



**DEMOCRACY DEVELOPMENT PROGRAMME
LOCAL GOVERNMENT FINANCING & DEVELOPMENT IN SOUTH
AFRICA**

**11-12 AUGUST 2008
SOUTHERN SUN ELANGENI, DURBAN**

PAPER PREPARED BY

PUBLIC SERVICES & UTILITIES INTERNATIONAL (PSU)

May 2008

**INSIGHTS BY PSU INTERNATIONAL FOR REVENUE ENHANCEMENT
PROJECTS**

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**INSIGHTS BY PSU INTERNATIONAL FOR REVENUE
ENHANCEMENT PROJECTS**

1. PSU APPROACH TO REVENUE MANAGEMENT

The PSU experience over the last 10 years has proved that the inter-relatedness of the following factors in achieving successful revenue management:

- 1. The provision of quality services to customers** includes administrative, technical and financial components working in perfect synchronization to ensure that every property is billed the right bill for the relevant services costed at the correct tariff every month.
- 2. Customer satisfaction** that ensures that customer's expectations in terms of service provision are met or exceeded to enable timeous and convenient payment for services.

This is depicted in the diagram above. It is a simplified diagram of the reality of many different business processes within a municipality/utility/service provider, and if any one of these businesses processes is problematic it has an impact on the rest. The Customer information system and billing system is central to revenue management, and this is the primary focus of most professional services offered by PSU. In many cases the billing system is the customer information system, and this is not always directly linked to or easily compatible with the property information system of the municipality/utility/service provider. Consumption statistics used by the technical departments of the municipality/utility/service provider are also usually not always directly linked to or easily compatible with the billing or customer information system.

Just keeping customer information updated and correct is a job in itself (change of address; change in owner/tenant status; ID number; etc) as is monitoring consumption of services (looking for exceptions other than seasonal variations, etc) or change in



ownership of properties. The implementation of the MPPRA has proved that besides having the correct valuation of a property (correctness of revenue) it is equally important to ensure that municipalities can account for every property within its jurisdiction (completeness of revenue)



2. UNVEILING PROJECT MILESTONES AND SUCCESSSES TO DATE

The case studies chosen to demonstrate project milestones and successes to date are appended:

- Annexure 1 – Gauteng
- Annexure 2 - Limpopo
- Annexure 3 – Dr J S Moroka Local Municipality – Water Billing Project
- Annexure 4 – Matfikeng Municipality Revenue Enhancement Success
- Annexure 5 – Matjhabeng Municipality Revenue Management Project



3. ADDRESSING THE ISSUE OF DATA INTEGRITY – HOW FAR CAN IT TIP THE BALANCE IN REVENUE ENHANCEMENT?

The key finding from the PSU experience to date is that the revenue analysis in all instances displayed to some or other degree the lack of data (completeness of data) as well as quality of data or "data integrity" (correctness of data).

Traditional data cleaning focused on determining the responsible debtor, or particular service or property information, and more often that not was done by means of a field audit where the relevant properties were visited. There has also been many debt-induced data clean-ups or complaint-induced clean-ups. On average these field audits cost between R80-R100 per property in the last few years and now cost significantly more.

On the other hand technology in the last few years has enabled electronic data cleaning. This does not replace traditional field audits, but should be used in the first instance prior to field audits to cut down on time and cost. The PSU way of doing electronic data cleaning is by extracting revenue data from the billing system to feed into a PSU written software program called the Municipal Data Analysis Model. The Model enables the municipal data to be matched against other external sources of data for the purpose of electronic exception testing. This process allows for highlighting problem properties for further focus, possibly traditional field audits thus excluding non-problematic properties prior to the field audit. The cost is generally 70% less than traditional field audits, and the process is generally 50% shorter. Most importantly the quality can be assured by performance monitoring and additional/updated comparisons.

If data cleaning is a once-off exercise and not incorporated as part of normal routine business process, then its success will be short-lived. Data cleaning needs to become a regular, normal, routine process customer and property information change all the time, and consumption patterns also change all the time. Data clean-ups need to progress to data maintenance to ensure that data is always correct and complete to enable successful revenue management. Accurate data is the cornerstone of successful revenue management and should be measured against the following performance indicators:-

- Does the municipality accurately bill for all services on every property every month?
- Does the bill reach a satisfied customer on time?
- Does the customer pay on time, or understand the implications of not doing so?
- Can the municipality effectively collect outstanding debt?



The best case scenario would be a positive answer to all of the above 3 questions, and the municipality, in trying to recover outstanding debt realises that it cannot collect a significant portion of the outstanding debt because it does not have the correct ID numbers or addresses of the debtors, or the amounts owed by the individual debtors are significantly less than the legal costs of recovering the debt.

The Gauteng case study (detailed in Annexure 1), half way through the completion of the project, reveals the following:-

Consumer Debt owed to municipalities in Gauteng

Consumer Debt in Gauteng has been estimated at approximately R20-21bn. R2,7bn (14% of total debt) is attributed to Interest on Debt. Debt constitutes 55% of budgeted revenue for Gauteng municipalities. 78% of the accounts in the province have debt associated to them. 50% of accounts have debt less than R1000.00. In terms of classification by debtor type, the largest component is Residential Debt (69%), with "Other" Debt amounting to 20%, followed by Business Debt at 10% and Government Debt at 2%. Indigent Debt is estimated at less than 5% of total debt, and while it is probably underestimated, it cannot be the explanation for the extraordinary high level of debt in the province. A process of electronic data cleaning initiated by Gauteng Treasury and Department of Local Government with the assistance of PSU International has focused on the Correctness and Completeness of data on billing systems as well as Institutional Capacity - the benefit to date is a just over R1bn (5%) where R864,1m has been earmarked for write-off (bad/recoverable debt or reversal of incorrect amounts), with R62,6m is due to improvement collection of arrears, and R114,2m due to collection of revenue from the normal billing process following data corrections. This is a small but significant start to addressing the huge historical debt in the province, the success of which is due to a collaborative effort by provincial and local government.

Government Debt in Gauteng

At the start of the Gauteng Revenue Protection & Enhancement Program in January 2007 the government debt in the Province was estimated at approximately R446m (2,2% of total debt), that is the amount of money owed to municipalities by national or provincial government departments or State Owned Enterprises. Gauteng Treasury and Department of Local Government have worked jointly with PSU International on a process of data cleaning that involved the proper classification of this debt by debtor type that included verifying ownership of properties, correcting postal addresses and splitting of municipal accounts into its rates and services components. This



process has established that R175,6m (39% of total government debt) is indeed municipal debt (inter-account transfers within the municipality) effectively reducing government debt to less than 1%. The process has further established that R81,5m (18%) is owed by the Provincial Department of Education, R88,5m (15%) is owed by the Provincial Department of Housing, R57,5m (13%) is owed by the (National) Department of Public Works, and R11,3m (2,5%) is owed by (National) Department of Water Affairs, with other national and provincial departments owing lesser amounts. All the national or provincial departments or State Owned Entities such as Transnet (R6,5m or 1,5%) have provided acknowledgements of debt to the respective municipalities and we are in the process of facilitating the payments before the end of the financial year in March. Payment to date in respect of Housing amounts to approximately R25m, the bulk of which has been paid to the City of Joburg.

The Limpopo case study (detailed in Annexure 2) shows that incorrect billing in the Blouberg Municipality inflated debt - there was incorrect billing for each stand of R1 per month, and the reversal of these amounts reduced the debt of the municipality by R8,4k per annum. Similarly in Greater Letaba Municipality there was a reduction of debt by R5m due to the correction of a data error.



4. CONCLUSIONS AND RECOMMENDATIONS ACROSS REGIONS: LESSONS LEARNT FROM PSU PROJECT EXPERIENCE

PSU has been involved in a range of revenue management projects over the last decade which includes, amongst others, traditional customer and meter audits, PPPs for water and electricity, establishment of municipal customer call centres, debt due diligence, and data cleaning that contributes to revenue enhancement.

