



cooperative  
governance

Department:  
Cooperative Governance  
REPUBLIC OF SOUTH AFRICA

DETAILED ANALYSIS  
REPORT ON THE STATE OF  
MUNICIPAL READINESS TO  
BECOMING SMART CITIES

APP Target: Quarter 2 Deliverable

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Compiler

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## 1. PROJECT INFORMATION

<b>PROJECT NAME/ DESCRIPTION:</b>	<i>2022/23 APP Target: To assess, evaluate the readiness in terms of adoption and implementation of the smart cities framework at the selected municipalities and develop a support program for implementation of smart city initiatives as per the smart cities framework for a period of twelve months (12) months.</i>
<b>PROJECT TYPE:</b>	<i>New</i>
<b>TIME FRAME</b>	<i>17 AUGUST – 16 SEPTEMBER 2022</i>
<b>INITIATED BY:</b>	<i>Stefanie Mills Chetty</i>
<b>FUNDING:</b>	<i>MSIG</i>

<b>PERFORMANCE INDICATOR: 2.8</b>	<b>APPOINTMENT OF A SERVICE PROVIDER TO ASSESS, EVALUATE THE READINESS IN TERMS OF ADOPTION AND IMPLEMENTATION OF THE SMART CITIES FRAMEWORK AT THE SELECTED MUNICIPALITIES AND DEVELOP A SUPPORT PROGRAM FOR IMPLEMENTATION OF SMART CITY INITIATIVES AS PER THE SMART CITIES FRAMEWORK FOR A PERIOD OF TWELVE MONTHS (12) MONTHS</b>			
<b>ANNUAL TARGETS (FY 2022/23)</b>	Develop a Support Program inclusive of targets and indicators for Smart City Initiatives			
<b>PORTFOLIO OF EVIDENCE</b>	Report on the Assessment and evaluation of the readiness of municipalities in terms of adoption and implementation of the smart cities framework			
<b>QUARTERLY TARGETS</b>	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
	<ul style="list-style-type: none"> <li>Approval of the TOR</li> <li>BID/ Tender Process</li> <li>Appoint Service Provider</li> <li>Sign SLA</li> <li>Inception Report</li> </ul>	<p>Detailed analysis report on the state of municipal readiness to becoming a Smart City (readiness assessment framework)</p> <p>Mapped municipal capabilities for becoming a Smart City and available funding</p>	<p>Draft Support Program that includes Targets and Indicators for becoming a Smart City which can be used as a baseline to develop a Smart City Strategy</p> <p>Draft Plans for redesign and refurbishment into Smart cities</p>	Approved Support Program inclusive of targets and indicators for Smart City Initiatives
<b>CONSULTANTS/SERVICE PROVIDERS/PARTNERS</b>		<b>FINANCIAL RESOURCES</b>		
Using Consultants? <b>YES/NO</b>	Status of the ToR/S	<b>BUDGET APPROVED? YES/NO</b>	<b>PROJECT APPROVED IN THE PROCUREMENT PLAN? YES/NO</b>	
YES	e- Submission Approved, Drafted and submitted to SCM (Awaiting formulation of the BAC) for consideration and approval	YES	Through the MISG as part of the approved departments procurement plan, For the current financial year 2022-2023	

## **2. EXECUTIVE SUMMARY**

The report below presents the findings of the cities and towns identified for the redesign and refurbishment into smart cities/towns. International and local research was undertaken to arrive at the Smart Cities Indicators and targets Report, The Identification Criteria and the Assessment framework. The analysis part of the assessment framework was done internally by a team of experts consisting of Towns and Regional Planners and Control GIS Technologists for the 16 municipalities. Thereafter based on the assessment an assessment report was compiled to inform the outcomes and findings presented here under in this business case.

## **3. BACKGROUND**

### **3.1. Policy**

In his State of the Nation Address (SONA) in June 2019, the President of South Africa, His Excellency Mr. Cyril Ramaphosa, expressed his dream of building a South African smart city. In the February 2020 SONA, the President announced more concrete plans to develop a smart city in the country. These statements provoked discussion around the notion of Smart Cities within the South African context.

