

# FINAL DRAFT ANNUAL PERFORMANCE PLAN 2023/2024



## **South African Weather Service**



## DOCUMENT CONTROL

### Version and Amendment Schedule

Version	Version Date	Author	Description of Amendments
1	2022-08-12	Dithuso Mogapi	Document created
2	2022-08-24	Dithuso Mogapi	Incorporate management input to medium-term and quarterly targets
3	2022-11-17	Dithuso Mogapi	Management's confirmation of proposed medium-term targets
4	2022-12-05	Dithuso Mogapi	Update of key risks and mitigation
5	2023-01-09	Dithuso Mogapi	Improvement of technical indicator descriptions
6	2023-01-11	Dithuso Mogapi	Inclusion of Executive Authority and Accounting Officer's statements
7	2023-02-23	Dithuso Mogapi	Inclusion of approved Executive Authority's Statement

### Approval and Control Schedule

Approved by	Designation	Responsibility	Signature	Date of Approval	Document status
Mr Ishaam Abader	Chief Executive Officer	Accounting Officer	DocuSigned by: <i>Ishaam Abader</i> 86FAA2275F1C4C8	23/2/2023   12:18 PM SAST	Final
Ms Feziwe Renqe	Board Chairperson	Accounting Authority	DocuSigned by: <i>Feziwe Renqe</i> 18D05DC5CF2B4CA...	26/2/2023   8:59 AM SAST	

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## ABBREVIATIONS AND ACRONYMS

AGSA	Auditor-General of South Africa
AMF	Aviation Meteorological Forecaster
ARS	Automatic Rainfall Stations
AWS	Automatic Weather Stations
B-BBEE	Broad-Based Black Economic Empowerment
CMA	China Meteorological Agency
DALRRD	Department of Agriculture, Land Reform and Rural Development
DFFE	Department of Forestry, Fisheries and the Environment
DWD	Deutscher Wetterdienst
EAP	Economically Active Population
GAW	Global Atmospheric Watch
GBVF-NSP	Gender-based Violence and Femicide National Strategic Plan
HSRM	Hydrogen Society Roadmap
ICAO	International Civil Aviation Organization
ICT	Information and Communications Technology
ISS	Integrated Service Strategy
JCOMM	Joint Technical Commission for Oceanography and Marine Meteorology
LDN	Lightning Detection Network
MTEF	Medium-Term Expenditure Framework
NDP	National Development Plan
NFCS	National Framework for Climate Services
NMHS	National Meteorological and Hydrological Services
NOAA	National Oceanic and Atmospheric Administration
NRF	National Research Foundation
NT	National Treasury
PFMA	Public Finance Management Act
PWDs	Persons Living with Disabilities
RCMS	Regulating Committee for Meteorological Services
SAAQIS	South African Air Quality Information System
SACAA	South African Civil Aviation Authority
SADC	Southern African Development Community
SANAE	South African National Antarctic Expedition
SANAP	South African National Antarctic Programme
SARIR	South African Research Infrastructure Roadmap
SAWS	South African Weather Service
SCM	Supply Chain Management
SOLAS	Safety of Life at Sea
SOP	Standard Operating Procedure
TAF	Terminal Aerodrome Forecast
UKMO	UK Meteorological Office
USA	United States of America
WMO	World Meteorological Organization

## EXECUTIVE AUTHORITY STATEMENT

I have the pleasure of presenting the Annual Performance Plan of the South African Weather Service for the 2023/24 financial year.

This Annual Performance Plan comes at a time when parts of the country, in particular the provinces of Eastern Cape, Mpumalanga and KwaZulu-Natal have experienced heavy and disruptive rainfall, which carried with it the potential to endanger lives and cause untold damage to property. Precipitation upwards of 60mm and, in some areas, well over 100mm, fell in the areas concerned, flooding roads and settlements.

With the devastating aftermath of the April 2022 KwaZulu-Natal floods still lingering in our minds, communities in the affected provinces were naturally on tenterhooks. Thankfully, those weather events came and went virtually without the widespread damage and loss of life experienced last year.



This was not a matter of luck. In the days leading up to the events, the South African Weather Service (SAWS) issued Orange Level 9 warnings, prompting provincial and District Disaster Management Authorities (DMAs) to spring into action. These authorities know that, in terms of the Impact-Based Severe Weather Warning System (ImpB-SWWS), an Orange Level 9 warning denotes a medium likelihood of severe impact. Within a few hours of the warnings, the authorities had already dusted off their contingency plans, reported on their state of readiness to deal with any eventuality, and disseminated alerts to vulnerable communities through various mediums.

The series of actions and the relatively quiet passage of the downpours underscore the critical role that SAWS plays in safeguarding of lives and property. We live in a country located in a region that is prone to weather hazards such as flash floods, heatwaves, tropical cyclones and droughts. While we cannot stop extreme weather from occurring, we can avert catastrophes through effective forecasting and the timely issuance of warnings.

This is essentially why, when I tabled the Department of Forestry, Fisheries and the Environment's (DFFE's) 2022/23 Budget Vote, I committed an amount of R100million over a three-year period ending 2023/24 to the SAWS to bolster its forecasting infrastructure.

With SAWS barely out of the throes of a shrunken revenue stream following the challenges brought on by the COVID-19 pandemic, this cash injection was a timely intervention to ensure that the crucial service delivered by the entity is not to the detriment of the people of this country, their property and the much-needed public infrastructure.

To this end, I am pleased with SAWS' strides in respect of the continuous development and improvement of its early warning systems, with emphasis on moving from "deterministic" forecasting to the Impact-Based Severe Weather Warning System (ImpB-SWWS). I note that the pilot project for the impact-based warning system was carried out in collaboration with Disaster Management Agencies and that its implementation is in process.

I am satisfied that the forecasting-related performance targets set out in this document emphasise the availability and accuracy of services, which, if optimally executed, will put SAWS in a position to help Disaster Management authorities to be better prepared to take early action and thus save lives and property.



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

## ACCOUNTING OFFICER STATEMENT

The South African Weather Service (SAWS) was established a little over two decades ago in terms of the South African Weather Service Act, Act No. 8 of 2001, (as amended through the SAWS Amendment Act, Act No. 48 of 2013), and draws its powers from this piece of legislation. It is but one of dozens of national public entities envisaged in Schedule 3(a) of the Public Finance Management Act No. 01 of 1999.

Through the development and provision of innovative meteorological solutions, products and services; generation of new scientific insights in atmospheric and related sciences; the upgrading, expansion and optimising of infrastructure; and the provision of quality data that meets minimum requirements, we endeavour to contribute towards the constitutional vision of an improved quality of life for all.



We have a hybrid funding model in terms of which we receive a grant from the government through the Department of Forestry, Fisheries and the Environment (DFFE) to finance our public good services while generating revenue through paid-for commercial services. The knock that we took in the wake of the economic slump that followed the COVID-19 disaster is well documented. We remain in recovery mode.

In the light of that difficulty, our previous Annual Performance Plan (APP) sought to help the organisation shake off the effects of the pandemic and pull itself up by the bootstraps, the end goal being to meet our obligations to stakeholders – from communities and the business sector to international partners.

We carried on with the ever-urgent task of providing public weather, aviation and maritime forecasts as well as severe weather guidance maps. In doing so, we employed the Impact-Based Severe Weather Warning System (ImpB-SWWS) in terms of which greater emphasis is placed the potential effect of the weather on lives and property as opposed to what the weather will be.

The operation of the Regional Meteorological Databank, which is critical for the aviation sector was another key area of focus as were the areas of research and innovation. In addition, we invested the little resources we had at our disposal in the maintenance of observational infrastructure.

We further focused on the development and retention of our key asset, being the employees, while keeping an eye on the need to meet employment equity obligations. Moreover, we sought to spread the word about the important work we do mainly to equip communities with crucial information that they can use to safeguard their lives and livelihoods while seeking to return our revenue-generation ability to where it would have been but for COVID-19.

We have done relatively well in all these areas and continue to do so. That said, there will always be room for improvement. In this regard, for this financial year, we will carry on with the same outcomes, outputs and indicators. However, in line with the medium-term targets, we will implement a nominal increase in the targets applicable to each indicator.

We are indebted to the Board and to the Minister of Forestry, Fisheries and the Environment for the unfailing support they have given us over the difficult last couple of years. We depend on that backing going into this financial year.

We remain committed to the non-negotiable need to perform optimally while observing the highest standards of good governance and integrity.

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*Ishaam Abader*

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**MR ISHAAM ABADER**  
**CHIEF EXECUTIVE OFFICER**  
**SOUTH AFRICAN WEATHER SERVICE**



## OFFICIAL SIGN-OFF

It is hereby certified that this Annual Performance Plan:

- (i) Was developed by the management of the South African Weather Service, under the guidance of the Department of Forestry, Fisheries and the Environment (DFFE).
- (ii) Considers all the relevant policies, legislation and other mandates for which South African Weather Service is responsible.
- (iii) Accurately reflects the Impact, Outcomes and Outputs which the South African Weather Service will endeavour to achieve over the period 2023/2024.

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## PART A: OUR MANDATE

### 1. UPDATES ON THE CONSTITUTIONAL, LEGISLATIVE AND POLICY MANDATE

There are no updates to the Constitutional, Legislative and Policy Mandates for the South African Weather Service (SAWS). The mandate as stated in the 2020/21 to 2024/25 Strategic Plan remains as:

#### 1.1 Constitutional mandate

In terms of the Constitution of the Republic of South Africa, Act No. 108 of 1996 (as amended) the mandate of the South African Weather Service is aligned to Chapter 2, Section 24 on the environment, which reads:

Everyone has the right-

- a) to an environment that is not harmful to their health or well-being; and
- b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
  - (i) prevent pollution and ecological degradation;
  - (ii) promote conservation; and
  - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The constitutional mandate of the SAWS remains relevant and as expressed in the strategic plan without any updates for this financial year.

#### 1.2 Legislative mandate

The legislative mandate of SAWS is derived from the South African Weather Service Act, Act No. 8 of 2001, as amended through the SAWS Amendment Act, Act No. 48 of 2013, the Public Finance Management Act (PFMA), Act No. 1 of 1999 and associated Treasury Regulations. SAWS is a Schedule 3A entity as per the PFMA. In terms of its enabling Act, Act No. 8 of 2001 (as amended), the functions of SAWS and its mandate include:

- To provide reliable weather services to support public good and its commercial ventures.
- Ensure ongoing collection of meteorological and ambient air quality data over South Africa and surrounding southern oceans
- Provide aeronautical and marine meteorological services
- To be the long-term custodian of a reliable national climatological and ambient air quality record

The mandate of the entity and its objectives as stipulated in the SAWS Act, Act No. 8 of 2001 (as amended) also requires for the SAWS to provide services that are sensitive to the demographic realities of country, to enter into agreements with State Departments for the delivery of services considered to be within the capacity of SAWS. These agreements are not deemed part of the public goods services.

The mandate and objectives of the entity remain relevant and, as expressed in the strategic plan, without any updates for this financial year.

## 2. UPDATES ON THE INSTITUTIONAL PRIORITIES, POLICIES AND STRATEGIES

Government Outcomes as envisaged by the National Development Plan (NDP) as well as National Policy Frameworks and discussion documents inform the alignment of SAWS with Government Priorities. Through the NDP, the country aims to eliminate poverty and reduce inequality by the year 2030 through uniting South Africans, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, enhancing the capability of the state and leaders working together to solve complex problems. The COVID-19 pandemic brought about challenges to the South African economy and its sustainability. As such, the Economic Recovery and Reconstruction Plan was developed to recover from the devastating impacts of the pandemic.

As an entity of government, the South African Weather Service has aligned itself to the plans of government in order to contribute the recovery of the country post the COVID-19 pandemic as well as implementation of actions to realise the NDP vision 2030. The key drivers for such alignment are the objects and provisions of the South African Weather Service Act (as amended). In its planning for the medium-term, SAWS considered the NDP Vision 2030 outcomes to which the entity's programmes are aligned towards, as well as government's commitments towards revitalising the economy and ending the inequality and injustice that impedes the progress of South Africa.