More recently, lessons learnt from our involvement with the dpig Debt Project and Project Consolidate 12 pilots are that the revenue analysis in all instances displayed to some or other degree the lack of data (completeness of data) as well as quality of data or "data integrity" (correctness of data). This is based on the assumption that there is actually revenue data on the financial system of the municipality - there was one case of the 12 pilot sites where the financial system of the municipality only had 44 customers of which only 38 were being billed when in fact the municipality had approximately 53 000 households within the area of jurisdiction, thus constituting a substantial revenue loss (even if 90% of the households would be declared indigent).

The above has been confirmed more recently by other non-dpig/Project Consolidate projects done by PSU, most notably in the pilot projects done for KZN LGTA, Revenue Analysis and Strategy Development for 6 municipalities done for Limpopo DLG&H, and the Gauteng Revenue Enhancement & Protection Program.

Where PSU has been working with individual municipalities the benefit has been in terms of providing a revenue analysis based on data from the financial system of that municipality, and identifying data discrepancies due to completeness and/or correctness that has resulted in a write-off of arrears and/or increase in revenue. In many cases this has been complemented with the formulation of a revenue enhancement and protection strategy to sustain the benefits post the PSU intervention. The spin-off benefits, if the revenue enhancement is sustained could translate into improved financial viability, thus improved credit ratings that enable more effective borrowing from the banks to improve service delivery.

Where PSU has been involved in a grouping of municipalities at a provincial or national programme level, the benefit has been to the individual municipality as outlined above, and in addition the benefit to the national/provincial programme has been in the form of facilitating the provision of hands-on support for revenue management based on the analysis, monitoring and



evaluation of municipal revenue. It has allowed for analysis, monitoring and evaluation at a more meaningful and practical level than that provided by the statutory financial reports. Managers at a national/provincial level with an accurate, quantifiable analysis of the factors that influence revenue management whether from a debt or consumption perspective. Implementation is thus measured and monitored on a regular basis.

Thus the national/provincial programme becomes a repository of information on revenue to turn into knowledge and management information via analysis and monitoring and evaluation (M&E) and thus provide more effective support to municipalities in the area of revenue management. It could also benefit District and Local municipalities in understanding the revenue and service delivery implications of the division of powers and functions such as water services provision.



ANNEXURE 1

Gauteng Revenue Protection & Enhancement Program (Nov 2006 – October 2007)

The Gauteng Program is jointly implemented by Gauteng Treasury and the Gauteng Department of Local Government under the guidance of the Municipal Support Directorate as a Project Consolidate Initiative and municipal wide support. It is Gauteng DLG's intention to coordinate this Program with the various other GLD projects such as SA/CA and SA/CE initiatives to ensure that the support provided to the various participating municipalities has the desired holistic and long-term impact. Municipalities that are part of the Program are all the metropolitan and local municipalities in Gauteng:-

- City of Joburg Metropolitan Municipality
 - City of Tshwane Metropolitan Municipality
 - Ekurhuleni Metropolitan Municipality
 - Emfuleni Local Municipality
 - Lesedi Local Municipality
 - Midvaal Local Municipality
 - Kungwini Local Municipality
 - Nokeng Local Municipality
 - Westonaria Local Municipality
 - Randfontein Local Municipality
 - Mogale Local Municipality
- The objective of this Program for Gauteng is to improve the revenue environment in the participating municipalities with a specific focus on:
- Reduction of consumer debt with a particular focus on Government Debt;
 - Integrity of billing systems (includes electronic data cleaning);
 - Revenue collection improvement; and
 - Monitoring of consumption efficiencies.

FORMULATION OF PROVINCIAL STRATEGY

Besides having done an analysis of revenue data for each municipality that is part of the Program, the data from all 11 municipalities was put together to do a provincial analysis. The Provincial Strategy is a working document that will be finalised at the end of the current Program to enable the DLG and Gauteng Treasury to assess to what extent their intervention has made an impact and what remains to be done post the intervention.

To date the analysis of the municipal data at a provincial level has highlighted three critical issues:-

- a) **Correctness of Data on Billing Systems**
The level of correctness or integrity of data on the billing systems has a direct correlation to the effectiveness of the municipality in providing good customer service and taking action against defaulting debtors and therefore its sustainability. Municipalities need to know who resides on all properties within its jurisdiction to enable the correct bill to reach the correct person to make payment for services received on time. The analysis of data to date indicates that the cleaning of data can not be a once-off intervention every few years, but that it should be an ongoing activity to maintain data integrity via appropriate standardised processes and procedures. While the analysis and cleaning of data is complex and time consuming, technological solutions are available before going the traditional route of field audits. In other words electronic data matching of municipal data against external data sources is useful as a start (customer, property and consumption data).



- b) Completeness of Data on Billing Systems
 The level of completeness of data on the billing systems is an indication of the potential of the municipality to maximise revenue from billing. If every property within the jurisdiction of a municipality is not correctly captured on the billing system, and all the services provided to that property are not captured, then the municipality will not be able to optimise revenue from its property base.

The level of discrepancy between the number of properties on financial systems in relation to property valuation systems as compared to cadastral systems and deeds registers is a good indicator of the completeness of data on billing systems – this is an issue in some of the municipalities, and not all. More importantly discrepancies between financial system and valuation roll need to be investigated – this should happen as part of the process of implementing the Municipal Property Rates Act. Once there is a match between properties on the Valuation Roll and Cadastre, all properties except those that are servitudes or used for other similar municipal purposes, need to be billed for rates and linked to the Financial System.

Municipal indigent databases seem to be understated and incorrect, and several municipalities have indigent registers kept separate from their billing systems. A substantial portion of the approximately R15 billion residential debt can be attributed to customers that should be classified indigent on the municipal systems. Emuleni Local Municipality had R7,8 million indigent debt as per the baseline and through correct classification of indigent customers managed to reclassify 27,644 accounts as indigent and write off R569 million residential debt. This process will continue until all indigents are correctly classified. Municipalities must establish accurate indigent registers to ensure that uncollectible debt is not raised against indigent customer and to ensure that indigent services are properly subsidised and managed.

Billing systems that do not cater for ID numbers or company registration numbers and do not distinguish between owners and tenants do not contribute to the completeness of data. Where billing systems do cater for such, the correctness of data is an issue.

- c) The state of the Billing Environment

The historical consolidation of municipal billing systems during the transformation of local government from over 800 municipalities into 283 municipalities has impacted on the integrity of billing systems as much as the completeness and correctness of data on those systems. Data cleaning and maintenance has not been a priority to date, and system linkages with other data sources are weak or non-existent. There are no standardised data conventions (e.g. uniform debtor classifications) or standardised financial management processes in relation to closing date for all systems (last day of month).

Poor workflow management between planning and development, technical and financial departments within municipalities result in incomplete and incorrect data that leads to customer dissatisfaction and unwillingness to pay for services. In addition, Human Resource Capacity in terms of numbers and level of skill is a major factor that constrains the billing environment. Finally socio-economic circumstances (ability of the municipal customers to pay) and behavioural patterns (willingness to pay) also impact on the billing environment.

Besides the cross cutting issues outlined above, the Provincial analysis is informed by rolling up the analyses of the 11 municipalities as well as the four objectives of the Program.

FOCUS ON DATA SYSTEMS AND INTEGRITY

One of the challenges that have affected progress is the availability, quality and consistency of municipal data, e.g. government debt account reconciliations not readily available on the BIC municipal financial systems, information from Venus sites was readily available and of a superior quality. Extracts from municipal financial systems such as Murrupk and SAP did not always provide PSU with all the requested data, and this lack of information delayed strategy development and the implementation process. Kungwiri's June 2007 extract is delayed and outstanding due to difficulties experienced in structuring the required data.

It is very evident from the initial data extracts that all the participating municipalities needed to spend considerable time and resources on the accuracy of their customer data and billing integrity. Accurate data is the platform on which participating municipalities can build financial sustainability, substantiate their support to indigent customers and effectively deliver services. Without accurate data participating municipalities will continue to get less than expected returns on their efforts to manage the rapid accumulation of consumer debt.