In response, The Department of Cooperative Governance (DCoG) drafted the Smart Cities Framework (SCF) to support the planning and implementation of smart city initiatives with impartial, factual information about smart cities in South Africa. The SCF supports DCoG in its efforts to guide and coordinate smart city initiatives implemented at municipal level throughout the country.

Towards the implementation of the SCF the department have develop Smart City Targets and Indicators in the 2021/22 financial year and will as a APP target for the 2022/23

further implement the framework by identifying towns for the redesign and refurbishment into smart cities/towns, the process entails the appointment of a service provider, however due to the delay experienced with SCM processes, the branch has commenced with the activities internally until such time the service provider is appointed.

### 3.2 Project Scope

The scope of this project is to assess, evaluate the readiness in terms of adoption and implementation of the smart city’s framework at the selected municipalities and develop a support program for smart city initiatives as per the smart cities framework for a period of twelve months (12) months. The appointed service provider must analyse all the towns on the list and based on the results must determine the identification of the five to eight cities and towns for redesign and refurbishment and produce a support program with detailed analysis reports, site plans and 3 D models as defined in the scope of the assignment and deliverables.

This process will be supported by funding from MSIG for the 2022/23 financial year.

The following list of municipalities form part of the assessment process to determine the priority municipalities:

Municipal Category	Municipality	Province
Category A	Nelson Mandela Bay Metro	EC
	Mangaung Metro	FS
Category B	Kouga LM	EC
	KSD LM	EC
	Walter Sisulu LM	EC
	Enoch Mgijima LM	EC

	Ray Nkonyeni LM	KZN
	Umuziwabantu LM	KZN
	Umdoni LM	KZN
	Umhlathuze LM	KZN
	uMfolozi LM	KZN
	Umzumbe LM	KZN
<b>Category C</b>	Ilembe District	KZN
	Ehlanzeni District	MP
	Harry Gwala District	KZN
	West Coast District	WC

### 3.3 Project Deliverables

The following deliverables as required are contained in the Terms of Reference:

- Develop the baseline criteria for the identification of existing cities/ towns
- Develop an assessment criteria (readiness assessment framework) aligned to DCOG's targets and indicators and Smart Cities Framework
- Develop the detailed analysis report on the state of municipal readiness to becoming a Smart City (for all the municipalities listed in the table),
- Produce a support program that includes DCOGs Targets and Indicators but not limited to, for becoming a Smart City which can be used as a baseline to develop a Smart City Strategy for the Municipalities
- Mapped municipal capabilities for becoming a Smart City and available funding

- From the list of municipalities based on the Identification criteria and the analysis report determine 5 to 8 cities/ towns for redesign and refurbishment into Smart Cities/ towns and develop business cases for each of them.
- Using the 5 to 8 Cities/ Towns based on the identification criteria and analysis report and the business cases develop plans for redesign and refurbishment into Smart cities/ towns:
  - (i) 3 D Models with detailed design using Autocad/BIM 3 D Software, and soft and hard copies and printed designs of the Models (Autocad)
  - (ii) Layout plans must include solutions for:
    - a). Greening,
    - b). Urban renewal,
    - c). Smart technology,
    - d). Incorporate urban resilience initiatives into the design
    - e). Incorporate urban safety into the models and design of layout plans (UN Habitat Systemwide Guidelines on Safer Cities and Human Settlements).
  - (iii) Site plans, inclusive of land use and zoning and Smart Cities Initiatives/ that can be adopted by the Municipal IDP and SDF

### **3.4 Timeframes**

- The contract with the successful service provider will be for a period of twelve (12) months to complete.
- The project will commence upon date of signing of the Service Level Agreement (SLA) between the DCoG and the successful bidder/ service provider.



## **4. IDENTIFICATION OF TOWNS FOR THE REDESIGN AND REFURBISHMENT INTO SMART CITIES/TOWNS**

### **4.1. Process Background**

The intention is for the project to be outsourced due to the various expertise required to undertake the requirements as outlined in the Terms of Reference. The directorate Spatial and Urban Development Planning have initiated the implementation process to ensure the project process commences while SCM process continue to be completed.