### 2.1 Priorities in the development agenda

#### Education, skills and health

The South African Weather Service (SAWS) is focused on improving the functionality of the National Ambient Air Quality Monitoring Network through the implementation of the Vaal, Waterberg Bojanala and Highveld Priority Areas Air Quality Management Plans and monitoring of air pollution in these areas. The efficient maintenance of the stations under the responsibility of SAWS, contributes to ensuring data availability for research purposes and the management of air quality by the regulatory authorities.

Successful implementation of the network recapitalisation plan for the Priority Areas contributes to ensuring that authorities can monitor the effectiveness of emission control measures and programmes which contribute toward the reduction of air pollution levels affecting the health of people in these priority areas, and a better quality of life for citizens in the surrounding communities.

The accessibility of air quality data and information through the South African Air Quality Information System (SAAQIS) remains beneficial to different stakeholders such as academia, government, industry and the public; contributing towards education and increases in skills of interested parties.

SAWS remains an active participant in the attempts to improve the Science, Engineering and Technology skills of our country through bursary initiatives for university students. The aim is to contribute towards a sizeable pool of educated individuals available for the environment sector.

## Social cohesion and safe communities

SAWS continues to address the concern of “Continual development of and improvement of early warning”, with the emphasis having moved from “deterministic forecasting” to “impact-based forecasting”. The pilot project for the impact-based warning system was carried out in collaboration with Disaster Management Authorities and its implementation is in process.

The verification of the effectiveness of this new type of forecasting is a medium-term challenge the entity is tackling through the development of an objective verification system for impact-based severe weather warnings. Dissemination of these life-saving weather warnings continues via different channels inclusive of radio, television, short-message-services and e-mails. The intention remains to reach all citizens of the Republic of South Africa, in particular, those vulnerable to harsh impacts of the ever-changing weather.

Through continual enhancement of the early warning system and SAWS’ commitment to educate vulnerable communities about severe weather events as part of developing adaptation mechanisms, there is also a contribution towards the national priority related to enhancing education and skills.

## Economic transformation and job creation

Weather and Climate-related solutions are more than ever before more important to economic growth as many sectors are weather sensitive and exposed to the impacts of climate variability and change. By providing fit-for-purpose solutions, SAWS contributes to economic development in a wide range of economic sectors such as agriculture, energy, transport, mining, marine and water.

In support of Operation Phakisa which focuses on unlocking the economic potential of South Africa's oceans, SAWS continues to contribute through the provision of met-ocean information for public good consumption and commercial operations. Through implementation of SAWS’ Marine Master Plan, SAWS established a Marine Unit to address scientific and operational challenges that could not be solved within the scope of the traditionally atmospheric-focus of SAWS’ research. Establishment of this Unit ensured that SAWS remains relevant within the marine science and operational fields, as well as ensuring that the entity is compliant with the World Meteorological Organization (WMO) and Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM) recommendations and requirements, which increasingly acknowledge the importance of marine systems in the weather-climate system in the context of an Earth System approach.

SAWS remains committed to supporting the implementation of the South African National Antarctic Programme (SANAP), through provision of training, personnel, expertise and meteorological equipment to the Marion Island, Gough Island and South African National Antarctic Expedition (SANAE) IV Base in Antarctica. Furthermore, SAWS provides meteorological support and personnel to the SA Agulhas II, which is a South African icebreaking polar supply and research ship owned by the Department of Forestry, Fisheries and the Environment (DFFE). Through the above commitments, SAWS contributes towards South Africa’s research presence in Antarctica and the Prince Edward Islands, as well as scientific data that is collected during voyages - which critical to understanding of amongst other things, the impacts of climate change and weather information associated with extreme events which can have an impact on the economic transformation and job creation in the marine sector.

Through internship and learnership programmes, SAWS provides on-the-job training and the upskilling of unemployed youth in their various disciplines of study. Despite constraints on the fiscus and the budget for compensation of employees, the entity is keen to fill its vacant positions and attracting unemployed citizens to enter the job market, thus contributing to reducing unemployment levels.

## 2.2 Alignment with government priorities

### Growing the economy and jobs

The Hydrogen Society Roadmap (HSRM) launched by the Minister of Higher Education, Science and Innovation, is one of government's strategies and policy direction aimed at bringing together public and private stakeholders and institutions around a common vision on how to use and deploy hydrogen as well as hydrogen-related technologies as part of South Africa's economic development and greening objectives. Leveraging on the hydrogen opportunity is one of the keys to the country's economic growth and development strategies, as well as part of its mitigation strategy for climate change through the greening of our economy and society. Air pollution, alongside climate change, is one of the biggest environmental threats to human health and the cause of several million premature deaths each year. The main components of poor air quality include particulate matter, ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide.

The South African Weather Service (SAWS) will contribute to the success of this envisaged new economy through effective monitoring of air quality in the Vaal Triangle-Air shed Priority Area, Highveld Priority Area and the Waterberg Bojanala Priority Area. SAWS developed an air quality scenario tool for Mpumalanga Air Quality Management and Planning. This tool/product provides high-resolution air quality conditions for different sector-based emission reduction scenarios. The product is important for provincial authorities to assist in determining under which emission reduction strategy the intended air quality standard can be achieved. This product could be significant for the authorities, resource managers and policy makers to conduct cost-benefit analyses for emission reduction strategies as well as to prepare and implement short- and long-term plans, such as the HSRM.

### Building better lives

During his State of the Nation address of 2022, the President alluded to the fact that *"As we work to grow the economy and create jobs, we will expand support to poor families to ensure that no person in this country has to endure the pain and indignity of hunger"*. The President further expressed that expanding access to land is vital for the country's efforts to reduce hunger and provide people with meaningful livelihoods. Furthermore, the agriculture sector also recognises the importance of supporting small-scale farmers and integrating them into value chains.

It is a known fact that climate variability and climate change have exacerbated the national food insecurity due to their influence on agricultural production, water quality and supply, as well as the ecological integrity of natural ecosystems. Rural communities in the country are experiencing increased levels of food insecurity due to dependence on agriculture and natural resources as the basis of livelihoods. Weather and climate play an important role in agricultural production, therefore the provision and timeous access to weather and climate information can contribute towards improving agricultural production and food security in vulnerable rural communities. SAWS will continue to contribute to the fight against hunger by providing education, as well as

weather and climate information to enable farmers, inclusive of subsistence farmers, to make adjustments in their operational activities and long-term seasonal planning in agricultural production systems.

### **Fighting corruption**

The South African Government has highlighted corruption as one of the greatest impediments to the country's growth and development. The South African Weather Service (SAWS) as an entity of government has a duty to contribute towards the reduction and ultimately eradication of corruption in the State. SAWS is committed to ethical business practices and prescripts of amongst others the Public Finance Management Act (PFMA), Act No. 1 of 1999 and associated Treasury Regulations.

In pursuit of ethical business conduct and compliance with corporate governance practices, SAWS developed and adopted the Code of Conduct and Ethics Policy which considers effective ethics management as a critical element in the day-to-day activities of the organisation. This policy/code is in line with corporate governance best practice and spells out general principles and ethical standards to be observed by the Board, Management, Employees, those doing business on behalf of SAWS, and to the extent possible by those doing business with SAWS. Implementation of the code affirms the commitment of SAWS to sound corporate governance practices and responsible corporate citizenship. Furthermore, to promote the eradication of criminal and other irregular conduct in SAWS, a Whistle Blowing Policy was developed and adopted by entity. This is additionally supported by the Whistleblowing Hotline available for staff to report any suspected fraudulent or corrupt activities in the entity.

## **2.3 Institutional policies and strategies**

### **Long-term financing strategy and Regulatory Considerations**

Optimal productivity of the South African Weather Service (SAWS) is reliant on sufficient availability of financial resources to enable and support its functions. The entity encountered numerous challenges over the preceding years posing a threat not only to its operations, but also sustainability in the long-term. SAWS remains heavily reliant on the support from Government in the form of a Government Grant allocation from the Department of Forestry, Fisheries and the Environment. This reliance is against the backdrop of an increasingly constrained national fiscus, resulting in steady decline in grant allocations.

SAWS' is actively improving its mobilisation of funds from external funders in the form fees generated through, among others, projects concluded with other scientific organisations. These collaborations enable the entity to perform research in various weather and climate fields and the funds are utilised in accordance with the conditions agreed with and set by the SAWS and the funders.

Notwithstanding the efforts to bring in additional revenue indicted above, there is a need to identify even more revenue generating initiatives to ensure the long-term sustainability of the SAWS. In the same vein, the entity developed a Revenue Turnaround Strategy which continues to be implemented and is expected to yield positive results in the medium- to long-term. As the SAWS continues with the implementation of its Revenue Turnaround Strategy, the entity is mindful of the impending pressure to strengthen its commercial position in the short-to-medium and ultimately long-term. The successful implementation of the Revenue Turnaround Strategy will assist SAWS to increase revenue generation to supplement the steadily decreasing government funding for meteorological services.

Non-statutory revenue is expected to reach R38,958 million in 2025/26 emanating from anticipated successes in implementing the Revenue Turnaround Strategy. This envisaged success is obviously dependent on the uptake of SAWS' innovative products, its ability to produce reliable and consistent data which, in turn, is dependent on contemporary and fit-for-purpose meteorological observations infrastructure and supporting technologies as well as market conditions. High-value observations infrastructure such as weather radars must be refurbished and upgraded to a desirable state. To this end, the entity developed an infrastructure plan for implementation over the long-term

There is a growing departure from using data from National Meteorological and Hydrological Services (NMHS), to using unverified and freely available data by various clients, both locally and internationally. Despite this growing trend, SAWS has a duty to maintain the integrity of meteorological data in line with its legislative mandate derived from the South African Weather Service Act, Act No. 8 of 2001, as amended. As demanded by the SAWS Act, the entity must "ensure the ongoing collection of meteorological and ambient air quality data over South Africa and the surrounding southern oceans for the use by current and future generations" as well as be the "long-term custodian of a reliable national climatological and ambient air quality record". This demand requires considerable investment in resources across the board to effectively discharge the entity's duties.

The SAWS will have to present a case for increased/additional funding through engagements with the Department of Forestry, Fisheries and the Environment (DFFE), the National Treasury (NT), as well as through the Medium-Term Expenditure Framework (MTEF) process.

In addition to the entity's intentions to secure increased funding, the SAWS identified a need to seek the regulation of the provision of meteorological services to the marine industry. The Regulating Committee for Meteorological Services (RCMS) is assisting SAWS to produce a cost-recovery model for the services provided by the entity through its established Marine Unit. The RCMS completed a feasibility analysis and circulated it for comment from the relevant stakeholders. It is also clear that pursuit of regulating the meteorological service provision to the marine industry will require a review of the South African Weather Service Act, Act No. 8 of 2001, as amended through the SAWS Amendment Act, Act No. 48 of 2013. The outcome of this feasibility analysis will serve as input to the final report which will be presented to the Minister of Forestry, Fisheries and the Environment for consideration.

### 3. UPDATES ON RELEVANT COURT RULINGS

Not applicable

## PART B: OUR STRATEGIC FOCUS

### 4. THE SAWS VISION, MISSION AND CORE VALUES

The Management and staff of SAWS are committed to the Vision, Mission and Core Values of the organisation and actively contribute to, and support all initiatives aimed at achieving organisational goals and objectives.

#### Vision

**“South African Weather-related Solutions for everyone, everyday”**

The vision articulates clearly the desired end state in which SAWS is central to a situation where citizens, communities and business sectors are able to use the information, products and services across the weather, climate and related environmental space to support socio-economic development and build resilience.

#### Mission

**“To provide meteorological solutions for improved quality of life for all in South Africa”**

Meteorological solutions include:

- Weather-related solutions
- Climate-related solutions
- Air quality solutions
- Other related environmental solutions, including water.

#### Core Values

- Integrity
- Collaborative
- Solution-oriented science
- Passion for service excellence



## 5. UPDATED SITUATIONAL ANALYSIS

South Africa finds itself engaged in the recovery from the impacts of the COVID-19 pandemic which plagued the globe since the year 2020. Though the pandemic negatively affected economies and lives across the globe, a steady though slow recovery continues to take place as sectors implement recovery plans to bring the situation back to pre-Covid levels. The South African Weather Service (SAWS) likewise was affected by the pandemic as its revenue generation from the aviation sector and strategic partnerships drastically declined.