Data such as physical and postal addresses, ID numbers, owner / tenant, and debtor classification as well as property information is outdated, incorrect or incomplete which results in the accumulation of debt – these aspects have been elaborated above.

FOCUS ON CONSUMPTION MONITORING

Municipal databases indicate that there are properties with meters and no consumption, properties with below average consumption for the area and properties with excessive consumption for the area. This results primarily in a loss in revenue in that poor/non-paying consumers use in excess of the free allocation, but also in an economic loss in that the municipalities are obliged to pay the bulk providers for this water. Poor management of consumption patterns easily leads to the accumulation of uncollectible debt. Approximately 25,000 properties with no water consumption have been identified and are being investigated.

FOCUS ON IMPROVED PAYMENTS

Improved payments will be the result of having investigated correctness and completeness of data and identifying bottlenecks within the billing environment. For example, the resolution of government debt requires extensive data cleaning and verification of data to enable provincial and/or national departments to pay the outstanding debt to municipalities, and if this is done correctly, it should be paid regularly on a monthly basis thereafter, thus resulting in improved payments to the municipality as has been the case in Mogale City.

Seemingly not all properties on the valuation rolls are on the financial systems (and reverse) and approximately 12,8% (262,477 properties) of all properties in the Province have no land values. This could be a potential source of additional rates and/or services revenue as has been the case in COJ.

FOCUS ON DEBT

Annexure A provides the detail used in this Sub-Section. At a glance, Baseline Information on Debt is:-

- a. DEBT is approximately R20 billion
- b. Interest on Debt is R2,7 billion or 14%
- c. Debt is 55% of budgeted provincial revenue
 - o Emuleni: 143% of budgeted revenue
 - o Nokeng, Mogale: 78% of budgeted revenue
 - o Midvaal: 26% of budgeted revenue
- d. 5,381,542 accounts in the Province and approximately 78% of accounts have Debt (includes Current Debt, 41% of accounts have debt older than 30 days.
- e. 50% of accounts have debt less than R1000
- f. 69% of debt on Active accounts with 31% of debt on Inactive accounts



- g. Debt on inactive accounts appears to be a "lost opportunity" (unless handed-over accounts with only interest charges) = R2,8 billion
- h. Accounts without ID/Co reg: 2 764 875 or 53% (Some accounts without IDs are linked to "parent accounts" – original debt that is handed over)
- i. Debt classified by Debtor Type is:-
 - o Government debt is 2% or R446 million
 - o Business debt is 10% or R1,9 billion
 - o Debt classified as Other (not business, residential or government) is 21% or R4,1 billion
 - o Residential debt is 68% or R13,5 billion
- k. Indigent Debt
 - o Number of indigent accounts – 236 038
 - o Indigent Debt is R474,879,466
 - o Indigent debt classified as Other Debt is R848,084,541 (duplication with indicator)
 - o Indigent identification varies: indicator on system, separate register, reflected differently, etc. and indigency seems understated on system given that Stats SA estimate 1,3m households in the province earning less than R1,600 or less per month.

The analysis of debt by Debtor Type with a focus on the Top 100 accounts within that Debtor Type by value in terms of percentage of the total debt is indicated below:-

- Residential (68% of Total Debt = R13,5bn). Top 100 constitutes 4% of Residential debt
- Business (10% of Total Debt = R1,9bn). Top 100 constitutes 3% of Business debt
- Government (2% of Total Debt = R446m). Top 100 constitutes 47% of Government Debt
- Other (21% of Total Debt = R4,1bn). Top 100 constitutes 3% of Other debt

While the 80/20 methodology of analysing and pursuing Top 100 accounts will work in the case of government debt, it is not so for the other categories of debt given the number and rand value of the accounts.

Debt Classification	Baseline Analysis	Subsequent Analysis
Residential Debt	R13,591 billion	R15,465 billion
Business Debt	R1,962 billion	R2,635 billion
Indigent Debt	R397 million	R648 million
Government Debt	R446 million	R278 million
Other Debt	R3,731 billion	R3,640 billion
Total Debt	R20,127 billion	R21,370 billion

The first progress report indicated that as at February 2007 consumer debt was standing at approximately R20,127 -billion compared to R21,370 -billion as at May 2007. Gauteng Province Debt is categorised as follows (for detail refer to Annexure A Baseline data First Progress Report and Annexure B Baseline report as of June 2007):-

Strategy for Reduction of Debt

The strategy for the reduction of debt is different for the various categories of Debt. The Top 100 methodology will work for the reduction of government debt, while a different strategy is required for non-government debt given the complexity and enormity.

The objective of the Government debt reduction strategy is to establish a method for the payment of the arrears to municipalities and to ensure that the Government account information on the municipal systems is correct to facilitate regular payment for municipal services rendered. One of the objectives of the second phase of the Programme was to resolve Government Debt - collection of debt and to ensure that government debtor database is correct to secure ongoing payments to municipalities. The Top 100 Government debtors were cleaned and submitted to



DLG and Treasury as the first submission of government debt for payment. The Top 100 Government debtors constitutes 47% of the total Government debt at R207 million.

The analysis of provincial (non-government) debt indicates that 41% of the accounts in the Province have debt older than 30 days associated to it. Is this a reflection of willingness and/or ability to pay? Or is it a reflection of poor credit control management? Or is it a reflection of poor data integrity? The answer is probably a combination of all of the above questions. This situation needs a radical change where 80% of accounts in the province should not have any debt associated with it, and only 20% of accounts should have debt of less than 60 days. Consideration needs to be given to focus on 20% of the top accounts and collect 80% of the arrears with the objective to turn the debt into a "performing asset" or contingent asset. There are many things that will need to be done simultaneously to achieve this objective.

Given the analysis of the Provincial Debt, the strategy to be followed should be to categorise the debt according to these various perspectives to enable informed decisions to be made:-

- a. Identify historical debt due to amalgamation of financial systems during transformation from over 800 municipalities to the current number of municipalities where debt cannot be verified on the system and thus needs to be written off
- b. Identify individual debt <R1,000 aged 120-days+ for write-off in terms of the cost-benefit analysis of collecting such debt
- c. Identify and monitor Top 100/1000 accounts per Debtor Type (excluding Government Debt) on a monthly basis
 - o Top 100 No filter
 - o Top 1000 Residential and/or target Residential properties with Land Values >R100k
 - o Top 1000 Business/Commercial – should be fully recovered without exception
 - o Top 100 Other – to be analysed and appropriately classified by debtor type to determine action
- d. Debt on inactive accounts appears to be a "lost opportunity" (unless handed-over accounts with only interest charges) = R2,8 billion
- e. Interest versus capital portion of debt may require interest write-off
 - o R2,7 billion or 14% of debt relates to Interest
 - o 18% of debt on Active accounts and 11% on inactive accounts is Interest (possibly administrative accumulation of debt).

Parallel to analysing the Debt from the various perspectives outlined above, it is important to note that a key focus should be on verifying ID numbers or Company Registration numbers for every account. Of the total of the 5,206,309 accounts, 47% of the accounts have ID numbers or Company Registration numbers. If 53% of accounts are without ID numbers or Company Registration numbers (note that some of these accounts are linked to "parent accounts"), then debt collection on half the number of accounts in the Province, if they have debt associated to it, will be unsuccessful because the municipality will be unable to trace the debtor. Of the 47% of the accounts have ID numbers or Company Registration numbers, the correctness of the data should be verified because incorrect and incomplete data hampers legal proceedings and debt remains uncollectible.