As per the deliverables indicated under section 3.3 above the directorate have undertaken the following activities:

- Develop the baseline criteria for the identification of existing cities/ towns **(Annexure 1)**
- Develop an assessment criteria (readiness assessment framework) aligned to DCOG's targets and indicators and Smart Cities Framework **(Annexure 2)**
- Develop the detailed analysis report on the state of municipal readiness to becoming a Smart City (for all the municipalities listed in the table using the readiness assessment framework), **(Annexure 3)**.

### **4.2 Process for the Identification of towns for implementation:**

As indicated above the directorate have developed the following documents/reports in support of the implementation process. This was support by the Smart Cities Targets and Indicators which was developed in the 2021/22 financial year **(Annexure 4)**.

The assessment process undertaken was a desktop approach towards the analysis of the 16 identified Municipalities based on information available at the disposal of the department and utilised key strategic municipal documents such as the Municipal

# Integrated Development Plan (IDP), Spatial Development Framework (SDF) and District Development Model (DDM) One Plans towards the execution of the assessment process.

The municipal analysis task was undertaken by town and regional planners and GIS specialists. The task was undertaken between 6 -12 September 2022.

## 4.3 Readiness Assessment Framework

The assessment framework was developed using the following documents:

- Smart City Targets and Indicators.
- Baseline Criteria for the Identification of Towns.

PERSONALITY	INVESTIGATIVE CRITERIA										SMART DEVELOPMENT TRANSFORMATIONAL INDICATORS (Smart City Goals & IM)										SMART DEVELOPMENT TOWNS AND SUBURBAN COMMUNITY INDICATORS (Smart City Goals & IM)				SMART DEVELOPMENT SUBURBAN COMMUNITY INDICATORS (Smart City Goals & IM)				SMART DEVELOPMENT ELECTRICITY INDICATORS (Smart City Goals & IM)			
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	1	2	3	4	1	2	3	4
Category 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Category 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Category 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

The assessment framework is based on a scoring system of 1 to 3 for each criteria with 1 being poor and 3 being good and linked to the scoring system is a priority system. The following final scores was be rated in terms of its priority as follows:

Priority 1: Score between 15-21
Priority 2: Score between 10-14
Priority 3: Score between 5-9

