



# forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

Ref: O2/1/5/2

## NATIONAL ASSEMBLY (For written reply)

QUESTION NO. 2708 {NW3099E}

INTERNAL QUESTION PAPER NO. 27 of 2023

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### Ms H S Winkler (DA) to ask the Minister of Forestry, Fisheries and the Environment:

(1) What (a) are the details of the plan of the SA Weather Service Infrastructure Sustainability (SAWS) plan, which aims to outline the expansion, automation and modernisation endeavours, emphasising alternative power solutions for its observation networks and (b) is the timeline for the adoption of the plan;

(2) what is the SAWS interim plan to ensure the continued effective operation of its observation networks in instances of load shedding and other energy supply issues?

### 2708. THE MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT REPLIES:

(1)

(a) The South African Weather Service (SAWS) Infrastructure Sustainability Plan outlines the entity's proposed expansion, automation, modernisation and upgrade of the current infrastructure networks. These infrastructure networks include the:

- RADAR Network and its peripherals;
- Lightning Detection Network (LDN) and its peripherals;

- Surface Observation Network (Automatic Weather Stations (AWSs), Automatic Rainfall Stations (ARSs) and Manual Rainfall Stations); and
- Upper-Air Sounding Network and the supporting Hydrogen Generators.

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### **Expansion**

Expansion of AWSs and ARSs will be for the benefit of Local Municipalities with no weather stations to ensure that any early warning system gaps are filled.

### **Automation**

Network expansions will primarily consist of converting Manual Rainfall Stations to either AWSs or ARSs. This will be informed by requirements such as the need for expansion to Local Municipalities as well as other end-user recommendations. Furthermore, the plans include the ability for remote monitoring of the RADAR and LDN peripheral equipment, especially with respect to diesel generators and uninterruptible power supplies (UPSs).

### **Modernisation**

Modernisation projects are mainly focusing on RADAR and LDN. Dual polarisation of the S-band RADARs is planned for, with Durban RADAR being prioritised. The LDN modernisation intends to upgrade the sensors to the LS7002 technology.

### **Upgrades**

Upgrades to the networks focus on alternative and backup power solutions. Solar panels are already in use in the AWSs and ARSs network for over a decade, and further deployment will be done to other sites where there is a compelling need. The RADAR and LDN networks are also earmarked for alternative and backup power solutions to mitigate against the prevalent load shedding and electricity challenges at the sites.

(b) The SAWS' Infrastructure Sustainability Plan is a 5-year plan starting from the 2023/2024 financial year that will conclude by the end of the 2027/28 financial year.

(2) The SAWS continues to invest in the RADAR and LDN peripheral equipment such as diesel generators, UPSs and Automatic Voltage Regulators (AVRs) to support more backup and stable power at the RADAR sites. Furthermore, the deployment of batteries and solar panels to AWS and ARS in need is being implemented.



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**MS B D CREECY, MP**  
**MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

DATE: 8/9/2023