As recommended by Rob Peake of SAICA, a key to the high recovery of debtor balances is appropriate classification and grading of probability of recovery with an appropriate process to manage each level economically, effectively and efficiently. It is proposed that debtors be classified into one of the following categories for the purposes of debt management:-

- Recoverable debt (less than 90 days) must be aggressively pursued by finance departments
- Doubtful debt (between 90 – 180 days) must be pursued through legal means
- Bad debt to be written off



- Irrecoverable debt (undesirable to collect) to be considered as non-performing asset

As stated before, Debt accumulated as a result of indigency stands at R474,879,466 (there are 236,038 number of indigent accounts). In addition, there is indigent debt classified as Other Debt and this amounts to R848,084,541. Indigent Debt needs to be properly classified and managed. It is evident that there is no standard data convention for indigent debt: in some cases there is an indicator on the system, in other cases there are separate registers or indigents are classified under Other Debt. In comparison against external data sources, it is interesting to note that Stats SA data reflects 1.3m households in the Province as indigent based on information that these households earn less than R 1600 p.m. It seems as if indigents are understated on municipal billing systems, and it therefore stands to reason that indigent debt may be underestimated, e.g. in Mogale City there are 4,000 approved indigent accounts while there are 20,000 incomplete indigent applications. If indigent Debt is to be targeted for write-off, is this debt correctly estimated? Mogale City wrote off R2.1m indigent debt while total debt is over R500m. If indigent Debt is poorly identified, are time & resources spent on debt collection that is politically undesirable? Kungwini has handed over about 400 indigent accounts for debt collection with no result. The Province could assist by setting uniform policy and criteria for declaring indigency and ensure correct and consistent classification on billing systems, and subsidisation and write off of such debt. Consumption management of indigent households should be a priority.

MUNICIPALITY PROJECT SUMMARY

Municipal priorities vary from municipality to municipality, thus while there may be some common elements in the strategy such as the four focus areas and specifically government debt, each municipal Strategy and Implementation Plan are also unique in other aspects. The most common elements within most Implementation Plans have been the focus on Government debt, data cleaning, collection of revenue from Top debtors and indigent consumption analysis.

Each project summary in the Progress Report has been structured to report on:-

- The effectiveness of PSC's in terms of approving the Strategy and Implementation Plan, and progress with implementation activities;
- The number of data extracts and changes against baseline data as shown by the municipal dashboard;
- The training and usage of MDAM by the municipality;
- The progress with implementation activities relative to the four programme objectives;
- The summary of results to date and expected results at the end of the project.

SUMMARY OF BENEFITS BY MUNICIPALITY

Randfontein

Summary of results to date

- Collection of R650,000 in arrears on business and parastatal accounts, facilitated by notification of service disconnections;
- Collection of R407,000 from 10 schools in lieu of outstanding amount of R1.5-million.
- Submission of accounts for write-off: 18 accounts and R1.6-million; 5 accounts and R2.8-million debt for reversal of debt since these belong to Council; 16 accounts and debt of R7.8-million for disconnections; submission of R4-million for hand-over to debt collection (73 accounts);
- Submission of 30 government accounts with debt of R1.4-million for payment;
- Identified 266 properties with no valuations as potential source of additional revenue.

Westonaria

Summary of results to date

- Improved data integrity by changing debtor type on 29,000 accounts to Residential classification;
- Submission of 100 government accounts with debt of R2.3-million for payment;
- Matching of 2,099 recipients of government grants to consumers on billing system for listing as indigent household; associated arrears o R6.3-million.

Nokeng

Summary of results to date

- Identification of government accounts (no debtor type on system) and improvement from 471 accounts to 1,600 accounts with debt of just over R1-million;
- Identification of 268 properties with no land valuations as potential additional source of revenue;
- Matching of previous debtor types to current incorrect classification for correction on billing system.

Mogale

Summary of results to date

- Submission of 38 government accounts with R10-million debt for payment;
- Improved revenue through Top 100 approach including R725,000 from government departments, R2.7 million from industrial accounts and R3.6-million from business accounts;
- Identification of R2-million on liquidated and deceased estate accounts for potential write-off;
- Submission of final figures totaling R2.1-million for indigent debt write-off.

Midvaal

Summary of results to date

- Confirmed management of consumption in Vaal Marina and highlighted potential revenue losses due to low valuations; waiting for updated valuation roll to verify findings;
- Identified 106 properties where basic water charges are not levied;
- Identified 30 properties where no basic electricity charges are levied;
- Submission of 34 government accounts for payment of R2.5-million;
- Identified 6 indigent consumers through matching with the Social Grants database.

Lesedi

Summary of results to date

- Collection on Top 100 accounts of R3.5-million, including a payment of R1.3-million towards government debt;
- Submission of 21 government accounts for the collection of R700,000;
- Matching of 89% of formatted Title Deeds to the financial system – an excellent result.

Kungwini

Summary of results to date

- Submission of government debt for payment and the facilitation of outstanding debt by DWAF of R13-million;
- Preparation of submission of indigent debt write-off of R7-million;
- Identification of irrecoverable debt on untraceable accounts to the value of R2.8-million.

Emtuleni

Summary of results to date

- The results achieved in this project are a direct result of the cooperation and commitment of key members of the PSC.
- In terms of debt reduction/write-offs:-
 - Indigent Debt write off R569 million (Actual)
 - Government Debt Interest possibly in full being R 5,831,759 (Anticipated)



- Interest vs Capital Rates Interest R80 million (Anticipated)
- A further R112 million indigent write off after verification of 9024 accounts (Anticipated)
- R27 million due to incorrect billings in Libia and Sebokeng Zone 21 phase 2 (Anticipated)
- Inactive accounts with Debt less than R200 = R487,000 (Anticipated)
- Sundry Accounts being approximately 5,000 accounts with debt of R54 million (Anticipated)

In terms of increased revenue:-

- The increased Rates billing from the 288 accounts submitted where Title Deeds were located for properties with No Land Value. Value unknown to date – work in progress
- The increased rates billings for the 7,000 properties located not on GIS and not in the Billing System
- The Credit Control Actions on the 14,204 accounts with ID Numbers associated to R97 million.

City of Tshwane

Summary of results to date

In terms of write-offs:-

- Government Debt Interest possibly in full being R 1 million
- Reversal of R72 million on 2 of the Top 100 accounts no filter

In terms of increased revenue:-

As a result of additional billing of rates revenue on the properties captured into the Billing System as at June 2007 where no Land Value was originally captured. Findings and actual revenue will be reported on in the last progress report
The arrears billing of these Assessment Rates account as at June 2007 – Findings and actual revenue will be reported on in the last progress report
Housing Debt of R1,052,730 submitted to provincial Department of Housing where the account numbers provided by Provincial Housing, matched to the CTMM account numbers for 277 accounts

Ekurhuleni

Summary of results to date

Government Debt Classifications

The number of Government accounts has been reduced by 200 (from 37 900 to 37 700). Further reductions will take place once the information supplied has been processed into the financial system (for example the 931 and 221 accounts that should not be classified as Government as outlined above).

Government Debt Revenue Collection

The grouping of the approximately 2 600 housing accounts (within Gov debtors), and acknowledgement that the Gauteng Housing Department is responsible for the payment of these accounts will improve revenue on a monthly basis. For example the six largest of these Housing debtors are billed approximately R1.3 million per month. The improved revenue will therefore be the once off collection of arrears and the R1.3m every month – i.e. over R15m per year. All the necessary work has been completed (i.e. detailed reconciliations prepared) for the collection of an additional R50 million (refer detail under Gov Debt above).

General Revenue Collection

There are 225 schools (the title deed is currently in the name of The EMM) with outstanding debt of approximately R16 million. These accounts are not being paid as the title deed is still in the name of The EMM. Once the title deeds have been transferred into the name of the Gauteng Department of Public Works payment of the arrears and monthly amounts will occur. This will



amount to improved revenue collection of the R16 million once off arrears and a monthly amount in the region of R500 000.

Debt Reduction

During the month of October EMM will write off approximately R2 billion in debt.

This write off will include the following debt:

- All Gov debt with balances before May 2003.
 - All Gov debt, which prescribed before June 2004.
 - All Debtor types – Interest up to June 2004.
- The total write off in Gov debt amounts to approximately R81 million.

Consumption Efficiencies

Consumption data has been analysed and presented to The EMM in sufficient detail to facilitate the investigation of abnormal or exceptional accounts. The identification and subsequent action taken against these account holders will reduce the level of unpaid debt (and provide the resultant cost saving of The EMM's cost of sales).

