

## INVESTIGATING CAPACITY SELF-ASSESSMENT AS A CATALYST FOR IMPROVED MUNICIPAL SERVICE DELIVERY

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### ABSTRACT

In recent years, the South African government has experienced significant changes in policies regarding service delivery. These changes gave prominence to the entire transformation of local government in South Africa as the new Constitution of South Africa holds a separate chapter for local government. With the enactment the Constitution, local government became an essential mechanism for the eradication of significant service delivery backlogs and therefore it is central to the transformation process of what is generally termed the new South Africa.

Municipal service delivery includes the planning, engineering, financing, implementation, maintenance and operation of municipal infrastructure. According to Lawless (2007), the municipal engineering function plays a primary role especially during the delivery of six basic municipal services, including water, sanitation, electricity, refuse removal, municipal roads and stormwater management. Longstanding service delivery backlogs serve as evidence of the underperformance of the engineering function at South African municipalities. A range of causes has been cited as contributing to this underperformance, with management skills, leadership and engineering capacity identified as crucial. PDG (2012) indicates that a disproportionate relationship is manifested between the performance of a municipal and its leadership, while organisational capacity has a more direct and constant effect on municipal performance.

Nationally, municipalities are experiencing a significant shortage of organisational capacity. In relation, numerous external governmental capacity building initiatives, of which many were specifically focused on municipal engineering capacity, have been instigated. The majority of these initiatives however have been ephemeral with little impact.

Crucial to any capacity building initiative, stands the process of capacity assessment. Existing capacity assessments, as enacted by the Municipal Demarcation Act, Municipal Systems Act and Municipal Structures Act, are described as insufficient as it assesses organisational capacity merely at the end of a performance timeframe, such as the financial year. These assessments are also performed at insufficient levels of detail. The United Nations Development Programme (UNDP) suggests that in depth pre-year and regular in-year capacity assessments are necessary to aid performance and performance management processes at municipalities.

Numerous investigations have cited many advantages with regards to the use of self-assessment tools. Recent studies suggest various opportunities embedded in frequent self-assessment of municipalities' organisational capacity. This research paper reports on organisational capacity self-assessment as a catalyst for performance improvement of the engineering functions at South African municipalities. The objective of the research is to design, build and test a municipal organisational capacity self-assessment model. The aim of this research is to provide a management tool with a focus on management, leadership and engineering capacities of municipalities.

### 1. INTRODUCTION

Municipal service delivery in South Africa is currently characterised by corruption, maladministration, general underperformance and major longstanding service delivery backlogs with the consequence of

frequent and violent service delivery protests. Recently (2012), the number of service delivery protests has reached a new culmination which now significantly pressures underperforming municipalities (Heese, 2012). This underperformance can be attributed to the lacking organisational capacity of municipalities.

This paper refers to general municipal service delivery performance and capacity in South Africa, the role of the engineering functions during the delivery of the six basic municipal services (water provision, refuse removal, sanitation services, electricity provision, municipal roads and stormwater management) and the possibilities which exist when performing pre-year and frequent in-year municipal capacity self-assessments. The aim of this paper is to acknowledge and emphasise the role of capacity assessments as a catalyst for the necessary performance improvement of the engineering functions of municipalities, which according to Lawless (2008) remain a key municipal function for improved service delivery.

This paper follows a clear logic chain, as described above and concludes with the proposing of a solution – an Excel-based municipal capacity self-assessment model which will be implemented and tested at municipalities during September 2013 at various municipalities in the Western Cape.

### 2. MUNICIPAL SERVICE DELIVERY PERFORMANCE AND CAPACITY

#### *Municipal Service Delivery Mandate*

The main objective of municipalities, according to the Constitution, is to provide effective and sustainable services to their respective communities. In order to provide such services, a municipality must perform certain functions. The provision of municipal services is therefore dependent on the ability to perform these specific functions (Beklink, 2006).

The provision of water, sanitation, electricity, solid waste removal, municipal roads and stormwater management at a basic service level qualifies as these basic municipal services (CoGTA, 2011). For each of these services, different service levels exist, which are generally categorised either as basic, intermediate or full level (Lawless, 2007). Municipal Service delivery targets are therefore usually set in terms of quantifiable outputs, such as the number of household receiving the six basic municipal services at the various service levels.

