

D/SM 8/22



MEMORANDUM

DIRECTORATE: INFRASTRUCTURE
SERVICES

CHECK BEFORE SUBMISSION	Y E S	N O
REGISTERED ON CSD DATABASE		
LETTER - SOLE SUPPLIER if applicable.		
QUOTE/INVOICE ATTACHED		
BUDGET (SAMRAS)		
CASHFLOW		
SIGNATURES		

To Aan: MUNICIPAL MANAGER
From Van: Mr Deon Louw
Job Title: DIRECTOR, INFRASTRUCTURE SERVICES
Date Datum: 24 FEBRUARY 2022
Re Insake: DEVIATION: TRAFFIC SIGNAL SYNCHRONISATION

1. PURPOSE

To obtain approval in terms of Supply Chain Management Policy, to deviate from the official procurement process in terms of section 36 of the approved SCM Policy

REASON FOR DEVIATION: (Mark with x where applicable)		
1.	Emergency. "Emergency dispensation" means emergency as referred to in paragraph 36(1)(a)(i) of this policy under which one or more of the following is in existence that warrants an emergency dispensation;	
a	The possibility of human injury or death;	
b	The prevalence of human suffering or deprivation of rights;	
c	The possibility of damage to property, or suffering and death of livestock and animals;	
d	The interruption of essential services, including transportation and communication facilities or support services critical to the effective functioning of the municipality as a whole;	
e	The possibility of serious damage occurring to the natural environment;	
f	The possibility that failure to take necessary action may result in the municipality not being able to render an essential community service;	
g	The possibility that the security of the state could be compromised; or	
h	The prevailing situation, or imminent danger, should be of such a scale and nature that it could not readily be alleviated by interim measures, in order to allow time for the formal procurement process. Emergency dispensation shall not be granted in respect of circumstances other than those contemplated above.	
2.	Goods or services are produced or available from a single provider	
3.	Acquisition of special works of art or historical objects where specifications are difficult to compile.	
4.	Acquisition of animals for zoos and /or nature and game reserves	
5.	Exceptional case and it is impractical or impossible to follow the official procurement processes	✓

DEVIATION: TRAFFIC SIGNAL SYNCHRONISATION PROGRAM

2. SUBSTANTIATE WHY SCM PROCESS COULD NOT BE FOLLOWED (TO BE REPORT TO COUNCIL)

Reasons for Deviation Point 5

Exceptional case and it is impractical or impossible to follow the official procurement processes

The Municipality in collaboration with the Stellenbosch University (SU) had developed a Traffic Engineering system that has the ability to adapt in real time to changing traffic patterns. Currently there are no service providers that have developed software (and related licensing) that meets the following requirements:

- Ability to integrate transportation data with traffic engineering.
- Ability to link with traffic signals and detectors on the roadways.
- Ability to support operational traffic management by adapting in real time to changing traffic patterns.

Traffic Synchronization systems by current market providers are not able to integrate transport data with traffic engineering seamlessly (and in real time) and are not able to adapt traffic signals in real time to changing traffic patterns. The current market is therefore not able to meet the Municipality's needs.

3. BACKGROUND

In 2007 the Municipality had concluded its Memorandum of Understanding (MOU) with the Stellenbosch University, through this collaboration, the Municipality gains access to talent, innovation processes as well as research and development.

The University established the Stellenbosch Smart Mobility Laboratory (SSML) in mid-2014, whereby the SSML, in collaboration with various industry partners, provides access to world class transportation and traffic engineering technology. The SSML is inter alia supported by the PTV group who are global market leaders in the development of transportation planning and traffic engineering.

In 2017 the Municipality, in collaboration with the SSML, commenced with the development of a traffic model, that is able to meet the Municipality's needs. Initially, no costs implications were linked to research, development and the possible implementation of a pilot programme for Stellenbosch. Substantive work efforts were however required to implement the successful pilot programme, which is a first in South Africa.