Over the pandemic period SAWS endured financial strain to a point where its ability to meet its obligations was threatened. To counter and manage the threat, the entity sought approval from the Department of Forestry, Fisheries and the Environment (DFFE) and the National Treasury (NT) to convert a portion of its allocated capital expenditure funding to operational expenditure until such a time that the SAWS' ability to generate revenue, both statutory and non-statutory, improved. It is projected that the above-mentioned conversion will continue until the 2023/2024 financial year.

The Republic of South Africa, African continent and world at large are confronted with weather, climate and water-related challenges. The South African Weather Service (SAWS) is a member of the World Meteorological Organization (WMO), an agency of the United Nations that is dedicated to international cooperation and coordination pertaining to the state and behaviour of earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces, and the resulting distribution of water resources. As a key member of the WMO, SAWS is designated several responsibilities through WMO designations as well as chairmanship of several technical committees of the WMO. Additionally, the entity is engaged in implementing programmes and projects initiated by the WMO for the benefit of the African continent's National Meteorological and Hydrological Services (NMHS) and the Southern African Development Community (SADC). Such programmes and projects address aspects and issues ranging from improving meteorological observations, information exchange and research, improving weather forecasting and early warnings, as well as capacity development amongst others.

The effects of global warming continue to bring about increased extreme weather events with undesirable and devastating effects on amongst others food and water security. Extreme weather was once again highlighted as one of the most severe risks on a global scale over the next 10 years in [The Global Risks Report 2022](#). Through the implementation of impact-based forecasting, SAWS continues to provide impact-based severe weather warnings to the public in order to assist with mitigating the associated impacts of forecasted severe weather. The provision of this service assists Disaster Management authorities to coordinate responses and mitigate the forecasted undesirable impacts.



Figure 1: Most severe risks on a global scale over the next 10 years (Source: WEF Global Risks Perception Survey 2021-2022)

Over the medium-term the South African Weather Service will continue to implement actions to address identified weaknesses, take advantage of opportunities and mitigate against the identified threats to the entity.

Strengths	Weaknesses (Areas to be improved)	Opportunities (Prioritised)	Threats Prioritised
<ul style="list-style-type: none"> <li>Scientific research capabilities and contribution to meteorological-related intelligence</li> <li>Custodian of meteorological data inclusive of historical weather information, climate and air quality data</li> <li>Consistent delivery of information and solutions to various user segments</li> <li>National geographical footprint of meteorological observations network</li> <li>ISO 9001:2015 certified Quality Management System</li> <li>Local and international designations and accreditations</li> </ul>	<ul style="list-style-type: none"> <li>Development and delivery of user-specific solutions</li> <li>Promotion and marketing of meteorological-related solutions</li> <li>Non-statutory revenue generation</li> <li>Management of the life cycle of technology and infrastructure</li> <li>Business processes and performance management</li> <li>Organisational culture improvement</li> <li>Attraction and retention of critical and scarce Science, Engineering and Technical skills, especially ICT skills</li> </ul>	<ul style="list-style-type: none"> <li>Development and delivery of real-time user-friendly solutions</li> <li>Leverage on strategic partnerships and technologies</li> <li>Development of an objective verification system for impact-based forecasting</li> <li>Increased use of social media for positioning the entity and its products and services</li> <li>Management and maintenance of strategic air monitoring stations on behalf of Provinces and Municipalities</li> <li>Emerging technologies in Information and Communications Technology (ICT)</li> <li>Trend towards “BIG data” analytics</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient funding for the entity’s long-term sustainability</li> <li>Increased competition for meteorological- related service provision across the value chain</li> <li>Weakened economic growth and recovery</li> <li>Vandalism inflicted on meteorological infrastructure</li> <li>Staff attrition / loss of skills</li> <li>Fraud and corruption in public service</li> <li>High levels of cyber-crime and security vulnerabilities</li> <li>Electricity supply</li> </ul>

Table 1: SWOT analysis

## 5.1 External Environment Analysis

The COVID-19 pandemic resulted in diminished global economic growth across the globe. However, recovery is expected to continue albeit stronger and more rapidly in developed countries, as opposed to those that are least developed, inclusive of those identified with emerging economies. The pandemic impacted on the global supply chain as well as currency exchange rates. The price of crude oil has substantially increased since the beginning of COVID-19 and was further exacerbated by the Russia-Ukraine war. The above impacts were indeed felt by the South African Weather Service (SAWS) as there were delays in procurement of meteorological equipment from abroad as well as increases in the prices paid for such equipment. The trend continues as prices of equipment that is critical to SAWS' operations become ever so expensive. This directly affects the finances of the entity and delays the plans to upgrade and refurbish SAWS' meteorological infrastructure.

The COVID-19 pandemic forced industries and workplaces to adapt to new ways of doing business and the adoption of technologies that enable remote and offsite working arrangements. Technological development has accelerated, and more employers have embraced the use thereof in their workplaces. Consequently, remote working arrangements have become popular leading to employers adopting a hybrid working model and reducing office space occupied. SAWS too has taken advantage of technology that allows it to organise itself such that a hybrid working model is implemented and reduction of office space is pursued for the purposes of saving costs associated with rental. This approach is also an employee-value-proposition initiative to assist employees to realise a work and home life balance.

## 5.2 Internal Environment Analysis

The South African Weather Service (SAWS) remains committed to achieving its strategic priorities over the medium-term. These strategic priorities are inclusive of financial resource mobilisation for SAWS' long-term sustainability and competitiveness. The efficient and effective use of such financial resources will depend on adequate business processes, sound corporate governance and internal control mechanisms to enable and strengthen the entity's corporate governance. The entity's top management established management structures and committees to support the effective management of SAWS, consequently improving and enhancing the entity's decision-making, and contributing to improved corporate governance. It is through this intervention by management that amongst others, SAWS continues to obtain an unqualified audit opinion from the Auditor-General of South Africa (AGSA).

The rate of attrition of staff is a concern of top management as the entity continues to lose skills to similar organisations nationally and internationally. SAWS identified a need to improve on its attraction and retention of skills as a priority to curb the loss of skills and retain institutional knowledge that is also a critical component of competitiveness. Consequently, a Talent Management Strategy was developed, and its implementation will assist to reduce the crippling loss of scarce and critical skills.

This annual performance plan as well as operational plans will be delivered in an environment characterised by a constrained fiscus. Prioritisation of projects must be the order of business under these constraints. The effective discharge of SAWS' mandate cannot be compromised despite the fiscal challenges. The maintenance and upgrade of infrastructure and information systems is to continue and be managed such that the entity is able to provide meteorological information for the protection of lives and property within the country.

## Capacity to deliver the SAWS mandate - High-Level Organisational Structure

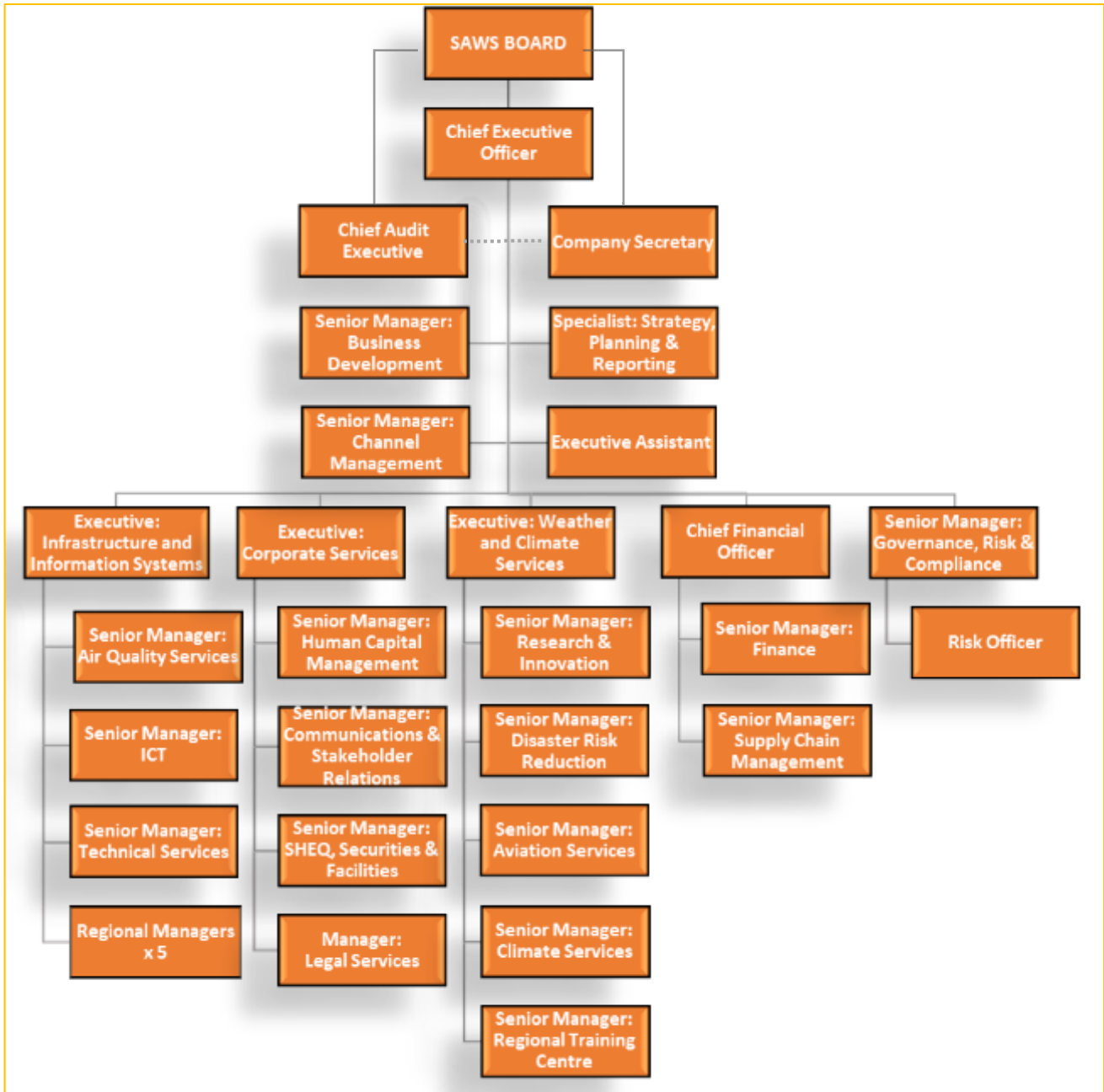


Figure 2: SAWS Organisational Structure

## PART C: MEASURING OUR PERFORMANCE

### 6. PROGRAMME PERFORMANCE INFORMATION

The SAWS Strategic Framework continues to strive for impact with the intention to obtain an ***Improved quality of life for all in South Africa***. The impact will be realised through the attainment of outcomes related to: Lives and property protected against meteorological-related risks, as well as Organisational Sustainability.