The 2011 South African Census indicates that, despite a decrease in service delivery backlogs over the past five years, many South African households are yet to receive basic municipal services. This, however, occurs despite the provisions in the Constitution and a battery of policy measures relating to local government, which have been adopted with a view to provide democratic, participative, responsive, efficient and effective government at local level (Siddle, et al., 2012). Unquestionably, municipalities are struggling to fulfil their service delivery mandate. Statistics with regards to these significant backlogs are shown in the table below.

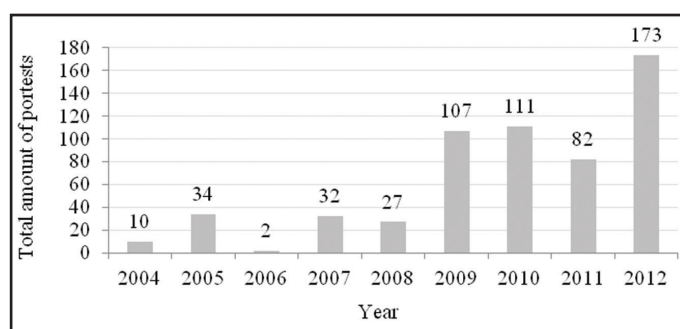
**Table 1: Backlogs of Basic Municipal Services in South Africa (2012)**

Type of Basic Municipal Services	Number of South African households	Households receiving below basic level of services	% Backlogs
Water Provision	14 450 133	2 167 520	15.0%
Sanitation Services	14 450 133	3 843 735	26.6%
Electricity Provision	14 450 133	3 401 838	26.1%
Refuse Removal Services	14 450 133	4 998 787	37.9%

### Municipal Service Delivery Protests

As a consequence of the aforementioned municipal underperformance, regular service delivery protests occur in South Africa. As such, service delivery in recent years has been typified by violent mass protests, demonstrations and petitions. Costly and difficult responses by communities resorting to protests have become a characteristic feature of citizen's response when Local Governments fail to show reaction to community needs (Heese, 2012). Considering community needs and their expectations with regards to municipalities' attempts to fulfil its mandate, useful insight can be drawn from the vast amount of protest which has occurred in South Africa since 2004 (Afeis-Corplan, 2011).

Figure 1 shows how the frequency of community protests has significantly risen from 2004 to 2012. During 2012, more protests had occurred than in any of the former eight years.



**Figure 1: Major Service Delivery Protests by Year (2004-2012)**

Evidently, unsatisfied communities in South African are becoming increasingly impatience and frustrated by the delayed delivery of basic services. Heese (2012) notes that while service delivery protests have become extremely violent, these protests predominantly occur as communities demand better access to basic services, with over 40% of protests demanding better access to housing and water.

### Municipal Service Delivery and Organisational Capacity

Based on the previous sections, questions can be posed around the state of South African municipalities' organisational capacity as an enabler for the delivery of municipal services and the eradication of backlogs. Various role-players in the public domain, including governmental departments, such as the National Treasury and research institutes, and the Council for Scientific and Industrial Research (CSIR), suggest that it remains uncertain what resources and organisational capacities attribute consistently to municipal performance in terms of its service delivery processes.

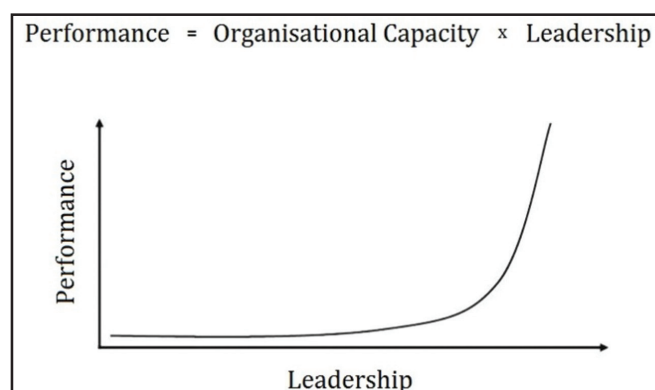
Relating to this, Lawless (2007) identifies the shortage of individual capacity, specifically regarding engineering resources, at municipalities as the main cause of municipal underperformance. Lawless (2007) alludes that high vacancy levels, lack of strategic leadership, poor management practices and limited budgets have significantly hampered the process of service delivery. Lawless (2007) states that, within the administrative structure of municipalities, municipal managers, functional managers and support personnel are also perceived to be lacking the requisite knowledge and skills for effective management practices.