COJ

Summary of results to date

In terms of debt reduction/write-offs:-

- 251 accounts of deceased persons identified for write-off with debt of R4.4 million;
- Housing Debt write-off of R22,293,225 assessment rates, capital and interest of R7,199,641 associated to 4,577 accounts for erroneously billed assessment rates;
- Government Debt Interest possibly in full being R 27,966,780.

In terms of the above, the total anticipated write offs to date is R54,590,005 (including the potential write-off of interest on Government Debt). It is also anticipated that a portion of the Top 100 accounts No Filter (all Debtor Types, Business and Residential) could be written off due to erroneous billing. These figures will be made available in the last phase of the project.

In terms of increased revenue:-

- As a result of additional billing of rates revenue on the 367 properties an increase in revenue of R1.2-million per month or R14.4-million per annum is anticipated. The arrears billing of these assessment rates on these account is R17,884,015-million.
- Potential increased collections of the outstanding debt of R27,693,003 less R966,723 for deceased individuals from the 1,468 cleaned accounts (Postal/Street Address information) is R26,726,280.
- Deposits on the 1,419 consumers where valid information was obtained based on minimum deposit of R550 per account is R780,450.
- Housing Debt of R18 million reconciled and matched to provincial Housing data.

Taking all the above into consideration the total increased revenue to date is R77,790,745.

Once the September extract is processed PSU will be in a position to indicate the actual improved revenue relating to all the properties where Assessment Rates have been changed, since the Land Valuations have been captured. It is difficult to assess or estimate these figures currently, as the number of non rateable properties is still unknown at this time.

In terms of Consumption Efficiencies:- This work has commenced and will be focussed on during the last phase of the project. Results will be submitted in the Final Progress Report.

PROVINCIAL SUMMARY: MAJOR FINANCIAL SUCCESS TO DATE



- Data cleaning in Emfuleni has resulted in R568m being written off in June 2007 (indigent debt), and further R200m to be written off in current FY (administrative/fictitious debt)
- R4m written off in Midvaal (illegal rates raised by old EGSC)
- *Mogale:*
 - R2m identified via data cleaning for collection
 - R17m identified for write-off
 - R4m pm on average since July 2007 cash into municipality from specific project intervention (government, industry, business)
 - Currently working on unallocated credits (R6,4m)

FINANCIAL BENEFIT TO DATE

To date Gauteng has received benefit of R568m, with another R208m about to be realised for a cost of R9m.

**ANNEXURE 2**

Limpopo Department of Local Government & Housing: Revenue Enhancement Strategy Development Project in 6 Local Municipalities (Jan – June 2007)

On 4 January 2007, the Limpopo Department of Local Government and Housing awarded a tender to Public Services & Utilities International (PSU) to develop revenue enhancement strategies for 6 local municipalities over a six month period. The municipalities, which are all rural, have a low revenue base and very limited resources and are supported by Project Consolidate – the municipalities are Bloubaerg, Greater Letaba, Lepelle-Nkumpi, Makhado, Maruleng, and Thabazimbi.

Financial and customer data from the municipalities billing systems was used to do a status quo analysis. The Municipal Data Analysis Model developed by PSU was used to electronically extract complex data sets from each municipality's database to establish a baseline understanding of each municipality's customer, billing, service delivery and consumption statistics. The data analysis was complemented by in depth interviews with municipal officials, especially those responsible for revenue, to gain more insight into the findings. The findings and recommendations, especially those recommended for immediate action were relatively similar for all the municipalities and could generally be categorised as follows:

Table 1: Key Findings and Recommendations

	Finding	Recommendation	Advantage
Institutional	Key policies, bylaws, tariffs absent	Draft, implement	Legalised enforcement
	Vacancies/under-capacity of key staff	Fill vacancies, training	Effective service delivery and Revenue Management
	No Service Level Agreements for Water Services Provision status	Finalise SLA with District Municipalities	Legal Clarity on Water Provision
	Few staff trained on billing system	Train staff on billing system	Data Integrity/ Data Current
Billing Environment	Satellite offices with manual capturing	Electronic linkup	Errors eliminated
	Masses of returned bills	Ensure Post Office delivers	Reduced revenue loss
	Corrupt Data, no system indicators (ward, indigent, active/inactive, etc.)	Data cleansing, activate indicators	Data Integrity: Improved management of accounts and debt
	High Customer Debt (all categories)	Manage Debt: Write off irrecoverable debt; Collect the rest	Improved debt profile; borrowing capacity



Service Delivery	No indigent management	Register credit indigents, discounts, manage consumption	No indigent debt; Services to poor; no unaccounted for services; Accurate Equitable Share Grant allocation
	Large areas unserviced	Planned roll out (DPP)	New customers = new revenue
	Low levels of service/unreliable	Increase service levels and reliability	Customer satisfaction

The implementation plan for this project (Phase 1 of a turnaround strategy) specified that issues contributing to unsatisfactory performance and high debt would be identified and recommendations for improvement would be provided. It was intended that this project would be followed by a second (Phase 2) project which would entail the implementation of the Revenue Enhancement Strategy for each municipality. However, once the Limpopo DLGH Project Consolidate managers, Mr. J Mohlala and Ms. Kokela Sillimela understood the issues, they realised that municipalities should start implementing some of the recommendations even before Phase 2 was launched – “these strategies should not be filed away in drawers, we should find the resources to implement them speedily” said Mr. J Mohlala, Senior Manager, Project Consolidate Limpopo Province. This insight by the Limpopo Project Consolidate leaders yielded some extraordinarily good results in a very short time - these initial achievements of the projects are summarised below.

Achievements of the Project

The managers of the different municipalities were impressed with the analysis of the revenue data and development of strategies, and were also very pleased that they could see immediate results from implementing elements of the strategy themselves.

Immediate results in Thabazimbi were that the municipality was able to identify water losses valued at R4m per month and collect an amount of R2m as a result of targeted debt collection among Top 100^o debtors. Mr R Nkomise, the Municipal Manager sums up the benefits in saying that “we appreciate the intervention of the Province and the work of highlighting the issues that can improve our municipality’s performance.”

Mr. Reuben Radziani of the Makhado municipality notes that “we have already started converting each strategy into an implementation plan” and as a result embarked on a system cleanup, installation of new meters and advancing the “Top 100” debtors to collectors.

Similarly the Blouberg municipal manager, Mr. N. I. Makhura, said that he is “very impressed with the analysis and presentation of the Revenue Enhancement strategy for Blouberg, all that remains is implementation.” Blouberg has been able to reduce its debt figure by R8.4k per annum as a result of having incorrectly billed R1 per stand per month; the municipality has collected R3.9m by targeting a few of the “Top 100” debtors with R2.1m debt referred to debt collectors.

The Lepelle-Nkumpi municipality has embarked on an awareness programme on water consumption and payment; meter audits and updating the billing system – in the words of the CFO Veronica Choshane “PSU has given us a well presented analysis and a clear way forward on the issues we need to address.”

Immediate results in Greater Letaba have been the reduction of debt by R5m due to the correction of an admin/data error identified in the strategy development process, an



improvement in collections amounting to R 108K was achieved by targeting “Top 100” debtors. The municipality is now targeting the collection of R 5.1m Government debt.

The process of revenue analysis and development of Revenue Enhancement Strategies provides insight into the potential of rural municipalities to improve revenue management and thus contribute to financial viability through sustainable “own-revenue” streams. It also demonstrates the benefit of provincial support to municipalities as part of Project Consolidate. The level of commitment from the provincial and municipal managers in driving the project, and especially the implementation of particular actions during the duration of the project is a good example of how best to use expertise from the private sector to gain immediate financial results – the cost of the project was R2.1m and by the end of the project the municipalities had already collectively gained a total financial benefit of at least R11 m.