In the application of the Results-Based approach to ensure that all factors contributing to the achievement of the intended results are taken into consideration, the entity's Strategic Framework identifies four (4) Output Areas to which the SAWS will strive to achieve in this APP and throughout the strategic period. These Output Areas include:

- (i) ENHANCED METEOROLOGICAL-RELATED BODY OF KNOWLEDGE
- (ii) METEOROLOGICAL-RELATED SOLUTIONS PROVIDED TO MEET USER NEEDS
- (iii) OPTIMAL CORE TECHNOLOGICAL CAPABILITY
- (iv) INTERNAL EXCELLENCE ACHIEVED WITHIN THE ORGANISATION

## 6.1 Outcomes, Outputs, Performance Indicators and Targets

### 6.1.1 PROGRAMME 1: WEATHER AND CLIMATE SERVICES

*PURPOSE: TO SAFEGUARD LIFE AND PROPERTY AND PROVIDE METEOROLOGICAL SOLUTIONS TO ALL SOUTH AFRICANS.*

#### **SUB-PROGRAMME 1.1: WARNINGS, ALERTS AND ADVISORIES**

*PURPOSE: TO PROVIDE TIMEOUS AND ACCURATE IMPACT-BASED EARLY WARNINGS, ALERTS AND ADVISORIES TO SAFEGUARD LIFE AND PROPERTY AGAINST THE IMPACT OF SEVERE WEATHER ON LAND, OCEANS AND IN THE AIR.*

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Meteorological-related solutions provided to meet user needs	Percentage availability of national weather forecast (FPZA41)	99%	99%	98.77%	98.85%	98%	98%	98%
		Percentage accuracy of aerodrome warnings	96.75%	98.8%	98.73%	99.41%	98%	98%	98%
		Percentage accuracy of Terminal Aerodrome Forecast (TAF)	93.5%	93.8%	94.14%	98.74%	92%	93%	94%
		Percentage availability of marine products (SOLAS)	98%	98%	98.97%	99.59%	95%	97%	98%

## 6.1.2 PROGRAMME 2: RESEARCH AND INNOVATION

*PURPOSE: TO DEVELOP METEOROLOGICAL SOLUTIONS TO INFORM WISE SOCIO-ECONOMIC CHOICES.*

### SUB-PROGRAMME 2.1: RESEARCH

*PURPOSE: TO GENERATE NEW SCIENTIFIC INSIGHTS IN ATMOSPHERIC AND RELATED SCIENCES IN COLLABORATION WITH RELEVANT STAKEHOLDERS.  
TO EXPAND THE EXISTING KNOWLEDGE BASE AND INTELLIGENCE RELATED TO CLIMATE CHANGE.*

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Enhanced meteorological-related body of knowledge	Number of research outputs	52	49	37	25	30	30	35

### SUB-PROGRAMME 2.2: SOLUTION DEVELOPMENT

*PURPOSE: THE PROVISION OF INNOVATIVE METEOROLOGICAL AND RELATED PRODUCTS AND SERVICES THROUGH THE DEVELOPMENT AND IMPLEMENTATION OF COMMUNITY WEATHER-SMART PRODUCTS AND SERVICES.*

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Enhanced meteorological-related body of knowledge	Number of new or enhanced climate solutions for climate-sensitive sectors signed-off	Not applicable	1	1	1	1	1	1
		Number of new or enhanced non-climate-specific solutions signed-off	5	6	4	4	4	4	6

### PROGRAMME 3: INFRASTRUCTURE AND INFORMATION SYSTEMS

PURPOSE: TO UPGRADE, EXPAND AND OPTIMISE INFRASTRUCTURE.

#### SUB-PROGRAMME 3.1: OPTIMAL MANAGEMENT OF INFRASTRUCTURE

PURPOSE: TO ENSURE OPTIMAL INFRASTRUCTURE AND SYSTEMS UPTIME OF OBSERVATIONS, INFORMATION DISSEMINATION AND EXCHANGE THAT ENABLES SAWS TO ACHIEVE ITS MANDATE.

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Optimal core technological capability	Percentage availability of Automatic Weather Stations infrastructure	87.4%	88%	83.14%	84.17%	85%	85%	85%
		Percentage availability of Automatic Rainfall Stations infrastructure	82.7%	83%	81.39%	82.38%	80%	80%	80%
		Percentage availability of Global Atmospheric Watch infrastructure	86%	83%	81.58%	80%	80%	80%	80%
		Percentage availability of radar infrastructure	92%	73%	73.83%	61.84%	75%	80%	85%



Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Optimal core technological capability	Percentage availability of Lightning Detection Network infrastructure	92%	94%	93.76%	92.19%	90%	90%	90%
		Percentage availability of the South African Air Quality Information System	Not applicable	99%	98.96%	99.96%	95%	95%	95%

### SUB-PROGRAMME 3.2: QUALITY DATA

PURPOSE: TO PROVIDE QUALITY DATA MEETING MINIMUM DATA REQUIREMENTS.

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Lives and property protected against meteorological-related risks	Optimal core technological capability	Percentage of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	Not applicable	67%	69.44%	79.49%	80%	80%	80%
		Percentage of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	Not applicable	94%	89.81%	87.19%	85%	85%	85%

### 6.1.3 PROGRAMME 4: ADMINISTRATION (INCLUDING CORPORATE AND REGULATORY SERVICES)

*PURPOSE: TO PROVIDE LEADERSHIP, STRATEGIC, CENTRALISED ADMINISTRATION, EXECUTIVE SUPPORT, CORPORATE SERVICES AND FACILITATE EFFECTIVE COOPERATIVE GOVERNANCE, INTERNATIONAL RELATIONS AND ENVIRONMENTAL EDUCATION AND AWARENESS.*

#### SUB-PROGRAMME 4.1: SOUND CORPORATE GOVERNANCE

*PURPOSE: TO PROVIDE BUSINESS MANAGEMENT AND LEADERSHIP.*

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Organisational sustainability	Internal excellence achieved within the organisation	Percentage of local expenditure on affirmative procurement (Level 1 to 4)	95% <sup>1</sup>	80% <sup>2</sup>	91.26%	82.77%	75%	75%	80%
		Level of B-BBEE rating	Non-Compliant	8	8	7	6	5	5
		Unregulated commercial revenue generated	R35.55 mil	R25.02 mil	R26.8 mil	R27 mil	R30 510 000	R34 476 000	R38 958 000
		External audit opinion	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified external audit opinion with no material findings	Unqualified external audit opinion with no material findings	Unqualified external audit opinion with no material findings

<sup>1</sup> Level 1 to 8 procurement

<sup>2</sup> Level 1 to 8 procurement

### SUB-PROGRAMME 4.2: ADEQUATE, APPROPRIATELY SKILLED, TRANSFORMED AND DIVERSE WORKFORCE

PURPOSE: TO DEVELOP PROGRAMMES WHICH CREATE A SUPPORTIVE ENVIRONMENT FOR HIGH PERFORMANCE, EMPLOYEE WELLNESS, CAREER DEVELOPMENT, ATTRACTION AND RETENTION.

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Organisational sustainability	Internal excellence achieved within the organisation	Percentage of Attrition Rate	6%	11%	6.22%	5.16%	≤8%	≤8%	≤8%
		Percentage of Workplace Skills Plan targets met	30%	60%	86.89%	85%	80%	80%	85%
		Percentage compliance to Employment Equity on women in management	36%	39%	38.71%	39.23%	42%	45%	45%
		Percentage compliance to Employment Equity on persons living with disabilities	2%	1.62%	3.03%	3.02%	2%	2%	3%
		Number of youths appointed for internships and learnerships as at the end of the year	20	10	15	9	10	15	15
		Number of placements in work-integrated learning as at the end of the year	Not applicable	5	4 (4 PWDs)	5	8	8	8

### SUB-PROGRAMME 4.3: BRAND POSITIONING AND STAKEHOLDER NETWORK DEVELOPMENT

*PURPOSE: TO DEVELOP AND MAINTAIN VARIOUS PLATFORMS FOR ENGAGEMENT WITH STAKEHOLDERS TO EXTEND THE REACH AND INCREASE AWARENESS OF THE SAWS BRAND. TO PROMOTE ENGAGEMENT OF STAKEHOLDERS FOR MUTUALLY BENEFICIAL RELATIONSHIPS.*

Outcome	Outputs	Output Indicators	Audited/Actual Performance			Estimated Performance 2022/23	Medium-Term Targets		
			2019/20	2020/21	2021/22		2023/24	2024/25	2025/26
Organisational sustainability	Internal excellence achieved within the organisation	Number of positioning and profiling programmes conducted locally and internationally	Not applicable	Not applicable	9	18	20	20	22
		Number of public awareness programmes conducted	Not applicable	Not applicable	16	25	27	27	30
		Number of collaborations through partnerships implemented locally and internationally	Not applicable	Not applicable	2	11	12	14	14

## 6.2 Indicators, Annual and Quarterly Targets

### 6.2.1 PROGRAMME1: WEATHER AND CLIMATE SERVICES

*PURPOSE: TO SAFEGUARD LIFE AND PROPERTY AND PROVIDE METEOROLOGICAL SOLUTIONS TO ALL SOUTH AFRICANS.*

#### **SUB-PROGRAMME 1.1: WARNINGS, ALERTS AND ADVISORIES**

*PURPOSE: TO PROVIDE TIMEOUS AND ACCURATE IMPACT-BASED EARLY WARNINGS, ALERTS AND ADVISORIES TO SAFEGUARD LIFE AND PROPERTY AGAINST THE IMPACT OF SEVERE WEATHER ON LAND, OCEANS AND IN THE AIR.*

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Percentage availability of national weather bulletins (FPZA41)	98% availability of national weather forecast (FPZA41)	98% availability of national weather forecast (FPZA41)	98% availability of national weather forecast (FPZA41)	98% availability of national weather forecast (FPZA41)	98% availability of national weather forecast (FPZA41)
Percentage accuracy of aerodrome warnings	98% accuracy of aerodrome warnings	98% accuracy of aerodrome warnings	98% accuracy of aerodrome warnings	98% accuracy of aerodrome warnings	98% accuracy of aerodrome warnings
Percentage accuracy of Terminal Aerodrome Forecast (TAF)	92% accuracy of Terminal Aerodrome Forecast	92% accuracy of Terminal Aerodrome Forecast	92% accuracy of Terminal Aerodrome Forecast	92% accuracy of Terminal Aerodrome Forecast	92% accuracy of Terminal Aerodrome Forecast
Percentage availability of marine products (SOLAS)	95% availability of marine products (SOLAS)	95% availability of marine products (SOLAS)	95% availability of marine products (SOLAS)	95% availability of marine products (SOLAS)	95% availability of marine products (SOLAS)

## 6.2.2 PROGRAMME 2: RESEARCH AND INNOVATION

*PURPOSE: TO DEVELOP METEOROLOGICAL SOLUTIONS TO INFORM WISE SOCIO-ECONOMIC CHOICES.*

### SUB-PROGRAMME 2.1: RESEARCH

*PURPOSE: TO GENERATE NEW SCIENTIFIC INSIGHTS IN ATMOSPHERIC AND RELATED SCIENCES IN COLLABORATION WITH RELEVANT STAKEHOLDERS.  
TO EXPAND THE EXISTING KNOWLEDGE BASE AND INTELLIGENCE RELATED TO CLIMATE CHANGE.*

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Number of research outputs	30 research outputs	8 research outputs	7 research outputs	7 research outputs	8 research outputs

### SUB-PROGRAMME 2.2: SOLUTION DEVELOPMENT

*PURPOSE: THE PROVISION OF INNOVATIVE METEOROLOGICAL AND RELATED PRODUCTS AND SERVICES THROUGH THE DEVELOPMENT AND IMPLEMENTATION OF COMMUNITY WEATHER-SMART PRODUCTS AND SERVICES.*

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Number of new or enhanced climate solutions for climate-sensitive sectors signed-off	1 new or enhanced climate solution for climate-sensitive sectors signed-off	Structure 1 new or enhanced climate solution for climate-sensitive sectors finalised	Introduction and second chapter of 1 new or enhanced climate solution for climate-sensitive sectors completed	Draft report of 1 new or enhanced climate solution for climate-sensitive sectors completed	1 new or enhanced climate solution for climate-sensitive sectors signed-off
Number of new or enhanced non-climate-specific solutions signed-off	4 new or enhanced non-climate-specific solutions signed-off	Needs analysis for new or enhanced non-climate-specific solutions completed	4 new or enhanced non-climate-specific solutions prototypes developed as per needs analysis	4 new or enhanced non-climate-specific solutions prototypes translated into solutions	4 new or enhanced non-climate-specific solutions signed-off

### 6.2.3 PROGRAMME 3: INFRASTRUCTURE AND INFORMATION SYSTEMS

PURPOSE: TO UPGRADE, EXPAND AND OPTIMISE INFRASTRUCTURE.

#### SUB-PROGRAMME 3.1: OPTIMAL MANAGEMENT OF INFRASTRUCTURE

PURPOSE: TO ENSURE OPTIMAL INFRASTRUCTURE AND SYSTEMS UPTIME OF OBSERVATIONS, INFORMATION DISSEMINATION AND EXCHANGE THAT ENABLES SAWS TO ACHIEVE ITS MANDATE.