Relating to this, Lawless (2007) and Macleod (2007) argue that engineers, and specifically civil engineers, remain the fundamental resource for municipal service delivery and thus also the eradication of service delivery backlogs. The motive for this is merely the conformity between the skills and knowledge required for municipal service delivery and that which are held by civil engineers. Considering the lack of adequate municipal engineering capacity and current municipal underperformance,

Lawless (2007) states that these two aspects relate very closely to each other.

Another approach to analysing municipal performance is evident in statements of the MDB (2010). The MDB (2010) believes that municipal performance is not necessarily reliant on a combination of many attributes, but it significantly relies on the less measurable and more ethereal realm of leadership and management practices. According to the MDB (2010), the way municipalities are led and the quality of decisions made by leaders and managers evidently have more of a direct effect on performance than numbers of staff, expenditure, experience and compliance with qualifications requirements.

Combining the above insights, Palmer Development Group (PDG) suggests a relationship which exists between the organisational capacity, leadership and performance of a municipality. This relationship is shown in Figure 2, below. It shows the disproportionate effect of leadership on municipal performance.



**Figure 2: Relationship between Leadership and Performance**

It should be noted that the relationship, as illustrated in Figure 2, implies a persistent effect of capacity on performance. Municipal capacity, as perceived by PDG (2012), thus functions as a constant value in the provided equation and as such additionally emphasises the value in obtaining its state by means of adequate organisational capacity assessments.

PDG(2012) henceforth argues that performance cannot easily be used as a proxy for whether a municipality has the needed organisational capacity or not. However, PDG suggests that whenever the results from municipal performance measurements are not ideal, the municipality should consider its organisational capacity for possible capacity-related shortfalls.

According to PDG (2012), while there may be several cases of a municipality performing a function adequately with inadequate capacity due to excellent leadership, it is likely to see cases of municipalities performing poorly with more than adequate capacity due to insignificant leadership. Relating to this, Ajam (2012) states that while failure to perform is in some cases attributed to a genuine lack of capacity, this is often used as an excuse to evade accountability for managerial, leadership or political dysfunction.

It is however important to note that the arguments, as stated above, propose that leadership stands separately from municipal capacity. Several investigations, including Siddie, et al. (2012), however indirectly suggest that municipal capacity undeniably includes the leadership found in the organisation. These different perceptions emphasise the value of assessing the organisational capacity of municipalities, as important insight can be drawn with regards to both municipalities' capacity and leadership.

### 3. MUNICIPAL ENGINEERING FUNCTION

#### *Municipal Service Delivery Logic Chain*

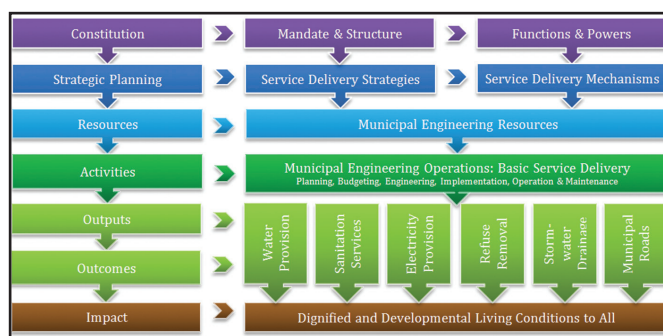
The engineering functions of South African municipalities are primarily defined in the Constitution, with mainly the Municipal Systems Act, 2000 providing further refinements. Relating to these enactments, the diagram in Figure 3 shows the municipal service delivery logic chain with reference to the background of the municipal engineering function. Accordingly, this logic chain is discussed in the proceeding sections.

As aforementioned, the Constitution puts forward a specified service delivery mandate and in accordance, provides guidance, by means of the Municipal Structures Act, 1998 in terms of the structure of municipalities. Municipalities, therefore have specific functions to fulfil (purple) by means of prescribed structures and powers. The following level (dark blue) in the diagram indicates the process of strategic planning, which necessitates the inclusion of predetermined service delivery objectives and key community needs.

Enacted by legislation (Municipal Systems Act, 2000), municipalities are obliged to compile and implement a five-year Integrated Development Plan (IDP) and a one-year Service Delivery and Budget Implementation Plan (SDBIP). These documents consist of strategies related to service delivery implementation, amongst others. Based on these strategies, the municipality is allowed to use various forms of services delivery mechanisms for the delivery of municipal services. The various possibilities in this regard are grouped into internal and external service delivery mechanisms in the Municipal Systems Act.