However, PSU has warned that *ad hoc* implementation of the strategies can lead to short term gains and failure in the long term. This is because the effective implementation of a revenue enhancement strategy requires the underlying causes of low revenue and high debt to be addressed. Thus debt collection, for example, should be one of the last issues to be tackled once the root causes of debt escalation have been dealt with. The root causes are a combination of institutional, technical, financial, IT and communication/education – with data integrity on the financial system proving to be a good way to start addressing this mammoth task.



ANNEXURE 3

Dr J S Moroka Local Municipality - Municipal Water Billing Project

Dr J S Moroka Local Municipality is situated in Mpumalanga, north east of Tshwane and is located within the Nkangala District Municipality. The population is estimated at 243 330, or 54,500 households, living in 70 villages. This is a rural municipality with a mixed water services delivery network: water is typically provided daily to remote communities and schools by means of water tankers while formalised R293 towns and surrounding communities enjoy reticulated water. According to the 2001 Census, 85% of the households live in formalised dwellings and the average household size is 4.5. More than 50% of households have access to water services through a yard or house connection. 67% of households were reported to earn less than R800 per month and just over 80% of households earned less than R1600 per month.

Siyabuswa is a former R293 town with Ga-Phahla immediately adjacent to it – a village in the former trust area of Kwandebele. Siyabuswa has a formal layout of about 9,000 stands and Ga-Phahla is informally planned with 1,700 stands and both constitute about 20% of the municipal area. In 2004, the municipality faced a consumer debt of about R36-million some of which dated back several years. At the time residents were billed at a flat rate for water services while consumers preferred being billed for actual usage. Council accepted this challenge by implementing the Premier's Special project which entailed the installation of water meters in selected areas. Following this project all meters had to be activated on the billing system and a separate initiative was approved by Council in 2004 which comprised a customer registration process as well as meter audits in Siyabuswa and Ga-Phahla, in order to move away from flat-rate billing to consumption billing to improve the payment rate of the municipality. Several constraints hampered the completion of the implementation of consumption billing, notably the poor quality of the data already on the system.

At that time, Project Consolidate was announced nationally for which a number of pilot sites had been identified across the nine provinces. Dr JS Moroka municipality was the only pilot site in Mpumalanga and, understandably, did a lot of preparatory work during 2005 which finally resulted in the approval of a **water consumption billing project**. Municipal efforts were further supported by the billing service delivery facilitator (SDF) deployed by ddg in the municipality. The way in which Council accepted this support and integrated Ms Eda Visser into the management structure provided further impetus for their achievement of the project objectives.

The project focused initially on two areas to coincide with the previous work done under the Premier's Special project and the MLU-funded meter activation project with the understanding that this would pave the way for the rollout of consumption billing into other areas once the first phase had been completed. The billing project, as it became known, comprised extensive data cleaning on the billing system and preparing the billing system for consumption billing. In order to ensure the successful rollout of the new billing, a number of complementary projects were necessary such as water conservation initiatives, a new arrears payment system to encourage future payments from consumers, targeted credit control on business and government accounts, an extensive indigent registration process and an improvement in waste management services.

Various service providers who shared the same vision we employed to implement the municipality's projects. PSU International assisted in the implementation of the billing project. The employed eight local people for 10 months; trained them in the art of meter reading and meter management and deployed and supervised them for a six-month period while introducing and entrenching consumption billing processes and procedures. The billing system vendor (Munsoft) was also engaged in the process to ensure that the billing system was correctly setup. A non-negotiable component of the implementation of this project was the registration and



approval of indigent consumers. Deloitte had assisted the municipality in crafting a credit control and indigent policy which was approved by Council just days before the indigent registration process commenced.

Apart from professional assistance, a considerable amount of support was given to the various projects from Council. The Mayor had several opportunities on radio to explain the rationale of the various initiatives. Councillors were taken on board through regular feedback sessions and became so familiar with the projects that they continually asked for an update on progress. Communication material was carefully designed and distributed at intervals to consumers to inform them of the pending changes and the process that would be followed prior to implementation of the new billing system.

What was the final result? The clean customer database was compiled by doing a house-to-house survey using local people (in excess of 25 local field workers were utilised in various functions) who were trained on how to conduct the survey. This was started in 2004 and completed during 2006. The benefits of doing it in this way were that local unemployed people got a chance to earn money and gain some skills; 2,000 new customers were put onto the database and about 8,000 consumer records were checked and corrected on the billing system; indigent registration was part of the process and about 20% of households were approved as indigent which resulted in the write-off of approximately R8million in the 2006/7 F.Y. The indigent verification process was done in accordance with Council policy which involved Councillors, ward committee members, community development workers (CDWs) and other leaders. All eight meter readers were absorbed into the municipal organisational structure based on the initiation and participation of the HR department in the entire recruitment process. These staff members are multi-skilled in that they the experience to expand the customer registration process to other areas where customer verification is required; they are conversant with the billing system and manage their own work with minimal supervision.

Consumption billing was finally implemented from 1 October 2006. The first bills were distributed at the beginning of November after the highest consumers (600 in total) were notified in writing during preceding months of their exceptional consumptions and to encourage water conservation through managed water usage and general upkeep of internal plumbing. Dr JS Moroka has, therefore, proven that even a very rural municipality can move away from the flat-rate water billing to providing consumption billing thus improving the municipality's financial viability. Billing has increased from about R500,000 in 2004 to close to R1-million per month at the end of 2006 and the percentage payment increased to a high of 54% compared to a 12% payment rate in 2004. An investment (project cost) of about R2,3 million over 3 years, effective strategic management by Council, the active involvement of ward councillors and sufficient time for planning and implementation were the key ingredients that made the recipe for success.



ANNEXURE 4

Matikeng Municipality Revenue Enhancement Successes

In 2005 dplg, FNB Public Sector Banking (FNB) and Public Services & Utilities International (PSU) entered into a Memorandum of Understanding (MOU) to provide an initial analysis of the state of revenue for the Project Consolidate pilot sites in order to highlight problem areas with their billing data and pinpointed areas where revenue enhancement programs should be introduced. The focus of the private sector partners was targeted at providing assistance in the area of billing and revenue enhancement. Matikeng Municipality is one of the Project Consolidate pilot sites.

It is widely accepted that inaccurate or incomplete data within Municipal financial systems contributes to poor financial management. Poor financial management in turn leads to lost revenue.

Matikeng Local Municipality, in association with PSU International (a company that specializes in assisting the Public Sector with improving data integrity), has made enormous improvements in their revenue streams over the last 12 months. By employing a sophisticated approach to their "data cleaning", Matikeng has developed a methodology which has significantly improved their cash flow. Inaccurate data has been identified and subsequently rectified in the financial system. Incomplete data has also been identified and subsequently added to the financial system. Both these initiatives have resulted in improved cash flow.

Improved reporting functionality has provided the basis for improved accountability. For example debtor information, by ward, has ensured that Local Councilors have sufficient information with which to assist in the process of improved payment levels. As is the case of any successful project, Matikeng's success has only been possible due to the coordinated commitment of all parties in the process. These include the Council, Council staff and various service providers. The process will be on going but the improved revenue flows should enable the Municipality to constantly strive to improve and extend service delivery.

Examples of Improved Billing (facilitated via detailed interrogation of financial data).

- Property Owners (previously not being billed for sewer) now being billed R49 930 per month.
- Property Owners (previously not being billed for rates) now being billed R75 847 per month.
- Whilst the monthly amounts may not seem material, when extended over a period of a year the above two examples could improve revenue by up to R1,5m per year.



ANNEXURE 5

MATJHABENG MUNICIPALITY REVENUE MANAGEMENT PROJECT

Background

PSU International was appointed by Matjhabeng Municipality as per a letter of appointment dated 5 September 2006. Our appointment carries strength especially in light of PSU International's Memorandum of Understanding that was concluded with DPLG and First National Bank (FNB) in support of the objectives of Project Consolidate. This report summarises the activities that were undertaken, the achievements that were reached and areas where further engagement is necessary in order to establish a sustainable revenue enhancement environment.