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Percentage availability of Automatic Weather Stations infrastructure	85% availability of Automatic Weather Stations infrastructure	85% availability of Automatic Weather Stations infrastructure	85% availability of Automatic Weather Stations infrastructure	85% availability of Automatic Weather Stations infrastructure	85% availability of Automatic Weather Stations infrastructure
Percentage availability of Automatic Rainfall Stations infrastructure	80% availability of Automatic Rainfall Stations infrastructure	80% availability of Automatic Rainfall Stations infrastructure	80% availability of Automatic Rainfall Stations infrastructure	80% availability of Automatic Rainfall Stations infrastructure	80% availability of Automatic Rainfall Stations infrastructure
Percentage availability of Global Atmospheric Watch infrastructure	80% availability of Global Atmospheric Watch infrastructure	80% availability of Global Atmospheric Watch infrastructure	80% availability of Global Atmospheric Watch infrastructure	80% availability of Global Atmospheric Watch infrastructure	80% availability of Global Atmospheric Watch infrastructure
Percentage availability of radar infrastructure	75% availability of radar infrastructure	75% availability of radar infrastructure	75% availability of radar infrastructure	75% availability of radar infrastructure	75% availability of radar infrastructure
Percentage availability of Lightning Detection Network infrastructure	90% availability of Lightning Detection Network infrastructure	90% availability of Lightning Detection Network infrastructure	90% availability of Lightning Detection Network infrastructure	90% availability of Lightning Detection Network infrastructure	90% availability of Lightning Detection Network infrastructure
Percentage availability of the South African Air Quality Information System	95% availability of the South African Air Quality Information System	95% availability of the South African Air Quality Information System	95% availability of the South African Air Quality Information System	95% availability of the South African Air Quality Information System	95% availability of the South African Air Quality Information System

### SUB-PROGRAMME 3.2: QUALITY DATA

PURPOSE: TO PROVIDE QUALITY DATA MEETING MINIMUM DATA REQUIREMENTS.

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Percentage of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements
Percentage of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements



### 6.2.4 PROGRAMME 4: ADMINISTRATION (INCLUDING CORPORATE AND REGULATORY SERVICES)

*PURPOSE: TO PROVIDE LEADERSHIP, STRATEGIC, CENTRALISED ADMINISTRATION, EXECUTIVE SUPPORT, CORPORATE SERVICES AND FACILITATE EFFECTIVE COOPERATIVE GOVERNANCE, INTERNATIONAL RELATIONS AND ENVIRONMENTAL EDUCATION AND AWARENESS.*

#### SUB-PROGRAMME 4.1: SOUND CORPORATE GOVERNANCE

*PURPOSE: TO PROVIDE BUSINESS MANAGEMENT AND LEADERSHIP.*

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Percentage of local expenditure on affirmative procurement (Level 1 to 4)	75% of local expenditure on affirmative procurement (Level 1 to 4)	75% of local expenditure on affirmative procurement (Level 1 to 4)	75% of local expenditure on affirmative procurement (Level 1 to 4)	75% of local expenditure on affirmative procurement (Level 1 to 4)	75% of local expenditure on affirmative procurement (Level 1 to 4)
Level of B-BBEE rating	Level 6 B-BBEE rating	N/A	N/A	N/A	Level 6 B-BBEE rating
Unregulated commercial revenue generated	R30 510 000 unregulated commercial revenue generated	R7 627 500 unregulated commercial revenue generated	R7 627 500 unregulated commercial revenue generated	R7 627 500 unregulated commercial revenue generated	R7 627 500 unregulated commercial revenue generated
External audit opinion	Unqualified external audit opinion with no material findings	N/A	Unqualified external audit opinion with no material findings	N/A	N/A

### SUB-PROGRAMME 4.2: ADEQUATE, APPROPRIATELY SKILLED, TRANSFORMED AND DIVERSE WORKFORCE

PURPOSE: TO DEVELOP PROGRAMMES WHICH CREATE A SUPPORTIVE ENVIRONMENT FOR HIGH PERFORMANCE, EMPLOYEE WELLNESS, CAREER DEVELOPMENT, ATTRACTION AND RETENTION.

Output Indicators	Annual Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Percentage of Attrition Rate	≤8% Attrition Rate	≤8% Attrition Rate	≤8% Attrition Rate	≤8% Attrition Rate	≤8% Attrition Rate
Percentage of Workplace Skills Plan targets met	80% Workplace Skills Plan targets met	Develop Workplace Skills Plan and submit to TETA	30% Workplace Skills Plan targets met	60% Workplace Skills Plan targets met	80% Workplace Skills Plan targets met
Percentage compliance to Employment Equity on women in management	42% compliance to Employment Equity on women in management	42% compliance to Employment Equity on women in management	42% compliance to Employment Equity on women in management	42% compliance to Employment Equity on women in management	42% compliance to Employment Equity on women in management
Percentage compliance to Employment Equity on persons living with disabilities	2% compliance to Employment Equity on persons living with disabilities	2% compliance to Employment Equity on persons living with disabilities	2% compliance to Employment Equity on persons living with disabilities	2% compliance to Employment Equity on persons living with disabilities	2% compliance to Employment Equity on persons living with disabilities
Number of youths appointed for internships and learnerships as at the end of the year	10 youths appointed for internships and learnerships as at the end of the year	N/A	N/A	N/A	10 youths appointed for internships and learnerships as at the end of the year
Number of placements in work-integrated learning as at the end of the year	8 placements in work-integrated learning as at the end of the year	N/A	N/A	N/A	8 placements in work-integrated learning as at the end of the year

### **SUB-PROGRAMME 4.3: BRAND POSITIONING AND STAKEHOLDER NETWORK DEVELOPMENT**

*PURPOSE: TO DEVELOP AND MAINTAIN VARIOUS PLATFORMS FOR ENGAGEMENT WITH STAKEHOLDERS TO EXTEND THE REACH AND INCREASE AWARENESS OF THE SAWS BRAND. TO PROMOTE ENGAGEMENT OF STAKEHOLDERS FOR MUTUALLY BENEFICIAL RELATIONSHIPS.*

<b>Output Indicators</b>	<b>Annual Target</b>	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
Number of positioning and profiling programmes conducted locally and internationally	20 positioning and profiling programmes conducted locally and internationally	6 positioning and profiling programmes conducted locally and internationally	6 positioning and profiling programmes conducted locally and internationally	4 positioning and profiling programmes conducted locally and internationally	4 positioning and profiling programmes conducted locally and internationally
Number of public awareness programmes conducted	27 public awareness programmes conducted	8 public awareness programmes conducted	7 public awareness programmes conducted	6 public awareness programmes conducted	6 public awareness programmes conducted
Number of collaborations through partnerships implemented locally and internationally	12 collaborations through partnerships implemented locally and internationally	4 collaborations through partnerships implemented locally and internationally	2 collaborations through partnerships implemented locally and internationally	2 collaborations through partnerships implemented locally and internationally	4 collaborations through partnerships implemented locally and internationally

## 6.3 Explanation of Planned Performance Over the Medium-Term Period

### 6.3.1 Programme 1: Weather and Climate Services

The South African Weather Service (SAWS) will continue to provide weather information, inclusive of life-saving weather-related and early warnings to the public at large, as part of its public good mandate. The entity moved to providing impact-based forecasting information as a means to provide users with the impacts expected from issued alerts and warnings. As part of the impact-based forecasting initiative, SAWS will be working on the development and improvement of an objective verification system to analyse the accuracy of issued warnings.

The aviation industry operations, notably air navigation, are dependant on accurate aviation meteorological information which SAWS continues to provide. The entity commits to the provision of this information required by the industry, and equally as required of the Republic of South Africa under the Convention on International Civil Aviation to provide aviation products and services that enable efficient, safe and regular flight operations in the Republic and the region. In the 2023/24 financial year and over the medium-term, SAWS will be working on improving the desired accuracy levels of issued aerodrome warnings as well as terminal aerodrome forecasts. Aviation Meteorological Forecaster (AMF) competencies as well as provision of resources will be key to ensuring consistent and adequate service provision to the industry in order to contribute to the safety of air transport as required by ICAO.

The Safety of Life at Sea (SOLAS) convention requires amongst other, the maintenance of meteorological services for ships for safe navigation. SAWS continues to issue the marine industry with timely marine-related products and services inclusive of coastal and deep-sea products for those operating on the shores and those navigating South Africa's surrounding oceans.

The improvement of dissemination means and platforms will be looked at over the medium-term, as it is the prerogative of SAWS to improve the availability of products for users who are dependent on these for decision making.

### 6.3.2 Programme 2: Research and Innovation

The South African Weather Service (SAWS) aims to produce several publications which will increase its knowledge base and position the entity as a Scientific Institution of repute and promote the reputation of SAWS. The envisaged research output will also contribute to the advancement of meteorological sciences due to collaborations with world-wide scientists to produce scientific research papers for independent peer-review. The entity will continue to encourage its researchers to lead publications in accredited journals to build scientific profiles. To assist with building reputable profiles, the National Research Foundation (NRF) implemented a rating system to help build a globally competitive science system in South Africa. This system allows for South African scientists to be benchmarked against the best in the world, with a researcher's rating being based on reports by international peer reviewers on the researcher's recent research outputs and impact.

Part of SAWS' strategic intent is the realisation of a state where citizens and institutions are enabled to use quality and reliable weather and climate related data to enhance the quality of their lives and build resilience to extreme weather events and mitigate against climate change impacts. This desired state is achievable when weather and climate information provided is timely, relevant, useable and in a user-friendly format.

SAWS therefore intends to enhance and/or develop a range of climate-specific and other products /solutions for various users as an outcome of needs analyses that will be undertaken. The main aim with the development of these solutions is to assist users to make weather-smart decisions in their respective communities and industries, particularly in an increasingly variable and changing climate.

### **6.3.3 Programme 3: Infrastructure and Information Systems**

Optimal Infrastructure and Information Systems that support advanced technologies for weather observations, information dissemination and exchange are fundamental to SAWS' ability to achieve its mandate. Central to the SAWS observations and forecasting capabilities is the Surface Observations Network consisting of Automatic Weather Stations (AWS) and Automatic Rainfall Stations (ARS), as well as the Remote Sensing Observation Infrastructure consisting of the Radar Network and the Lightning Detection Network (LDN), amongst others. Optimal management of the above infrastructure and information systems will in the medium-term yield the desired availability targets. However, the availability of financial resources to invest in the entity's infrastructure is key to realisation of performance targets from an infrastructure perspective as well as provision of life-saving meteorological information. SAWS has long-term plans in place to optimise and to improve its infrastructure performance which is highly-dependent on funding.

One of the objects of SAWS as stipulated in the SAWS Act, is to ensure the ongoing collection of meteorological and ambient air quality data over South Africa and surrounding southern oceans for the use by current and future generations, and to be a long-term custodian of a reliable national climatological and ambient air quality record. It becomes extremely important for the entity to likewise ensure sound and optimal management of the air quality infrastructure, inclusive of the SAWS designated Priority Areas stations as well as the South African Air Quality Information System (SAAQIS). Over the medium-term SAWS will collaborate with provinces and municipalities to assist in improving the National Ambient Air Quality Monitoring Network functionality. A phased-in approach will be implemented for SAWS to manage strategic stations, in particular non-operational stations in areas with sparse monitoring on behalf of provinces and municipalities.

The SAWS infrastructure is important for the generation, transmission and storage of meteorological data for use as climate data. Climate data is the backbone of most operations related to National Meteorological Services such as SAWS. This data is used in several weather products and services and must be of acceptable quality and readily available when needed. Internal and external consumers of weather data need assurance about the data quality control processes and alignment to internationally recognised standards. SAWS is keen to realise climate data on the National Climate Database that meets minimum data requirements. In the medium-term, SAWS will focus on the implementation of an internally re-developed Climate Data Management System for the effective management of a National Climate Databank as mandated through the SAWS Act as amended.