DEVIATION: TRAFFIC SIGNAL SYNCHRONISATION PROGRAM

4. DISCUSSION

Analysis and assessments carried out on the Municipality's Main Road network indicates that the main road network is operating at capacity, with severe delays being experienced at main road intersections. A more efficient traffic signal timing system is required to address the increasing traffic on the road network. A Traffic Signal control system is identified as an urgent need so as to mitigate potential interruptions to traffic flow in Stellenbosch

Implementation of the proposed programme will result in improved traffic flow at intersections along the most congested corridor (the R44) through Stellenbosch, and will increase the Municipality's ability to access, forecast and respond to traffic impacts.

The software not only supports the real-time traffic signal control system but also has wider application. It provides functionality for easy expansion of the system, includes demand modelling (eg. for Public Transport and NMT) as well as microsimulation features, and could lay the foundation for a smart mobility platform to manage the town's transportation network well into the future.

Tests on the system have been carried out and it has been concluded that the system will be extremely beneficial to the municipality. Media briefing by the Municipality's Mayor were held, showcasing the collaborative effort involved as well as the positive outcomes of the pilot tests carried out.

5. FINANCIAL IMPLICATIONS

Years	Price in RAND excl. VAT
Year – 1 (2021)	R 550,572
Year – 2 (2022)	R 550,572
Year – 3 (2023)	R 550,572
Total	R 1,651,716

6. RECOMMENDATION

The deviation be approved, and that the Municipality, University and PTV Africa proceed with the implementation of the Traffic Signal Synchronization Programme along the R44 corridor through Stellenbosch.

In future, the Municipality puts out a tender (as the market conditions may have changed) for the implementation of Traffic Signal Synchronization of all signalized intersections within Stellenbosch CDB.

DEVIATION: TRAFFIC SIGNAL SYNCHRONISATION PROGRAM

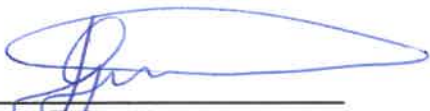
7. VALUE FOR MONEY (OTHER RATES/VALUES/...)

The quotations have been assessed and it is confirmed that excellent value for money is being achieved, actual cost such as research, development, testing, ect are not being taken into account, cost quoted are for actual software licensing and support. In addition, through the collaboration between the Municipality and the University, significant funding has been saved on consultancy fees.

8. IT IS RECOMMENDED THAT:

It is recommended that approval be granted to the PTV Africa (Pty) Ltd, from Traffic Engineering Operational UKEY be granted in terms of the Municipality's Supply Chain Management Policy 4.36.

Compiled:

PP 

Johan Fullard
Senior Manager: Roads, Transport and Stormwater

Date: 25/2/22



Deon Louw
Director: Infrastructure Services

Date: 25/2/22

DEVIATION: TRAFFIC SIGNAL SYNCHRONISATION PROGRAM

9. SUPPLY CHAIN MANAGEMENT COMMENTS:

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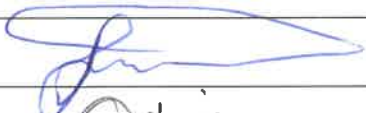
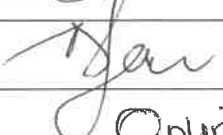
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10. APPROVAL:

REQUEST SUPPORTED / NOT SUPPORTED BY THE STELLENBOSCH MUNICIPAL BID ADJUDICATION COMMITTEE

Name	Signature	Date
J.G. Louw		25/2/22
C. Kitting	Online	25/02/22
D. Jacobs		25/2/22
A. Barnes	Online	25/02/22
A. de Beer	Online	25/02/22

Comments:

CHAIRPERSON.....

DATE 25/02/2022

RECOMMENDATION FROM BID ADJUDICATION COMMITTEE APPROVED BY THE ACCOUNTING OFFICER

Comments:

ACCOUNTING OFFICER.....

DATE 3/3/2022

tax compliance confirmed.