

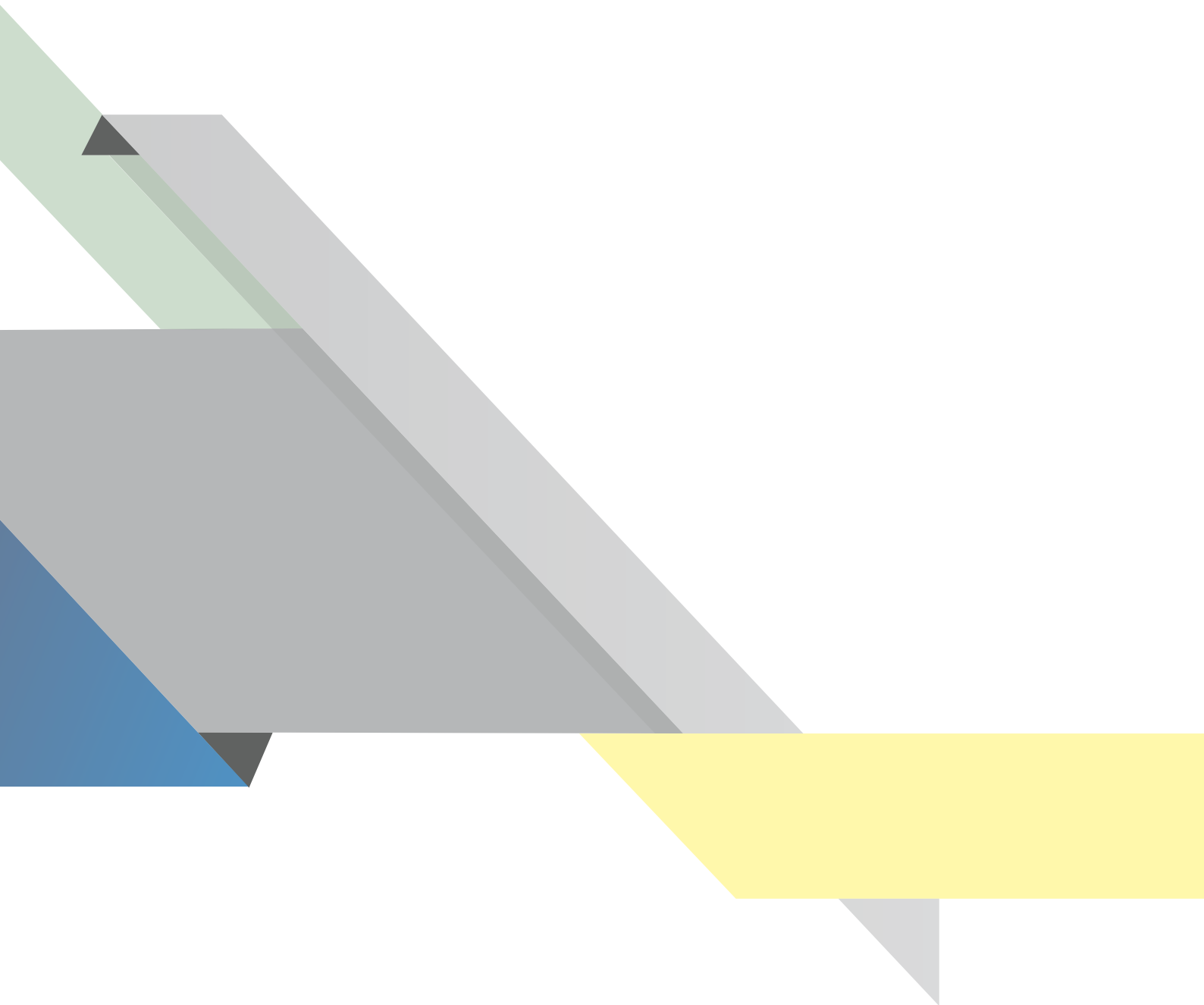


**South African  
Weather Service**



# STRATEGIC PLAN

2020|21–2024|25



SOUTH AFRICAN WEATHER SERVICE

# STRATEGIC PLAN

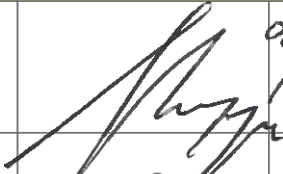

2020|21–2024|25

## ■ Document Control

### Version and Amendment Schedule

Version	Version Date	Author	Description of Amendments
1	23 September 2019	Dithuso Mogapi	Document created
2	5 December 2019	Dithuso Mogapi	Alignment with DPME Revised FSAPP
3	8 January 2020	Dithuso Mogapi	Alignment with Revised Framework for Strategic Plans and Annual Performance Plans

### Approval and Control Schedule

Approved By	Designation	Responsibility	Signature	Date Approved	Copy Status
Dr. Jonas Mphepya	Acting Chief Executive Officer	Accounting Officer		06/09/2020	Master
Ms. Nana Magomola	Board Chairperson	Accounting Authority		06/03/2020	Master