Based on the strategies and predetermined objectives, as included in the IDP and SDBIP, the requisite resources, as an input to the service delivery process ought to be allocated. These resources (light blue) include financial and human resources, systems, procedures, practices and processes, technology, tools and facilities, etc. Collectively, these resources form the input of a service delivery process, generally termed the result chain.

As part of the result chain, on completion of the input-phase, activities (dark green) are performed, which in the case of municipal service delivery processes include, amongst others, the planning, budgeting, engineering, implementation, operation and maintenance of municipal infrastructure.



**Figure 3: Municipal Service Delivery Logic Chain**

As illustrated in Figure 3, these activities ought to result in measureable outputs (light green), short-term development results, produced by project and non-project activities, including the number of households receiving the different levels of basic municipal services (UNDP, 2010). Effective and efficient service delivery activities, resulting into desired outputs, generally enable opportunities for the achievement of anticipated outcomes. In this regard, less measureable outcomes (light green) include changes relating to human behaviour and the development and sustainability of communities in South Africa (UNDP, 2008).

The concluding phase of the municipal service delivery logic chain includes an impact (brown) in the aforementioned communities, which

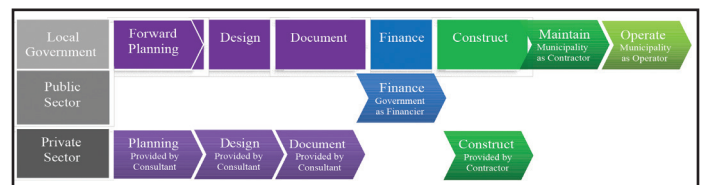
relates to the envisioned change in human development as measured by societies' well-being, such as living conditions, through improvements in health, income, education, nutrition or the environment (UNDP, 2008).

Adequate evidence (Lawless, 2007) exists to confirm that through the municipal service delivery logic chain, as illustrated above, the provision of, among a limited number of others, the six basic municipal services relate meticulously to the science of engineering and more specifically, civil engineering. As such, municipal engineering functions primarily include the delivery of the aforementioned six basic municipal services. Service delivery processes in this regard include all elements of the project lifecycle, i.e. planning, budgeting, designing, construction, implementation, operation and maintenance of municipal infrastructure which become the responsibility of the Technical Services Department.

#### *Municipal Engineering Orientation*

According to Lawless (2007), it is however important to note that generally, the Technical Services Department does not perform all of the activities as mentioned above, but rather manage or oversee it. The Municipal Systems Act, 2000 makes provision for such intervention. In this regard, it is of significant importance to study the differences in past and present sector positioning of engineers in South Africa.

Prior to the late 1980's, the South African local government, through its municipalities, generally fulfilled all the responsibilities related to the project lifecycle, including the construction, maintenance and operation of infrastructure (Lawless, 2007). Lawless eludes that the trend worldwide has been to transfer the majority of the abovementioned responsibilities to the private sector and South Africa has followed suit. The current split of responsibilities is shown in Figure 4. This diagram illustrates how the private sector, from 1980 onwards, has taken over the consulting and contracting functions (Lawless, 2007).



**Figure 4: Split of Project Lifecycle Responsibilities**

As a result of deteriorating engineering capacity at municipalities, the approach, as shown above, has become the preference for the delivery of the majority of municipal services. Several possibilities exist in this regard as the Municipal Systems Act, under section 77, authorises the outsourcing of service delivery processes, or part thereof. These mechanisms are grouped into internal and external service delivery mechanisms. The Municipal Systems Act allows for the collaboration with amongst others, another municipality, a private entity as well as the immediate community. The nature of such collaborations is often directly a consequence of the engineering capacity of a municipality.

### 4. CAPACITY ASSESSMENT AND PERFORMANCE IMPROVEMENT

#### *Organisational Capacity*

According to (Matachi, 2006), organisational capacity determines how individual capacities are utilized and strengthened. Cloete (2002) explains that organisational capacity can also be defined as the potential and competency, found within organizations, which includes human resources (combined individual capacities), strategic leadership, purpose, orientation, institutional memory, confidence, partnerships, powers and functions, resources and support systems, infrastructure, structures, processes, etc.

These definitions of organisational capacity depict the notion as a multi-dimensional concept. The UNDP (2012) accordingly divides

organisational capacity into three inter-related and interdependent dimensions, i.e. individual, institutional and environmental capacity.