### **6.3.4 Programme 4: Administration (Including Corporate and Regulatory Services)**

The South African Weather Service (SAWS) remains committed to obtaining an unqualified audit opinion of the Auditor General of South Africa. All efforts towards sound business management, compliance with applicable prescripts and standards, as well as good governance will be rallied in execution of this annual performance plan and the medium-term targets.

SAWS is a knowledge-based institution and values its Human Resources as an important asset of the organisation for delivery against the mandate. In driving a high-performance culture, the entity endeavours to reward its

talent pool with market related incentives and an employee value proposition which will enhance employee engagement and mitigate against the risk of high staff turnover in critical positions. Under the current economic conditions, the need for enhanced non-monetary rewards, also through partnerships is a very important focus area. Aligned to its Talent Management Strategy, SAWS will continue with the implementation of the Workplace Skills Plan to equip its employees with the skills required to position SAWS as “a provider of world-class meteorological solutions for improved quality of life for all South Africans”.

SAWS aspires to have a truly diverse workforce, that is representative of the Economically Active Population (EAP) of South Africa at all levels of the organisation. Aligned to the Department of Forestry, Fisheries and Environment’s Gender Mainstreaming agenda, SAWS is committed to improve on its target of women representation in management positions. In this regard SAWS offers a Generic Management Learnership, as part of its Women Advancement Programme, to equip female employees to progress to Management positions.

Whilst the entity exceeded the 2022/23 target for persons living with disabilities, this is still a focus area in terms of recruitment and learnership programmes.

SAWS strengthened its capability to position its brand through public and stakeholder relations as well as aiming to ensure safety of citizens through the dissemination of weather forecasting information, severe weather warnings, climate information and information relating to air quality. The entity aims to reach out to more people in rural and vulnerable communities impacted by the changing weather patterns, by balancing the activities with communication, education and brand positioning.

A partnership agreement with the Department of Agriculture, Land Reform and Rural Development (DALRRD) translated into the two institutions conducting community awareness programmes in various provinces across the country. The Free State and Gauteng province were covered since 2021/2022, while the Eastern Cape and North West province will be the focus of this year.

In the quest to effectively fulfil its national and international obligations, as well as service its commercial ventures, the South African Weather Service (SAWS) has forged and continues to forge partnerships at national, regional and international levels. On the regional front, the SAWS will continue to play its role in the advancement of meteorology on the continent through servicing memoranda of understanding (MoU) with institutions inclusive of amongst others, the Instituto Nacional de Meteorologia (Mozambique) and Namibia. Formalisation of relations with other institutions will continue to be pursued with the aim of aligning with latest meteorological developments that will better service the parties involved.

From an international collaboration and partnership point of view, the organisation intends to continue collaborating with the UK Meteorological Office (UKMO) on numerous meteorological projects under the Newton Fund. The entity is committed to strengthening its international collaborations through implementation of memoranda of understanding (MoU) with institutions such as the Deutscher Wetterdienst (DWD), which is the German Meteorological Service. Moreover, SAWS intends to formalise relations with the China Meteorological Agency (CMA) as well National Oceanic and Atmospheric Administration (NOAA) of the United States of America (USA). Of paramount importance is for SAWS to ensure that the forged partnerships are optimally serviced and implemented through formalised action plans, taking into consideration the limited capacity within the entity.

## 6.4 Overview of 2023/24 Budget and MTEF: Estimates

### 6.4.1 Expenditure Estimates

#### Summary of Income and Expenditure

##### Projected Income Statement

Description	Audited Annual Financial Statements	ENE Allocations over MTEF Period 2022/23 to 2025/26			
	2021/22 R'000	2022/23 R'000	2023/24 R'000	2024/25 R'000	2025/26 R'000
<b>Revenue</b>					
Government Grant - Operational	207 133	212 042	336 856	352 415	232 379
Government Grant - Operational(Re-allocation from Infrastructure grant)	124 903	124 000	-	-	-
Government Grant - Capex	18 205	51 044	191 437	198 238	195 327
Additional Grant - Capex	-	8 900	-	30 000	30 000
Commercial Income	26 853	27 000	30 510	34 476	38 958
Aviation Income	77 718	94 090	108 441	128 000	140 800
Other income, Interest and Donor Funds	26 772	60 356	25 500	28 050	34 210
<b>Total Revenue</b>	<b>481 584</b>	<b>577 432</b>	<b>692 744</b>	<b>771 179</b>	<b>671 674</b>
<b>Expenditure</b>					
Employee Costs	(268 509)	(290 088)	(307 493)	(325 942)	(345 499)
Administrative and Operating Costs	(154 895)	(173 221)	(193 814)	(216 999)	(230 651)
<b>Total Expenditure</b>	<b>(423 404)</b>	<b>(463 309)</b>	<b>(501 307)</b>	<b>(542 941)</b>	<b>(576 150)</b>
<b>Operating (Deficit) / Surplus Before Depreciation and Amortisation</b>	<b>58 180</b>	<b>114 124</b>	<b>191 437</b>	<b>228 238</b>	<b>95 525</b>
Impairment Loss	(193)	-	-	-	-
Bad Debts written-off	(4 433)	-	-	-	-
Gain / (Loss) on disposal of assets	463	-	-	-	-
Depreciation and Amortisation	(31 856)	(39 170)	(42 304)	(45 265)	(48 886)
<b>Surplus / (Deficit) before Valuations</b>	<b>22 161</b>	<b>74 954</b>	<b>149 133</b>	<b>182 973</b>	<b>46 638</b>
Fair Value Adjustments and Actuarial Valuations	13 635	-	-	-	-
Gains /(Loss) from Foreign Exchange	820	-	-	-	-
<b>Surplus / (Deficit) for the year</b>	<b>36 616</b>	<b>74 954</b>	<b>149 133</b>	<b>182 973</b>	<b>46 638</b>
Capital Expenditure	(18 205)	(74 954)	(149 133)	(182 973)	(46 638)
<b>Net Surplus / (Deficit) after CAPEX for the year</b>	<b>18 411</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Table 2: Projected Income Statement

## 6.4.2 Asset and Liability Management

	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
	Audited figures	Budget	Draft		
<b>ASSETS</b>	<b>R'million</b>				
Carrying value of assets	394	389	400	456	519
Inventory	5	2	3	5	7
Receivables and prepayments	18	24	26	21	23
Cash and cash equivalents	70	11	12	20	30
<b>Total assets</b>	<b>487</b>	<b>426</b>	<b>440</b>	<b>502</b>	<b>579</b>
<b>LIABILITIES</b>					
Accumulated surplus/deficit	392	390	400	569	753
Operating Lease	1	3	3	4	6
Trade and other payables	23	19	22	28	33
Provisions	71	15	15	18	21
<b>Total equity and liabilities</b>	<b>487</b>	<b>426</b>	<b>440</b>	<b>619</b>	<b>813</b>

Table 3: Summarized Statement of Financial Position

## 6.4.3 Cash Flow Projections

CASH FLOW DATA	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
	Audited figures	Budget	Draft		
	<b>R'million</b>				
Cash flow from operating activities	45	15	150	191	57
Cash flow from investing activities	(17)	(74)	(149)	(183)	(47)
Cash flow from financing activities	-	-	-	-	-
Net increase/(decrease) in cash and cash equivalents	28	(59)	1	8	10
Cash and cash equivalents at the beginning of the year	42	70	11	12	20
Estimate of available cash	70	11	12	20	30

Table 4: Cash Flow Projections



### 6.4.4 Capital Expenditure Programmes

ACQUISITIONS	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
	Audited figures	Budget	Draft		
R'million					
Air-Quality Equipment	4,86	5,00	5,00	9,85	12,00
Meteorological Equipment	1,90	20,00	20,00	62,12	7,00
Radar Equipment	3,05	18,40	38,13	80,00	8,00
Computer Servers/Equipment and HPC	5,43	21,00	80,00	20,00	7,64
Computer Software	0,00	5,00	3,00	5,00	5,00
Furniture and Fittings	0,93	2,20	1,00	3,00	3,00
Buildings and Leasehold Improvements	1,62	1,20	1,00	1,00	1,00
Office Equipment	0,42	1,20	1,00	2,00	3,00
<b>TOTAL ACQUISITIONS</b>	<b>18,21</b>	<b>74,00</b>	<b>149,13</b>	<b>182,97</b>	<b>46,64</b>

Table 5: Capital Expenditure

## 7. UPDATED KEY RISKS AND MITIGATION FROM STRATEGIC PLAN

Outcome	Output	Key Risk	Measures to Mitigate
Lives and property protected against meteorological-related risks	Enhanced Meteorological-Related Body of Knowledge	Weak core innovation capability in science, engineering and technology	<ul style="list-style-type: none"> <li>• Implementation of career ladder for SET skills.</li> <li>• Implementation of Research and Development Strategy.</li> </ul>
	Meteorological-related solutions provided to meet user needs	Inability to attract/reach a large scale of new sectors that can utilise SAWS products and services	<ul style="list-style-type: none"> <li>• Review and Implementation of regulated cost-recovery mechanisms including marine and other sectors solutions.</li> <li>• Implementation and updating of sectors including marine and renewable energy sectors.</li> <li>• Roll-out of impact-based forecasting products and services to weather-sensitive sectors (green energy, agriculture, water and health).</li> </ul>
		Inadequate revenue generation from sale of meteorological products and services	<ul style="list-style-type: none"> <li>• Explore revenue generating opportunities in the marine space.</li> <li>• Implementation and monitoring of revenue turnaround strategy.</li> <li>• Commercial committee to generate ideas.</li> <li>• Grow revenue through strategic partnerships to address gaps in coverage.</li> </ul>
	Optimal Core Technological Capability	Inaccurate weather information by SAWS dissemination partners and communication not reaching stakeholders timely	<ul style="list-style-type: none"> <li>• Develop Dissemination Channel Policy and Strategy.</li> <li>• Conclude memoranda of agreements and service level agreements with disseminating partners.</li> </ul>
		Inadequate Infrastructure Performance	<ul style="list-style-type: none"> <li>• Implementation of infrastructure performance turnaround strategy and technical plans.</li> <li>• Manage third-party support (long-term maintenance contracts).</li> <li>• Upgrading of standby power infrastructure and security of infrastructure.</li> <li>• Training of technical staff for improvement of maintenance efforts.</li> </ul>
		Technological Changes	<ul style="list-style-type: none"> <li>• Implement ICT turnaround plan.</li> <li>• Implementation of radar software upgrade.</li> <li>• ICT steering committee periodic meetings.</li> <li>• Outsourced software engineering skills for HPC implementation as well as enhancement of skills for ICT staff.</li> <li>• Monitoring and evaluation of service providers.</li> </ul>

Outcome	Output	Key Risk	Measures to Mitigate
Organisational sustainability	Internal Excellence achieved within the Organisation	Ineffective governance processes and accountability	<ul style="list-style-type: none"> <li>Implementation of talent strategy.</li> <li>Management and Board performance evaluation.</li> <li>Implementation of succession planning at EXCO and Senior Management level.</li> <li>Gender equity initiatives across the board.</li> <li>Address gaps identified through 360 degrees evaluations at management level.</li> </ul>
		Inability for SAWS to meet set strategic priorities	<ul style="list-style-type: none"> <li>Enhance partnerships with other organisations.</li> <li>Filling of key positions and implementation of succession planning.</li> <li>Implementation Revenue Turnaround Strategy and cost containment strategy.</li> </ul>
		Inadequate strategic positioning	<ul style="list-style-type: none"> <li>Develop an inclusive strategy for communications and stakeholder relations focusing on brand promotion.</li> <li>Lobbying for Executive Council position in the World Meteorological Organization</li> <li>Pursue the plans to form international and regional partnerships.</li> </ul>
		Non-compliance to quality management system requirements	<ul style="list-style-type: none"> <li>Development or sourcing of document and information management system.</li> </ul>
		Inadequate critical skills attraction and retention	<ul style="list-style-type: none"> <li>Advancement of women in management and leadership positions.</li> <li>Implementation of succession planning.</li> </ul>
		Non-compliance to SCM prescripts	<ul style="list-style-type: none"> <li>Training of bid committees</li> <li>Contract management</li> </ul>
		Financial Unsustainability	<ul style="list-style-type: none"> <li>Implementation of cost containment measures.</li> <li>Monitor implementation of Revenue Turnaround Strategy.</li> </ul>

## **8. INFRASTRUCTURE PROJECTS**

Not applicable.