# ■ Table of Contents

---

<b>ABBREVIATIONS AND ACRONYMS</b>	<b>4</b>
<b>EXECUTIVE AUTHORITY STATEMENT</b>	<b>5</b>
<b>ACCOUNTING OFFICER STATEMENT</b>	<b>7</b>
<b>OFFICIAL SIGN-OFF</b>	<b>10</b>
<b>PART A: OUR MANDATE</b>	<b>11</b>
1. Constitutional Mandate	11
2. Legislative and policy mandates	11
3. Institutional Policies and Strategies	12
4. Relevant Court Rulings	15
<b>PART B: STRATEGIC FOCUS</b>	<b>16</b>
5. The SAWS Vision, Mission and Core Values	16
6. Situational Analysis	17
6.1 External Environment Analysis	21
6.2 Internal Environment Analysis	23
<b>PART C: MEASURING PERFORMANCE</b>	<b>26</b>
7. Institutional Performance Information	26
7.1 Measuring the Impact	27
7.2 Measuring Outcomes	27
7.3 Planned Performance Over the Five-Year Planning Period	27
8. Key Risks	32
<b>PART D: TECHNICAL INDICATOR DESCRIPTIONS (TID)</b>	<b>34</b>

## ■ ABBREVIATIONS AND ACRONYMS

---

CEO Chief Executive Officer

DEFF Department of Environment, Forestry and Fisheries

GFCS Global Framework for Climate Services

ICAO International Civil Aviation Organisation

SAWS South African Weather Service

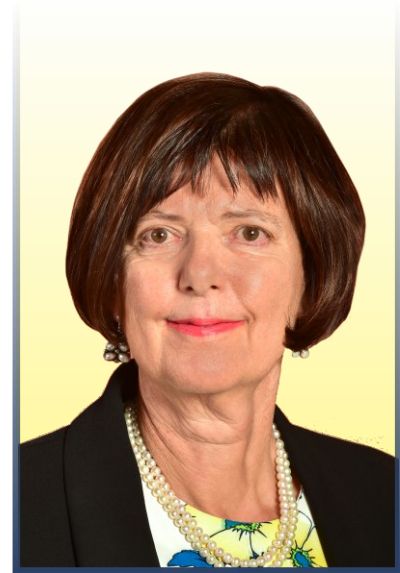
WMO World Meteorological Organization

## ■ Executive Authority Statement

---

Ms. Barbara Creecy, MP

Minister of Environment, Forestry  
and Fisheries



It is satisfying to present the South African Weather Service's Strategic Plan for the period 2020/21 to 2024/25.

As an entity of the Department of Environment, Forestry, and Fisheries, the SA Weather Service (SAWS) is one of the key role players in ensuring South Africans are able to deal with changing weather patterns as climate change takes hold. A change in rainfall, for example, not only affects food production, but also infrastructure and livelihoods through flooding.

The science-based organization is service-oriented and technology-driven. Its work is aimed at mitigating the impacts of severe weather, natural disasters and climate-related challenges by delivering public and commercial services to the public and weather sensitive industries. SAWS is the authoritative voice for weather warnings in South Africa.

The next decade will be characterised by society's needs for environmental solutions, especially its ability to mitigate and adapt to climate change. The impact of weather and water scarcity will be among the main issues that will continue to affect the Africa and South Africa in particular. With many inter-annual and longer-term changes expected throughout South Africa, the frequency and intensity of heatwaves, droughts, floods and severe storms will increase. This will affect the most vulnerable and socio-economically sensitive sectors of society. In addition, growing urban populations will have unique needs challenging SAWS's abilities to address food security, water availability, inequality and environmental health.

The Weather Service is well-positioned to address challenges related to weather, climate and related environmental phenomena with its proactive focus to provide information and user-specific solutions to its customers. This information supports socio-economic development, builds resilience to cope with the changing climate, and protects life and property - on land, in the air and in the oceans.

Over the next 10 years, weather science and technology is expected to develop rapidly so that it can be used to develop and deliver the solutions needed to help us cope with climatic changes. A well-functioning SAWS can ensure that all South Africans benefit from its fit-for-purpose observation network, regional and international exchange of knowledge and data, appropriate communication and computing infrastructure and its innovative service delivery mechanism. To achieve this will require an accelerated investment in research and innovation, enhanced observational network and revenue generating activities, while attracting and retaining personnel with the appropriate skills.

SAWS is geared towards the provision of solutions related to the impact of extreme weather, natural disasters and climate action. By fine-tuning its products, services and the way in which it communicates to the public, the most important outcome will be a well-informed, weather aware and resilient nation - a WeatherSmart nation.

Besides its national role, the Weather Service is recognized internationally for its contribution to best business practices and data sharing with members of the World Meteorological Organization, academia and other bodies. While the private sector and other role-players enter this space, the Service remains at the forefront of technological development, research and innovation, taking advantage of new scientific insights.

Organisational outputs include enhancing the organisation's core of meteorological knowledge, providing solutions that meet user needs, developing an optimal technological capability, and achieving internal excellence to serve the nation in the new decade.