### Organisational Capacity Assessment

The UNDP (2007) defines capacity assessment as an analysis of current capacities against desired future capacities, which generates an understanding of present capacity assets and needs and thereby guides the formulation of capacity development strategies. The UNDP's Capacity Assessment Framework advises the following three simple steps for the technical process of conducting a capacity assessment:

- Define desired future capacities
- Define level of desired future capacities
- Assess existing capacity level

The UNDP (2007) identifies several benefits with regards to the utilization of organisational capacity assessment which include amongst others, the systematic approach to identifying future capacity needs and assessing existing capacity assets. Such interventions include focus on a substantial collection of capacity detail. The UNDP (2007) further highlights such capacity assessments as a method for generating both quantitative and qualitative data in specific support of decision making processes during the formulation of capacity development strategies as mentioned above.

Applicable capacity assessment holds the benefit of illustrating very specific capacity areas which hold a need for improvement. As such it contributes to simplifying complex capacity development conditions, when it is not apparent where best to intervene or to promote applicable development (UNDP, 2007).

Relating to the aforementioned relationship between capacity and performance as identified by PDG (2012), the UNDP (2005) additionally defines capacity assessment as an application for the appraisal of existing capacity of an individual or collective entity to achieve a mandate, perform important functions and deliver anticipated results. It is accordingly intended that capacity assessment link latent capacity with performance (UNDP, 2005).

### Capacity Assessment and Capacity Building

As aforementioned, the UNDP (2007) defines capacity assessment as an application for the generation of both quantitative and qualitative data of future and existing capacity needs in support of the development of capacity building strategies. The UNDP (2005) remarks that, depending on the context of capacity challenges and accessible resources, capacity assessments can appraise one or more capacity dimensions, including the environmental, institutional and individual capacity of a municipality.

Irrespective of the entry point, capacity assessments should constantly take account of the interrelatedness of capacity issues between the targeted levels and the enabling environment (UNDP, 2005). The MDB (2012) recognises the need to gather more reliable insight of municipal capacity in South Africa as it holds the potential to guide decision-making processes of capacity building, policy formulation and municipal planning.

Organisational capacity assessments of municipalities thus fulfil a very important function during any capacity building initiative. Based on the Kolb learning cycle, the DFID (2010) proposes the following four-phase approach to capacity building, which is:

- 1. Capacity Assessment:** This step is concerned with acquiring data on all relevant strengths and weaknesses of institutional frameworks at individual, institutional and environmental levels.
- 2. Strategic Planning:** This step involves planning of the activities required to deliver the program outcomes, such as costs, schedules, monitoring and evaluation arrangements, such as organisational mapping and the establishment of a capacity baselines.

**3. Implementation:** This section sets out the key roles of the concerned partners in supporting capacity building processes and highlights some examples of action at each of the three capacity levels which can contribute to effective capacity building.

**4. Monitoring and Evaluation:** This section sets out the key principles to be followed in the monitoring and evaluation, as well as some examples of indicators which may be used to judge the effectiveness of the capacity building initiative.

Combining this four-phase approach to capacity building and previous insights, Figure 5 below illustrates a simplified diagram of the capacity building process.

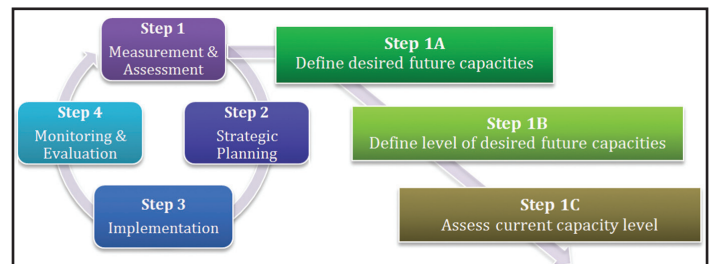


Figure 5: Combined Capacity Building Process

### Capacity Assessments and Performance Management

The close relation between the capacity, capacity building and performance of municipalities necessitates the consideration of the role of capacity assessment during current performance management practices at municipalities.

Enacted by the Municipal Systems Act, municipalities are obliged to establish a specific and unique performance management system. Such systems are required to include the performance management tasks of measuring and monitoring. The consequent occurrence of frequent and guided assessments of municipal performance opposed to the efforts devoted to sophisticated capacity assessments however, in this regard, contradicts the identified relationship which exists among municipal performance and organisational capacity of municipalities.

