

- The presentation focused on “Plug the bleeding project” in PHED
- He gave an overview of the Nigerian Distribution environment and the different challenges that Distribution companies in South Africa have to deal with
- He also highlighted the processes PHED implemented to minimize losses namely field operations, technology solutions and policies
- The plan is to increase manpower and resources to perform such tasks from 33 to 82
- The challenges faced in the project ranged from losses over 55% collection losses and over 60% overall losses
- The Project analysis and gains achieved through actions were discussed and an amount of R119 million gained

- He showed examples of the different types of tampers and highlighted other local issues unique to Nigeria
- The lessons learned was:-inaccurate data base made analysis impossible, inconsistent supply hampered operations, magnitude of the issues with MD meters very difficult to address, hotline increased workload, manpower and resources inadequate, procedure and equipment to recover abandoned meters outstanding
- In conclusion the positive impact of Team building exercises and training exercises was explained

#### **15. DAVE TURTON**

- The title of the presentation was “Solutions that count”
- It focused on the introduction of new technology to counter the losses due to thefts and vandalism
- First the effectiveness of the different robust “Protective structures” or enclosures with no visible hinges or locks were explained
- Secondly the different high power locking mechanisms and alarms as well as the functions of the “smart controller” namely event monitoring, E smart reporting and E smart additional features
- The project to curb illegal connections were highlighted
- The presenter highlighted the different “Best practices” with regard to all the systems, enclosures and locks
- He also showed pictures of various successful applications in Utilities in South Africa

#### **16. QUENTIN LOUW**

- The presentation focused on the installation of a Pepper gas alarm system in eThekweni Metro
- It was quoted that the identified risks are many and gave some background of the challenges in the Metro
- It was stated that altogether R40.2 million losses per annum have been incurred due to theft and vandalism at substations and other infrastructure
- It was stressed that it was found that in these types of crimes the market demand dictates the theft volume
- The mitigating methodology of pepper gas applications were explained
- The mitigating impact of the solution was also highlighted
- The assumption was shared that approx. R76.8 million losses were prevented (if the previous trend of incidents before the installation of this solution were taken into consideration)
- It was also explained that they use the GSM network to activate the system
- He gave an overview of the results and findings
- It was explained that there was no response unit
- In conclusion it was stated that the main achievements of the project were the reduction in thefts and that all stakeholders received added value

#### **17. PAUL SMITH**

- The presentation focused on Revenue Model and Management for local Government
- Explained the Revenue model as:- contribution to reduce Municipal Consumer debt and protect and enhance the Municipal revenue collection
- The main focus areas are the Commercial and Industrial segment
- The goal is to Reduce Municipal revenue and customer debt and an accurate / integrated data system is a critical element of the model
- Furthermore, it is a way to get money back
- He related to the Gauteng Debt resolution project they were involved in which involved 500 businesses
- It also means cost effective access to meaningful integrated and useful data

- He also spoke to the Organizational development focus and the approx. R50 million debt resolved from 20 top debtors.
- In conclusion it was said that this concept will improve Organizational structure and better reporting

## **18. THOKO MATSIKA**

- The presentation first focused on Social Media:- a necessity for the modern Municipality
- She explained what social media was – a driving business resolution
- Secondly it was explained that a media plan should be driven by a business revolution that has become an essential part of doing business today
- It was explained what the focus should be
- It should involve “Stakeholder Engagement”
- The concept of “The disruptor” was explained which refers to the impact of the media on businesses, Markets and Governments.
- What to consider when tackling these issues were discussed e.g. understanding the protocol to vet
- In conclusion some Case studies were discussed and comparative analysis of the findings were highlighted

## **19. MARTIN KUHLMANN**

- The presentation was titled A Revenue led Strategy for electric utilities
- He spoke on how to study the Revenue curve to determine the strategy
- He pointed out that the Large Power users were the best to focus on first as their usage was the biggest
- He discussed all the types of Consumers according to their usage curves
- Revenue Curve – Large Power Users importance (30%)
- Revenue Curve – Small Power Users (70%)
- It is important to analyse the challenges of customer vs services
- In summary when focusing on Non-technical losses one should look at Revenue vs effort vs installation of a Smart Meter

## **20. WILHELM HERBST**

- The theme of the presentation was regarding the use of efficient and accurate Asset documentation
- The presenter asked “How do you calculate what your losses are, if you don’t know what you have”
- He further explained the different steps in calculating losses effectively
- It was stated that you could not measure what you could not manage
- One needed to determine where assets are and then generate documentation to record this aspect
- The Challenges of such issues were analysed
- An overview of the Equipment to be used was discussed
- In conclusion the importance of GIS systems was explained

## **21. MARINA SHORT**

- The presentation focused on Optimizing Revenue with Data Insights
- The presenter explained the “Credit Arena” concept (which explains all the different role players)
- She explained the concept of “indebtedness” (Credit vs Non-credit)
- Credit standings of consumers were explained
- It was stated the loss of income is the highest priority. The reasons for non-payment was discussed
- It was highlighted which issues influences the Market e.g. Credit, Debt issues and Amnesty
- The Legislative impacts were discussed and the concept of “Data silos” were explained (Municipal own data, Supply Chain data, HR data, Revenue data, customer data, links to other accounts and indigent data)

- In conclusion it was mentioned that the following issues determined the extent of the successes namely:- Contact ability, Ability to pay, Willingness to pay

Yours sincerely

A handwritten signature in black ink, appearing to read 'J. Venter', written in a cursive style.

**JEAN VENTER**  
**GENERAL SECRETARY**