Project Scope

The scope of work was determined after analysis of the data and discussions with management about strategic focus areas were carried out. Leaving the scope of work open ensured that there was space for constant reporting and discussions to take place. These discussions ended with a commitment to improve revenue. Frequent data extractions helped to make the reporting more meaningful and the full-time resource on site also contributed to the success of the project.

Main Deliverables

In collaboration with the acting CFO we identified areas of concern whereby action needed to be taken. Upon analysis of revenue data and the annual budget for 06/07, the following critical items were identified for the project:

- The water distribution losses of 40%;
 - Indigent's billings and water consumption;
 - Active arrangements;
 - Payment ratios per wards/services which will help with the collection process;
 - Comparing meters that have been read by Khawuleza (an external meter reading company) to the information on Venus; and
 - Comparing data from the deeds office to data on Venus.
- Water distribution loss:** We started off by placing consumers into three categories, namely:
- Consumers with negative consumption;
 - Consumers with zero consumption; and
 - Consumers with consumption between 1 and 6kl per month.

The three categories represent 36% (24,018 meters) of the total water meters (66,612) read by Khawuleza. More than 7 000 meters display zero consumption which means that either they are by-passed, are old and need to be replaced or are not read. The distribution loss was nearly 40%. The average kiloliters purchased for 2006/2007 is 2,641,748 kiloliters and the average kiloliters billed for the same period is 1,526,308 kiloliters. This amounts to an average distribution loss of 42.23%.

The average water bill for Sedibeng water is R8,500,000 per month. Given that there is a distribution loss of 41% (water that's not billed for) and an annual average payment ratio of only 62%, it is evident that Matjhabeng does not collect enough cash for water services to cover the monthly water bill of Sedibeng. The loss of billed revenue amounts to more than R50 million for the 2006/2007 financial year.

Details of the three categories extracted were sent to the engineering department for investigation and produced positive results in March 2007. The total percentage of meters in the three categories dropped from 36% (24,018 meters) to 30% (20,355). This resulted in 6% more meters



(3,663 meters) that have been billed for 7kI and more. Meters with negative consumption readings normally arise from incorrect billing from the previous month and are thus billed as negative.

Indigents: Currently there are 29,415 registered indigents on the billing system with a billing of R7.8 million per month and a payment ratio of 9%. Only 70% (20,644) of registered indigents have water meters of which 57% (11,755 indigents) consume more than 6kI of water per month. Based on the water consumption of 7kI and more per month Matjhabeng can save R1million per month by managing the consumption levels of indigents. As at the end of May 2007 only 49% of registered indigents received a subsidy of between R66 and R110 per month. The outstanding debt for indigents accrued with nearly R7million per month, which is nearly 40% of the total debt per month.

Arrangements: Consumers are allowed to make arrangements on outstanding debt over a specific period of time subject to certain conditions. One of the conditions is that the current billing must be paid monthly. At the end of June 2007, there were 9,603 arrangements made of which only 35% (3,439 accounts) received payments. Only 53% (1,902 accounts) of the 35% paid the billing and arrangement amounts. If these arrangements are followed up on a monthly basis and the period reduced to the original period according to the contract the cash flow will increase with R4 million per month. During April 2007 one official focused on arrangements for ten days and managed to collect R110,000 from 300 debtors as a result.

Payment ratios: Payment ratios per ward as well as payment ratios per service are used as a tool to guide the collection section as to where action should be taken and on which services such action should be made. As at the end of June 2007 electricity was the only service in Matjhabeng that met the budgeted standard of 85% payment ratio. The core source of revenue and assessment rates was running on an average payment ratio of 69%. This is 16% lower than the budgeted rate of 85%. From July 2006 to June 2007 Matjhabeng collected R110 million less cash than what was budget for. This resulted in a cash flow deficiency with no resources to finance the shortfall.

Comparison of meters: We started in March 2007 by comparing the unprocessed data received from Khawuleza with the meters on Venus. The purpose of this exercise was to identify meters that were on Venus that have not been read by Khawuleza and to identify meters that were not on the Venus system. Based on the March 2007 data extractions received from Khawuleza, 1,790 meters were not read by Khawuleza and 5,681 meters could not be linked to the information on Venus. This implies that 5,681 meters could not be billed for either water or electricity. This information is channelled to an official in the finance department who deals with meter readings and from there the engineering department conducts an investigation.

Deeds data: After comparing data extracted from the deeds offices with Matjhabeng data, we identified more than 9,000 stands that could not be matched. Only 16% (1,561) of the identified stands are registered in the name of Matjhabeng Municipality, which means that 84% of the identified stands are registered to either private persons or companies that are not billed for. The potential loss of income per month, based on rates only, could amount to R1.2million (calculations are based on R180 per stand).

We started off with Allanridge and Confido plots and identified 932 that could not be matched. Most of the stands in Allanridge are vacant stands registered in the name of the municipality. These stands will not have any effect on billings or cash flow but will contribute to the future development thereof. The stands need to be captured on the debtors system and asset register. All the owners on the Confido plots are captured on one stand with only one valuation. According to the deeds office there is a sub division of the stand into 20 units, which will need to be valued and captured on the billing system. Value will be added to the monthly billing and cash flow. Officials are currently updating the billing system.



Supporting Activities

Through our pro-active approach to the project several issues were identified and the following ad-hoc management support was undertaken:

i.

Section 71 report: We committed ourselves to providing the debtors data that would be necessary to complete the Section 71 report on a monthly basis, before the end of every month. The data consists of payments per ward, billings per ward, payment ratios per ward, number of registered indigents per ward, total billings, total payments, top 100 debtor's accounts, ageing for the top ten debtor's accounts, ageing by debtor type and ageing per service.

ii.

Early warning financial indicators: We looked at five financial indicators to help and guide management in decision-making processes.

a) **Debt management:** This is one of the biggest problem areas in the council and we thus focused on specific aspects of the debt.

Increase in debt as a percentage of the total billing: In July 2006 the increase in debt was 32.99% as compared to 0.80% in May 2007. The decrease from 32.99% to 0.80% can be ascribed to a R200 million debt that was written off in April 2007.

Increase in debt as a percentage of the total outstanding debt: This indicator provides an indication of the percentage of debt that is growing. For the first six months the average increase in debt was 1.44% per month. The increase for June 2007 stands at 2.44%

Increase in debt as a percentage of the monthly billing: The calculation reflects the non-payment percentage of the monthly billing. The non-payment portion of revenue usually represents the provision made for bad debt in the budget. If the non-payment percentage is higher than the provision made for bad debt, council can run into cash flow problems. Currently the non-payment percentage is higher than the provision made for bad debt.

Debt exceeding 90 days: This provides a clear indication of the effort put into collecting outstanding debt before 120 days. Between December 2006 and January 2007 the debt exceeding 90 days increased by more than 3%. For the month of June 2007, 82% of Matjhabeng's total debt exceeded 90 days.

b) **Debt and grants:**

Debt collection period: We looked at the debtors in total and based our calculations on the total outstanding debt in relation to the total billed over a specific period. In July 2006 the debt collection period was 448 days, as at the end of June 2007 the collection period for debt was 504 days.