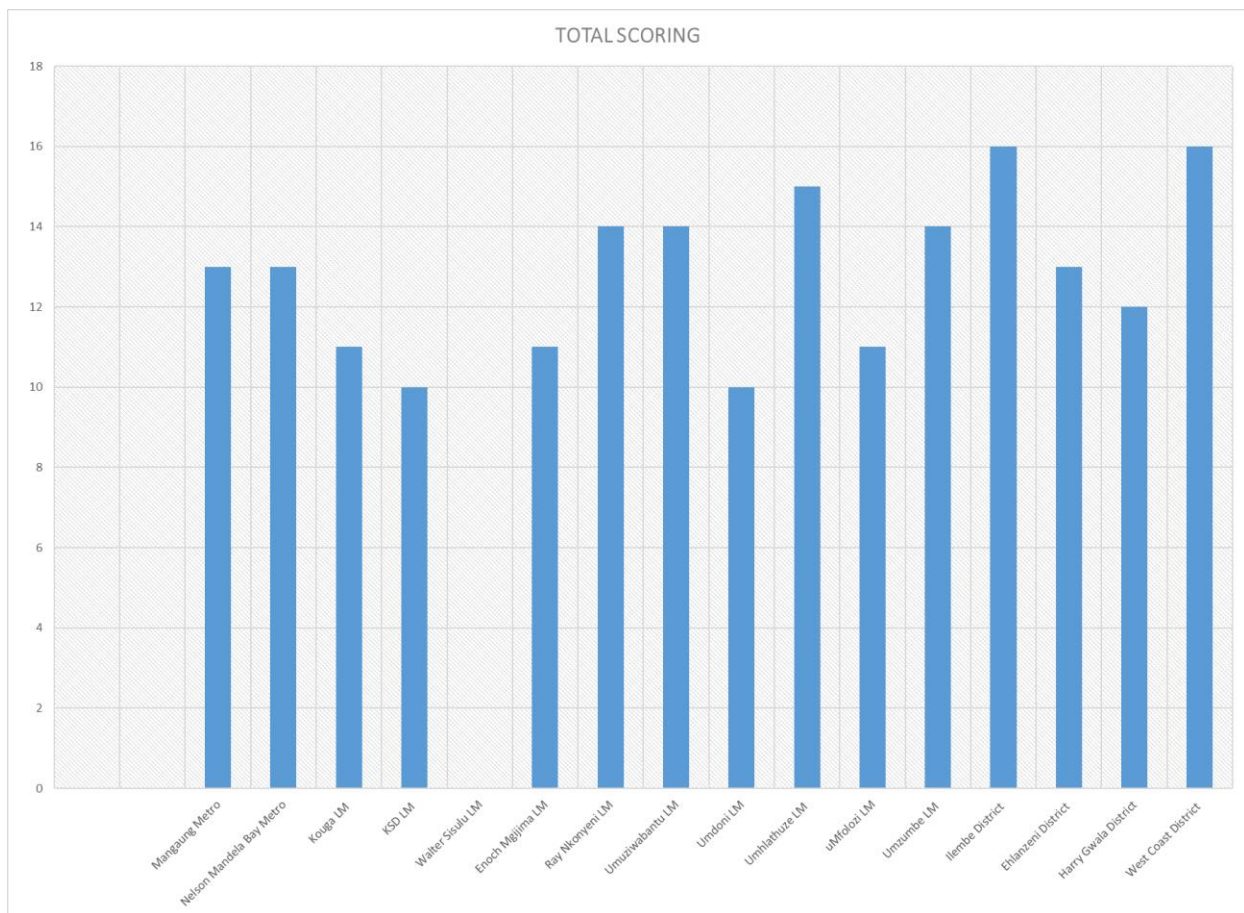
## 4.4 Assessment Report

Following the assessment process, the directorate consolidated the findings and produced a report. The purpose of the report is to provide an analysis of the assessment findings linked to the final scores which will provide an indication on the priority municipalities for the initiation of the process for the redesign and refurbishment of towns into smart cities/towns.

#### 4.5 List of Priority Municipalities

The following findings can be noted in respect of the priority towns identified through the desktop analysis process undertaken:

The graph below provides an indication of the scoring per municipality.



The Table Below provides an indication of the Top 9 priority municipalities (Cities/ Towns) to be considered for the redesign and refurbishment into smart cities/towns.

Score	No of municipalities	Names of Municipalities	Cities/ Towns (Redesign and Refurbishment)	Top 9
16	2	Ilembe West Coast District	Mandeni Piketberg, Malmesbury, Moreesbury, Elandsbaai, Hopfield	Priority 1
15	1	Umhlathuze	City of Umhlathuze	Priority 1
14	3	Ray Nkonyeni Umuziwabantu Umzumbe	Izingolweni Harding Umzumbe	Priority 2
13	3	Mangaung NMBM Enhlanzeni	City of Mangaung City of NMBM Thaba chweu	Priority 2
12	1	Harry Gwala	Kokstad, Ixopo, Bulwer, Highflats, Creighton, Underberg, Himeville	
11	3	Enoch Mgijima Umfoloji Kouga	Enock Mgijima Umfoloji Thornhill	
10	2	KSD Umdoni	KSD	

## 5. PROJECT RISKS

The following risk identified below is currently faced with the implementation of the project.

Risk event	Risk Description
<b>Appointment of service provider</b>	The project requires specific technical expertise to ensure the deliverables are met, currently there is a delay with the SCM process is at the BAC for Adjudication before the Tender Process
<b>Time Constraint</b>	Linked to risk above the project is a 2022/23 project, considering the delays with SCM process the appointed service provider will have limited time to deliver the final product, hence the reason to try to deliver Q2 and Q3 deliverables in Less than 1 month
<b>Budget</b>	Funding for the project is from MSIG, the appointment process must be concluded quickly to ensure funds are not lost

An Advisory Committee will be established to support the implementation of the project. A draft Terms of Reference has been prepared for the establishment of the committee. (Annexure 5)

## 6. WAY FORWARD

The following should be noted:

1. That a selection of between 5-8 municipalities from the list of top 9 as contained under section 4.5 of this report should be identified for project implementation.
2. To ensure the successful completion of the APP Target for 2022/23, the implementation process requires the appointment of a service provider to undertake the process of developing a support program for the redesign and refurbishment of towns into smart cities/towns.