The infrastructure initiatives and capital expenditure attached thereto are expressed in Section 6.4.4 of this annual performance plan.

## **9. PUBLIC-PRIVATE PARTNERSHIPS**

Not applicable.

The South African Weather Service has not entered any Public-Private Partnership.

## PART D: TECHNICAL INDICATOR DESCRIPTIONS

<b>Indicator Title</b>	Percentage availability of national weather forecast (FPZA41)
<b>Definition</b>	Refers to the availability of National Public Weather bulletins on time over a given period. These are issued twice daily. Set time of submission is no later than 06:00 and 16:00 South African Standard Time.
<b>Source of data</b>	Message Handling System
<b>Method of Calculation / Assessment</b>	Quantitative: $((\text{Forecast produced on time} \div (\text{number of days that month} \times 2)) \times 100)$
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>• Message Handling System reports</li> <li>• Signed-off monthly reports</li> </ul>
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	98% availability of national weather forecast (FPZA41)
<b>Indicator Responsibility</b>	Senior Manager: Disaster Risk Reduction

<b>Indicator Title</b>	Percentage accuracy of aerodrome warnings
<b>Definition</b>	Aerodrome warnings are issued to provide operators, aerodrome services and others with concise information on meteorological conditions that could adversely affect the aerodrome's facilities and services, and aircraft on the ground, including parked aircraft. Warnings are issued for major airports and are disseminated by local arrangements to those immediately concerned. Warnings are issued on ad hoc basis when the threat is expected to happen within the next 4 hours.
<b>Source of data</b>	OPMET Databank, Aviation website
<b>Method of Calculation / Assessment</b>	Quantitative: $\frac{(\text{Forecast and Observed} + \text{Not Forecast Not Observed})}{(\text{Forecast and Observed} + \text{Forecast but Not Observed} + \text{Not Forecast but Observed} + \text{Not Forecast Not observed})} \times 100$
<b>Means of verification</b>	Monthly (Mrep) and quarterly reports
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	98% accuracy of aerodrome warnings
<b>Indicator Responsibility</b>	Senior Manager: Aviation Services

<b>Indicator Title</b>	Percentage accuracy of Terminal Aerodrome Forecast (TAF)
<b>Definition</b>	Terminal Aerodrome Forecast (TAF) is a concise statement of the expected meteorological conditions at an airport during a specified period, up to 30 hours for an international airport. The forecast is used for planning purposes by airlines, i.e. to give them expected conditions when landing at intended destinations.
<b>Source of data</b>	OPMET Databank, Aviation website
<b>Method of Calculation / Assessment</b>	Quantitative: $((\text{Forecast and Observed} + \text{Not Forecast Not Observed}) \div (\text{Forecast and Observed} + \text{Forecast but Not Observed} + \text{Not Forecast but Observed} + \text{Not Forecast Not observed}) \times 100)$
<b>Means of verification</b>	Aviation Evaluation Reports, Monthly Reports (Mrep), Quarterly reports
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	92% accuracy of Terminal Aerodrome Forecast (TAF)
<b>Indicator Responsibility</b>	Senior Manager: Aviation Services

<b>Indicator Title</b>	Percentage availability of marine products (SOLAS)
<b>Definition</b>	Refers to the percentage availability of SOLAS bulletins (FQZA30 and FQZA31) on time over a given period. The times for FQZA30 are no later than 10:30 and 15:30 South African Standard Time. The times for FQZA31 are no later than 11:00 and 16:00 South African Standard Time.
<b>Source of data</b>	<ul style="list-style-type: none"> <li>• Message Handling System reports</li> <li>• Signed-off monthly reports</li> </ul>
<b>Method of Calculation / Assessment</b>	Quantitative: $((\text{Forecast produced on time} \div (\text{number of days that month} \times 2)) \times 100)$ for FQZA30 and FQZA31 respectively; Average for the two (2) products
<b>Means of verification</b>	Monthly Report (Mrep)
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	95% availability of marine products (SOLAS)
<b>Indicator Responsibility</b>	Senior Manager: Disaster Risk Reduction

<b>Indicator Title</b>	Number of research outputs
<b>Definition</b>	Research output measured in terms of the number of publications published in the following media: <ol style="list-style-type: none"> <li>1. Peer-reviewed articles published in scientific journals</li> <li>2. Peer-reviewed conference papers</li> <li>3. Theses (MSc. And PhD)</li> <li>4. Book Chapters</li> </ol>
<b>Source of data</b>	Publications through Scientific Journals. Publications through peer-reviewed conference proceedings. Theses (MSc or PhD)-reviewed by academic reviewers.
<b>Method of Calculation / Assessment</b>	Quantitative
<b>Means of verification</b>	Quarterly Report on Journal publications, conference proceedings & thesis.
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	30 Research outputs
<b>Indicator Responsibility</b>	Senior Manager: Research and Innovation

<b>Indicator Title</b>	Number of new or enhanced climate solutions for climate-sensitive sectors signed-off
<b>Definition</b>	The indicator measures the number of climate solutions that can be used as a decision-making tool. To provide value-added climate data and services towards building resilience to climate change
<b>Source of data</b>	The information is mainly forthcoming from observational weather data stored on the climate database. In addition, media sources are utilised to summarise significant weather and climate events.
<b>Method of Calculation / Assessment</b>	Quantitative
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>• Signed-off quarterly progress on solution development</li> <li>• Signed-off solution by Senior Manager: Climate Services at year end</li> </ul>
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	One (1) new or enhanced climate solution for climate-sensitive sectors signed-off
<b>Indicator Responsibility</b>	Senior Manager: Climate Services

<b>Indicator Title</b>	Number of new or enhanced non-climate-specific solutions signed-off
<b>Definition</b>	Indicator measures the number of new products and services as well as enhancements to existing products in order to provide value-added decision-making services for different economic sectors.
<b>Source of data</b>	SAWS Observation Platforms and networks (ARS, AWS, Radar, Lightning, Satellite etc.) Numerical Weather Prediction model output (UM, ECMWF etc.) Other Data sets
<b>Method of Calculation / Assessment</b>	Quantitative
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>Signed-off quarterly progress on solutions development</li> <li>Signed-off solutions by Users and Senior Manager: Research and Innovation at year end</li> </ul>
<b>Assumptions</b>	Availability of quality data from observation platforms as well as the reliability of computational systems (HPC, Servers).
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	4 new or enhanced non-climate-specific solutions signed-off
<b>Indicator Responsibility</b>	Senior Manager: Research and Innovation



<b>Indicator Title</b>	Percentage availability of Automatic Weather Stations infrastructure
<b>Definition</b>	Operational Automatic Weather Stations with all parameters available for $\geq 85\%$ in a particular month are deemed to be operational. Operational stations are then calculated as a percentage of the number of stations in operations.
<b>Source of data</b>	Climate Database - five-minute tables
<b>Method of Calculation / Assessment</b>	Quantitative: $\% \text{temperature} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{humidity} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{pressure} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{speed} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{winddir} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{gust} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $\% \text{Rain} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $= \text{IF}((\text{AND}(\% \text{temperature} \geq 85; \% \text{humidity} \geq 85; \% \text{pressure} \geq 85; \% \text{speed} \geq 85; \% \text{winddir} \geq 85; \% \text{gust} \geq 85; \% \text{Rain} \geq 85));$ "Operational"; $\text{IF}((\text{AND}(\% \text{temperature} = 0; \% \text{humidity} = 0; \% \text{pressure} = 0; \% \text{speed} = 0; \% \text{winddir} = 0; \% \text{gust} = 0; \% \text{Rain} = 0));$ "Non-Operational"; "Semi Operational"))
<b>Means of verification</b>	Automatic Weather Stations infrastructure performance report
<b>Assumptions</b>	Spares necessary for the maintenance of infrastructure are available
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	85% Automatic Weather Stations infrastructure
<b>Indicator Responsibility</b>	Senior Manager: Technical Services

<b>Indicator Title</b>	Percentage availability of Automatic Rainfall Stations infrastructure
<b>Definition</b>	Operational Automatic Rainfall Stations with all parameters available for $\geq 85\%$ in a particular month are deemed to be operational. Operational stations are then calculated as a percentage of the number of stations in operations.
<b>Source of data</b>	Climate Database - five-minute tables
<b>Method of Calculation / Assessment</b>	Quantitative: $\% \text{Rain} = \text{number of reporting days} \div \text{number of days in month} \times 100$ $= \text{IF}((\text{AND}(\% \text{Rain} \geq 85));$ "Operational"; $\text{IF}((\text{AND}(\% \text{Rain} = 0));$ "Non-Operational"; "Semi Operational"))
<b>Means of verification</b>	Automatic Rainfall Stations infrastructure performance report
<b>Assumptions</b>	Spares necessary for the maintenance of infrastructure is available
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	80% availability of Automatic rainfall stations infrastructure
<b>Indicator Responsibility</b>	Senior Manager: Technical Services

<b>Indicator Title</b>	Percentage availability of Global Atmospheric Watch infrastructure
<b>Definition</b>	One of the WMO obligations for SAWS, is to manage the Global Atmospheric Watch station at Cape Point and Regionally to measure background elements of trace gas increases as a result of climate change. The indicator measures the percentage availability of the GAW infrastructure over a reporting period.
<b>Source of data</b>	The Global Atmospheric Watch Cape Point and Global Atmospheric Watch Regional suite of instruments
<b>Method of Calculation / Assessment</b>	Quantitative: ((GAW Cape Point average sensor performance + GAW Regional average sensor performance) ÷ 2)
<b>Means of verification</b>	Quarterly Global Atmospheric Watch Data Recovery report.
<b>Assumptions</b>	Adequate performance of instrumentation (infrastructure) as well as availability of supporting consumables (gasses)
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	80% availability of Global Atmospheric Watch infrastructure
<b>Indicator Responsibility</b>	Senior Manager: Research and Innovation

<b>Indicator Title</b>	Percentage availability of radar Infrastructure
<b>Definition</b>	Radar is the critical component for short-term forecasting and issuing of weather warnings. It is critical to track average percentage of the radar infrastructure availability over a reporting period. The performance results are system generated TITAN files which are analysed by radar specialists. Uptime is measured in 24 hours cycle, monthly average and quarterly average.
<b>Source of data</b>	Radar data files generated and stored on TITAN and Rainbow computers (remote desktop applications) dedicated to radar network
<b>Method of Calculation / Assessment</b>	Quantitative: Quarterly average of radar infrastructure availability
<b>Means of verification</b>	Quarterly radar performance report derived from Rainbow/TITAN files analysis.
<b>Assumptions</b>	Network access to files received in a 24-hour system operation, Ravis uptime
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	75% availability of radar Infrastructure
<b>Indicator Responsibility</b>	Senior Manager: Technical Services

<b>Indicator Title</b>	Percentage availability of Lightning Detection Network infrastructure
<b>Definition</b>	Average percentage of the Lightning Detection Network infrastructure availability over a reporting period. The performance results are system generated SUDD files which are analysed by Lightning Detection Network specialists. Uptime is measured in 24 hours cycle, monthly average and quarterly average.
<b>Source of data</b>	Lightning processing server
<b>Method of Calculation / Assessment</b>	Quantitative: Quarterly average of Lightning Detection Network infrastructure availability
<b>Means of verification</b>	Quarterly of Lightning Detection Network performance report derived from SUDD files analysis.
<b>Assumptions</b>	Network access to files received in a 24-hour system operation
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	90% availability of Lightning Detection Network infrastructure
<b>Indicator Responsibility</b>	Senior Manager: Technical Services