Grant dependency: For operational activities Matjhabeng depends on 17.20% grants (equitable share) and an 85% payment ratio to meet the day to day expenses. A drop in any one of these percentages will result in a cash flow shortfall. The capital dependency rate on grants was 79%. Matjhabeng will be financing the remainder 21% from surplus funds generated by operational activities. Any drop in the payment ratio will have a direct effect on capital expenditure financed by Matjhabeng.

c) **Cash management:** This is purely an indication of the bank balance per month and the percentage of the overdraft facility utilized.

d) **Creditors:** This is a critical area to manage. Any negative movement in the cash flow will reflect in the creditors. A drastic drop in the creditors payment percentage and an increase in the creditors turn-around time (days) will imply a



- negative movement in cash with limited or no significant steps to reducing expenditure. No reporting could be done on creditors due to the inadequate and inaccurate data available.
- e) **Staff cost:** The norm for municipalities that provide for staff cost as a percentage of total operating expenditure, is 35%. Matjhabeng budgeted for 36% and it is of utmost importance to maintain the budgeted percentage. It is extremely difficult to reduce salary costs, especially in local government. In June 2007 Matjhabeng ran on a rate of 45%, which will have a negative effect on cash allocated for day-to-day expenses
- iii. **Outstanding debt:** This is one of the areas where we tabled a variety of monthly reports. Combinations varied from outstanding debt by debtor type, service, ward and by suburb. Ageing was added on every report from current up to 300 days plus. We also included or excluded the indigents. These reports were utilised to determine where the biggest percentage of outstanding debt accrued in the suburbs, on services, in wards and by debtor types. These reports guided management in the collection process.
- iv. **Matjhabi and Associates:** DPLG appointed Matjhabi and Associates to investigate ring fencing water and electricity services. The acting CFO asked us to assist with the necessary information needed to carry out this investigation. We provided them with a variety of reports on these two services. The information extracted from our data model was copied to an Excel format to enable them to produce their own reporting format. Information needed was made available within a day. The following reports were compiled:
- Water and electricity consumption from September 2005 up to the date of extraction.
 - Consumption per suburb and debtors type.
 - Billings and payments per suburb and debtors type.
 - Ageing per suburb and debtors type.
 - Payment ratios for all the periods.
- All our reports were combined in the final report tabled to council.
- v. **Viability study:** The study served as a guide for management whereby areas were identified for action and improvement. We conducted a viability study on the 2005/2006 financial statements. Areas of concern for the period under review were debtors movements, staff cost as a percentage of gross expenditure, bulk purchases and salary costs as a percentage of available cash and funding options employed for net current assets.
- vi. **Debtor balances after transport of property:** More than R10 million is still outstanding on accounts after transport of property is taken into account. We compiled a detailed list of accounts with ageing up to 300 days plus, that needs to be attended to.
- vii. **Disconnection of services:** After the festive season in December 2006 Matjhabeng's payment rate dropped to below 60%. Drastic action was needed and it was decided to focus on water, electricity, government debt and the top 800 business accounts. All of these reports were compiled from the PSU model and used in the disconnection process with excellent results. The payment ratio for water increased from 52% in December 2006 to 70% in January 2007 and 79% in February 2007. Electricity increased from 64% in December 2006 to 102% in January 2007. The cash flow improved with R18 million from December 2006 to February 2007.
- viii. **Motla Engineering:** Matjhabeng decided to do a meter audit of the top 100 electricity consumers based on the average consumption for the last six months. Motla Engineering was appointed to do this. We assisted with the process by extracting the top 100 consumers for electricity based on average consumption for six months. We also provided Motla with the stand number, physical addresses, meter numbers and meter types. Motla is currently busy with the audit.



- ix. **Top payers for businesses and residences:** This report was compiled on request from the mayor. The purpose of the report was to thank the consumers for the positive way in which they managed their municipal accounts. We based the report on monthly payments for billings with zero outstanding balances for the last six months. Only 17% (1,518 accounts) of businesses and 10% (9,665 accounts) of residences could be identified. Nearly 90 % of the debtors defaulted on payment for the six month period.
- x. **Government and education:** As per a request from the manager of revenue service, we conducted an extraction of all the accounts for educational and government departments in Matjhabeng. The extract included billings per service per month and payments for the period December 2005–November 2006.
- xi. **Stats SA:** We provided the information requested by Stats SA on the 2005/2006 financial year as well as quarterly information for September 2006, December 2006 and March 2007. Information was extracted from the financial statements compiled for the 2005/2006 financial year as well as from the final trail balances for June 2006, September 2006, December 2006 and March 2007. Special programs were written to provide the information needed.
- xii. **NER:** Municipalities are compelled to apply to the National Electricity Regulator (NER) for approval of any increases in electricity tariffs. The acting CFO asked us to assist them with extracting the necessary information for completion of this application. We compiled the balance sheet and the income statement for the period 2005/2006. Given that the information for the financial year 2006/2007 is available on the PSU data model, Matjhabeng will easily be able to provide the consumption information needed. Currently it is taking them more than a week to extract the data.
- xiii. **Outstanding debt for water and electricity:** This report is tabled monthly before the finance committee. The content is based on outstanding debt of 30 days and older for water and electricity per ward and excludes all the other services. We included detailed information to assist officials and councillors in the collection process. Since they started to focus on water and electricity services the payment ratio for water increased from a 56% average for the first six months of the financial year to 71% for the last six months.
- xiv. **Collection via the GIS system:** Matjhabeng used the GIS system to identify areas in Matjhabeng where outstanding debt exceeded R10,000. The areas identified were combined with detailed information on the debtors and was used in the collection process.
- Constraints**
- The project was constrained by the inability of officials to be proactive in certain identified areas. The reasons could be ascribed to deficiency in capacity and to inexperience. It is important that staff become involved in the strategic initiatives of municipalities. Such initiatives start at senior management level and filter down to middle and lower staff levels.



Summary

Identified Area	Results		Added Value per Month		Added Value for a Year	
1 Water Distribution Losses						
Number of meters identified with Zero Consumptions	7664					
Number of meters identified with consumptions between 1 and 6 kl	19984					
Number of meters identified with consumptions based on a 60% improvement from 0 to 20 kl per meter:	4598					
Added Value on meters with consumptions between 1 and 6 kl based on a 60% improvement from 6kl to 16 kl per meter:		R	799,201,92	R	9,590,423,04	
	11990	R	1,041,965,76	R	12,503,589,12	
Sub Total			R1,841,168		R22,094,012	
2 Arrangements						
Number of Arrangements	9603					
Payment Ratio on monthly billings	31%					
Payment Ratio on arrears amounts	0,66%					
Sub Total			R4,752,433		R57,029,196	
3 Payment Ratios						
Average payment ratio first 6 months	63%					
Average payment ratio last 6 months	66%					
Added Value due to improvement in the collection process and focusing on specific problem areas	3%					
Sub Total			R1,563,957		R9,383,740	
4 Comparison of Meters						
Water meters not read by the meter reading company	767					
Water meters not billed	4,966					
Added Value: Meters not read value based on 20kl per meter	767	R	R133,305	R	R1,599,655	
Added Value: Meters not billed value based on 20kl per meter	4,966	R	R863,091	R	R10,357,090	
Sub Total			R996,395		R11,956,745	
5 Deeds Match						
Stands with no matching erf key on the billing system: Allamridge and Confido Plus	932					
Added Value: For services based on R500 per stand	932					
Sub Total			R466,000		R3,592,000	
6 Indigents						
Indigents consuming more than 6 kl water per month	10,090					
Added Value: By managing the water consumptions of indigents consuming more than 6kl per month	10,090					
Sub Total			R1,000,000		R12,000,000	
Grand total			R10,619,953		R118,010,693	



Project Finances

Project billing has been as follows:

Item	Amount
Rental of equipment Sept 06 – Sept 07 (MSIG)	R466,000.00
Data extract for ten months (MSIG)	R684,000.00
Full time PSU resource and management support, Sept 06 – July 07 (MSIG)	R1026,000.00
Subtotal	R2,166,000.00
Extension of contract up to 31 July 07(MSIG)	R51,300.00
Grand total of contract	R2,217,300.00

Recommendations

Following our support ending July 2007, we identified several areas that should be attended to in order to improve the financial sustainability of the municipality. It is recommended that these areas form the basis of work for the 2007/2008 financial year.

- Improve the water management environment in order to reduce distribution losses of more than 40% per month and increase the monetary value of the water service.
- Develop a management framework for the administration and collection of outstanding recoverable debt; and focus on payment levels for all services.
- Conduct desktop data cleansing by focusing on the key components whereby revenue could be enhanced.

Conclusion

The objective of this project was to establish a sustainable revenue enhancement environment. We did this by focusing on payment levels per service, outstanding recoverable debt and water consumption behaviour so as to reduce bulk losses, deal effectively with arrangements on outstanding debt and to address other areas of concern. This project has laid a sound foundation for the further development and expansion of the revenue environment.