The UNDP (2007) indirectly states that opportunities exist relating to the use of organisational capacity assessment which are not applied only at the end of the performance management process, as is currently the case, but also during various other phases of the performance management process. It is therefore understood that capacity assessment can be used for obtaining valuable data relating to future, present and past organisational capacities.

The opportunities, as referred to above, can better be understood with reference to the following typical performance management process, as derived from the Municipal Systems Act and as shown in Figure 6 below. Each phase of the process is associated with the performance of a municipality. Additionally, opportunities with regards to the application and focus of organisational capacity assessments are shown in the accordance in the following row of the figure.



Figure 6: Performance Management Process and Opportunities for Organisational Capacity Assessments

Primarily based on the assumed relationship between performance and organisational capacity, the included possibilities of capacity building and the variety which exists in terms of the uses of capacity assessment as shown above, this research investigates organisational capacity assessments as a catalyst for performance improvement of the municipal engineering function.

### 5. ORGANISATIONAL CAPACITY SELF-ASSESSMENT MODEL

Existing forms of municipal capacity assessments, as enacted by the Municipal Systems Act, Municipal Structures Act and Municipal Demarcation Act, have been implemented over the past ten years. Bearing in mind the annual revision and improvements of these assessments, little value has been added to any performance management processes at municipalities as these assessments merely consider the amount of employees, their academic background and work experience.

Provided the importance of implementing the necessary capacity building initiatives at municipalities, the consequential importance of assessing municipalities' organisational capacity and the lack which exist with regards to suitable capacity assessment models, the Organisational Capacity Self-Assessment Model for South African Municipalities has been developed.

This model allows municipalities to frequently measure its organisational capacity and thus its capability to perform the planned service delivery included in the IDP and SDBIP of the municipality. The model considers all three dimensions of organisational capacity, i.e. individual, institutional and environmental capacity. The model allows the municipality to view its backlogs in terms of four municipal services, including electricity provision, refuse removal services, sanitation services and water provision.

The model uses the concept of fuzzy logic to allocate weights of importance to the different assessment criteria. Essentially, the model measures the different aspect of a municipality's capability to perform the distinct tasks included in the previously mentioned municipal services delivery logic chain. The following facets of the municipal service delivery result chain can be assessed with the proposed model:

#### Mandate Strategy:

- Integrated Development Plan and Service Delivery and Budget Implementation Plan

#### Inputs/Resources:

- Human Resources
- Financial Resource
- Physical Resource
- Technological Resources

#### Engineering Operations:

- Planning
- Designing
- Procurement and Documentation
- Financing
- Construction
- Maintenance and Operation

In addition, capacity for the general achievement of desired outputs, outcomes and impacts, is assessed. These and the other aspects of the service delivery logic chain are assessed according to the criteria as shown in the following table.

**Table 2: Assessment Criteria of the Organisational Capacity Self-Assessment Model**

<b>INDIVIDUAL CAPACITY:</b>	<b>Academic Qualifications</b> <b>Relevant Work Experience</b> <b>Technical Skills and Knowledge</b> <b>Management Skills and Knowledge</b> <b>Critical Thinking &amp; Leadership</b>
<b>INSTITUTIONAL CAPACITY:</b>	<b>Legislation: Policies &amp; Regulations</b> <b>Powers &amp; Functions</b> <b>Structures, Governance &amp; Reporting</b> <b>Systems, Processes &amp; Procedures</b> <b>Performance Management</b>
<b>ENVIRONMENTAL CAPACITY:</b>	<b>Economic Environment</b> <b>Social Environment</b> <b>Technological Environment</b> <b>Legislative Framework</b> <b>Political Environment</b>

The Organisational Capacity Self-Assessment Model for South African Municipalities has not been implemented, while it will soon be tested as part of the author's pilot studies at various municipalities in the Western Cape.

### CONCLUSION

The proposed Organisational Capacity Self-Assessment Model for South African Municipalities has the capability of acting as a necessary catalyst for the performance improvement at municipalities. This tool should be used as frequently as required by municipalities which are currently experiencing service delivery backlogs and undergoing continued capacity building operations. This tool can be used as basis for improvements to the assessment model as implemented yearly by the Municipal Demarcation Board.

The Organisational Capacity Self-Assessment Model for South African Municipalities will be tested at municipalities in the Western Cape during September. Results of these tests will form part of the final paper. ►

## APPENDIX

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**Figure 7: Preview of the User Input Form (Organisational Capacity Self-Assessment Model)**

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**Figure 8: Preview of the Navigation Form (Organisational Capacity Self-Assessment Model)**

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