<b>Indicator Title</b>	Percentage availability of the South African Air Quality Information System
<b>Definition</b>	The percentage of South African Air Quality Information System (SAAQIS) uptime over a given period i.e., the availability of full SAAQIS functionality for use over a reporting period.
<b>Source of data</b>	External/third party monitoring tool or Envitech – SAAQIS Service Provider
<b>Method of Calculation / Assessment</b>	Quantitative: SAAQIS availability expressed as a percentage, provided by an external electronic website monitoring tool
<b>Means of verification</b>	Website Monitoring Report
<b>Assumptions</b>	N/A
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	95% availability of the South African Air Quality Information System
<b>Indicator Responsibility</b>	Senior Manager: Air Quality Services

<b>Indicator Title</b>	Percentage of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements
<b>Definition</b>	This indicator refers to the percentage (%) of SAWS operated ambient air quality monitoring stations (AAQMS) within the Priority Areas which are available on SAAQIS that meet minimum (75%) data requirements over a reporting period.
<b>Source of data</b>	SAAQIS report / station monthly reports
<b>Method of Calculation / Assessment</b>	Quantitative: The number of Ambient Air Quality Monitoring Stations (AAQMS) operated by SAWS in the Priority Areas that meet minimum data requirements is computed and then expressed as a percentage of the total number of AAQMS in the Priority Areas.
<b>Means of verification</b>	Monthly Reports of Highveld Priority Area (HPA), Vaal Priority Area (VPA) and Waterberg Bojanala Priority Area (WBPA) stations
<b>Assumptions</b>	Only refers to SAWS operated ambient air quality monitoring stations in the National Priority Areas (HPA, VPA and WBPA)
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	80% of Priority Areas Air Quality Stations available on SAAQIS meeting minimum data requirements
<b>Indicator Responsibility</b>	Senior Manager: Air Quality Services

<b>Indicator Title</b>	Percentage of AWS & ARS climate data available on National Climate Database meeting minimum data requirements
<b>Definition</b>	As long-term custodian of a reliable national climate record, reliable and quality data must be available on the national database. Indicator calculates percentage of such quality data on the national database over a reporting period.
<b>Source of data</b>	Climate Database - five-minute tables
<b>Method of Calculation / Assessment</b>	Quantitative: <ul style="list-style-type: none"> <li>• <math>((\text{Received five-minute values} \div \text{by expected values}) \times 100)</math></li> <li>• Average of AWS and ARS monthly achievement</li> </ul> <i>NB: Expected value is number of open stations x 288 records x number of days in month.</i>
<b>Means of verification</b>	System generated AWS & ARS climate data availability reports
<b>Assumptions</b>	No lack of spares for AWS and ARS. Adequate sensor uptime.
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	85% of AWS & ARS climate data available on National Climate Database meeting minimum data requirements
<b>Indicator Responsibility</b>	Senior Manager: Climate Services

<b>Indicator Title</b>	Percentage of local expenditure on affirmative procurement (Level 1 to 4)
<b>Definition</b>	Indicator measures the total affirmative procurement from BEE levels 1 to 4 suppliers as a percentage of the total expenditure from local suppliers
<b>Source of data</b>	Accounting Software (NetSuite)
<b>Method of Calculation / Assessment</b>	Quantitative: Total of procurement from BEE Level 1 - 4 suppliers as a percentage of the total procurement from local suppliers
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>Quarterly procurement report</li> <li>NetSuite Purchase Order report</li> </ul>
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	75% local expenditure on affirmative procurement (Level 1 to 4)
<b>Indicator Responsibility</b>	Senior Manager: Supply Chain Management

<b>Indicator Title</b>	Level of B-BBEE rating
<b>Definition</b>	A measure of the B-BBEE level of the organisation
<b>Source of data</b>	B-BBEE verification report generated by SANAS accredited verification agency
<b>Method of Calculation / Assessment</b>	Qualitative: B-BBEE verification report
<b>Means of verification</b>	B-BBEE Certificate
<b>Assumptions</b>	Availability of required documentation for the measurement elements
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Annual
<b>Desired performance</b>	Level 6 B-BBEE rating
<b>Indicator Responsibility</b>	Senior Manager: Governance, Risk and Compliance

<b>Indicator Title</b>	Unregulated commercial revenue generated
<b>Definition</b>	Commercial revenue generated from non-regulated ventures identified in order to contribute to increased Total Revenue.
<b>Source of data</b>	NetSuite, Revenue and Pricing Models
<b>Method of Calculation / Assessment</b>	Quantitative: Non-regulated Revenue from financial reports
<b>Means of verification</b>	Financial Management Reports and Audited Financials
<b>Assumptions</b>	Quality (accuracy and completeness) as well as availability of the data
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	R30 510 000 unregulated commercial revenue generated
<b>Indicator Responsibility</b>	Senior Manager: Business Development

<b>Indicator Title</b>	External audit opinion
<b>Definition</b>	Measures the effectiveness of developed and implemented internal controls for effective and efficient financial management and organisational performance management. Ensure compliance with relevant laws and regulations to achieve an unqualified audit opinion.
<b>Source of data</b>	Management Report issued by the Auditor-General of South Africa
<b>Method of Calculation / Assessment</b>	Qualitative: Opinion of the Auditor-General of South Africa
<b>Means of verification</b>	Audit Report of the Auditor-General of South Africa as contained in the SAWS Annual Report
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Annual
<b>Desired performance</b>	Unqualified external audit opinion with no material findings
<b>Indicator Responsibility</b>	Chief Financial Officer

<b>Indicator Title</b>	Percentage of attrition rate
<b>Definition</b>	Measurement of the rate at which employees leave the workforce through resignations and dismissals over a period. This excludes terminations due to end of internships/learnerships, fixed-term contracts, retirement and death.
<b>Source of data</b>	HR employee list records
<b>Method of Calculation / Assessment</b>	Quantitative: $((\text{Terminations} \div \text{Average number of employees over the period}) \times 100)$
<b>Means of verification</b>	Quarterly attrition rate report
<b>Assumptions</b>	None
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	≤8% attrition rate
<b>Indicator Responsibility</b>	Senior Manager: Human Resources Business Partner

<b>Indicator Title</b>	Percentage of Workplace Skills Plan targets met
<b>Definition</b>	Refers to the planned skills programmes that will be executed in the financial year for a targeted number of employees
<b>Source of data</b>	Employee Personal Development Plans, Learning and Development Report
<b>Method of Calculation / Assessment</b>	Quantitative: $((\text{The number of people trained} \div \text{the number of people planned to train}) \times 100)$
<b>Means of verification</b>	Quarterly WSP Report and proof of training
<b>Assumptions</b>	All training needs are identified
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative (year-to-date)
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	80% Workplace Skills Plan targets met
<b>Indicator Responsibility</b>	Learning and Development

<b>Indicator Title</b>	Percentage compliance to Employment Equity on women in management
<b>Definition</b>	Ratio of women in middle, senior and executive management positions within SAWS
<b>Source of data</b>	Human Resources and payroll records
<b>Method of Calculation or Assessment</b>	Quantitative: $(\text{Number of women employees in management positions} \div \text{Total number employees in management at end of period}) \times 100)$
<b>Means of verification</b>	Quarterly employment equity report
<b>Assumptions</b>	Effort is made to meet the targets as per the Employment Equity Plan
<b>Disaggregation of Beneficiaries</b>	Women
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	42% compliance to Employment Equity on women in management
<b>Indicator Responsibility</b>	Senior Manager: Human Resources Business Partner

<b>Indicator Title</b>	Percentage compliance to Employment Equity on Persons Living with Disabilities
<b>Definition</b>	Ratio of persons living with disability within SAWS (Disability as defined by the EEA)
<b>Source of data</b>	HR records, EEA1 Forms
<b>Method of Calculation or Assessment</b>	Quantitative: (Number of employees living with disabilities ÷ Total number of employees at end of period x 100)
<b>Means of verification</b>	Quarterly employee list Report
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Employees/ candidates declare their disability(ies)</li> <li>• Designate/identify suitable positions deemed appropriate for persons living with disability(ies)</li> <li>• Appetite for persons living with disability(ies) to apply</li> </ul>
<b>Disaggregation of Beneficiaries</b>	Persons living with disabilities
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	2% compliance to Employment Equity on Persons Living with Disabilities
<b>Indicator Responsibility</b>	Senior Manager: Human Resources Business Partner

<b>Indicator Title</b>	Number of youths appointed for internships and learnerships as at the end of the year
<b>Definition</b>	Number of youths appointed for core-related internships and learnerships. Core of SAWS includes meteorological-related sciences, technical and ICT services.
<b>Source of data</b>	Employee records and Learning and Development records
<b>Method of Calculation or Assessment</b>	Quantitative: Number of appointed learners and interns maintained at end of reporting period
<b>Means of verification</b>	Learning and Development report
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Enough funding from TETA</li> <li>• Willingness for training providers and learners to enter into agreements</li> </ul>
<b>Disaggregation of Beneficiaries</b>	Unemployed graduates and youth of South Africa
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Annually at year-end
<b>Desired performance</b>	10 youths in internships and learnerships as at the end of the year
<b>Indicator Responsibility</b>	Learning and Development



<b>Indicator Title</b>	Number of placements in work-integrated learning as at the end of the year
<b>Definition</b>	Number learners placed as work-integrated learners (WIL) as form of experiential learning required for completion of qualifications.
<b>Source of data</b>	Employee records and Learning and Development records
<b>Method of Calculation or Assessment</b>	Quantitative: Number of appointed work-integrated learners at end of reporting period
<b>Means of verification</b>	Learning and Development report
<b>Assumptions</b>	There is appetite and reasonable accommodation for persons living with disability(ies)
<b>Disaggregation of Beneficiaries</b>	Learners currently studying and learners living with a disability
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Non-cumulative
<b>Reporting cycle</b>	Annually at year-end
<b>Desired performance</b>	8 placements in work-integrated learning as at the end of the year
<b>Indicator Responsibility</b>	Learning and Development

<b>Indicator Title</b>	Number of positioning and profiling programmes conducted locally and internationally
<b>Definition</b>	To position SAWS and its products and services to weather consumers through media platforms and other engagements.
<b>Source of data</b>	Integrated Communication, Marketing and Stakeholder Relations Strategy
<b>Method of Calculation or Assessment</b>	Quantitative: Actual number of positioning and profiling programmes conducted both locally and internationally
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>• Reports on the positioning and profiling programmes per quarter</li> <li>• Links to digital media platforms or references to print media</li> </ul>
<b>Assumptions</b>	Minimal Business disruptions
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	20 positioning and profiling programmes conducted locally and internationally
<b>Indicator Responsibility</b>	Senior Manager: Communications and Stakeholder Relations

<b>Indicator Title</b>	Number of public awareness programmes conducted
<b>Definition</b>	To create and maintain awareness on the SAWS brand, product and services in communities and schools.
<b>Source of data</b>	Integrated Communication, Marketing and Stakeholder Relations Strategy
<b>Method of Calculation or Assessment</b>	Quantitative: Actual number of public awareness programmes conducted
<b>Means of verification</b>	Reports on public awareness programmes implemented per quarter
<b>Assumptions</b>	N/A
<b>Disaggregation of Beneficiaries</b>	Women, Youth, Persons living with disabilities
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	27 public awareness programmes conducted
<b>Indicator Responsibility</b>	Senior Manager: Communications and Stakeholder Relations

<b>Indicator Title</b>	Number of collaborations through partnerships implemented locally and internationally
<b>Definition</b>	To create and maintain mutually beneficial and implementable collaborations through partnerships with scientific institutions and other types of organisations
<b>Source of data</b>	Integrated Communication, Marketing and Stakeholder Relations Strategy
<b>Method of Calculation or Assessment</b>	Quantitative: Actual number of collaborations through partnerships programmes implemented
<b>Means of verification</b>	<ul style="list-style-type: none"> <li>• Report on collaborations through partnerships implemented</li> <li>• Concluded MoU or MoA</li> </ul>
<b>Assumptions</b>	N/A
<b>Disaggregation of Beneficiaries</b>	N/A
<b>Spatial Transformation</b>	N/A
<b>Calculation type</b>	Cumulative - year end
<b>Reporting cycle</b>	Quarterly
<b>Desired performance</b>	12 collaborations through partnerships implemented locally and internationally
<b>Indicator Responsibility</b>	Senior Manager: Communications and Stakeholder Relations