This 2020/21 to 2024/25 Strategic Plan outlines the goals and strategies set out by SAWS to achieve its mandate of safeguarding life and property. It gives me pleasure to present this strategy to the nation.

**Ms. Barbara Creecy, MP**

Minister of Environment, Forestry and Fisheries



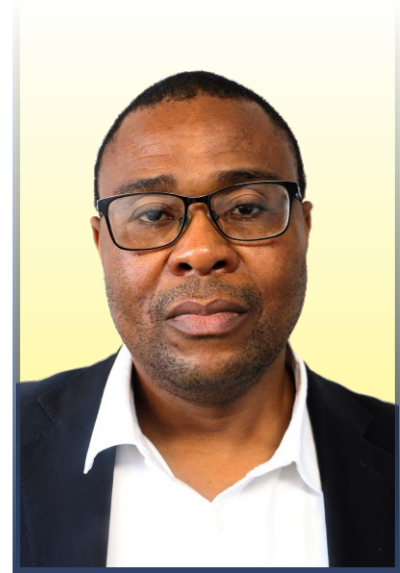


## ■ Accounting Officer Statement

---

Dr. Jonas Mphepya

Acting Chief Executive Officer  
South African Weather Service



The SAWS Strategic Plan for the 2020/21 – 2024/2025 years was de-veloped by considering the duality of our audience as encapsulated in the Integrated Services Strategy and the public good services nature of the South African Weather Service. The Integrated Service Strategy (ISS) concept was borne from primarily the need to refocus SAWS back to its core mandate i.e. dissemination of climate and weather information that improves societal preparedness for severe weather events that are associated with climate variability.

The 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 section 3A entity as per the PFMA and in terms of its enabling Act; Act no 8 of 2001 (as amended). The organisation is therefore mandated to -

- Provide reliable weather services to support public good and its commercial ventures.
- Provide aeronautical and marine meteorological services.
- Provide ambient air quality services.

This Strategy is informed by the National Development Plan (NDP) as well as national policy frameworks and government priorities. While our main focus is on Outcome 10, environmental assets and natural resources, the South African Weather Service also includes NDP priorities relating to education, skills and health; social cohesion and safe communities; and economic transformation and job creation as part of its strategy.

The South African Weather Service continues to focus on its main priority, namely to provide science-based weather, climate and environmental solutions while simultaneously growing the organisation. It envisages to concurrently increase its scientific competence, provide user friendly meteorological products and services and disseminate information in the most comprehensible, user-friendly way.

The strategic outputs of the organisation, namely meteorological knowledge generation; meteorological solutions; optimal core technical capability; and internal excellence are transferred into strategic priorities that will enable us to fulfil our mandate.

One of the main aims of this strategy is to optimally position the organisation nationally and internationally. The South African Weather Service aspires to become a MEGA SAWS, inspired by our additional mandate (treaty, SADC, etc.). This will ultimately result in a comprehensive “supersized” SAWS, which will include an optimal scientific workforce; best-in-class contemporary technology and increased revenues from multiple sources, underpinned by high demand for SAWS' services and products.

With a rapidly changing external environment, the need to provide solutions to address climate variability and water and weather vulnerability to an increasingly urbanised society will steer us in the direction to focus on a more inclusive approach to Earth System observations, modelling and as well as a seamless approach to service delivery, fully aware of the emerging trends of society becoming more sophisticated; quantifying the cost benefit of our services and operating from a position of strength amongst a growing number of national and international role players. Our solutions, on all time scales, need to be understandable, affordable and enable our users to make wise choices in terms of safety and socio-economic development.

The National Framework for Climate Services encourages policy alignment to create an enabling environment for the NFCS and the National Climate Change Response Policy to be implemented successfully. Effective national implementation of the Global Framework for Climate Services (GFCS), will enhance climate observations and monitoring, transformation of climate information into sector-specific products and applications, and the dissemination of those products widely.

As Government works towards a reliable energy supply to ensure energy security for now and the future, and to enable economic growth, the South African Weather Service will continue to support the energy sector, including the renewable energy sector. It will also revitalise its agriculture and agro-processing value chain, with relevant research and development to support this field.

The South African Weather Service actively participates in attempts to improve the national Science and Technological Skills through bursary and training initiatives. It furthermore plays a critical role in the implementation of the Vaal and Highveld Priority Area Air Quality Management Plans and the management and reduction of air pollution in these areas. The accessibility of air quality data and information through the SAAQIS is beneficial to various air quality management stakeholders, contributing towards education and increases in skills of interested parties. The mandatory provision of emission data through the South African National Atmospheric Emissions Inventory System (NAEIS) will be part of the contribution by SAAQIS to meet the air quality and climate change commitments made by the South African government.

Community safety, linked to the National Climate Change Response Policy is one of the organisation's priorities, and our continuous role in improving our early warning systems and create weather awareness amongst vulnerable communities remain one of our priorities. Simultaneously our support for the Operation Phakisa initiative support government's priorities of economic transformation and job creation.

In terms of the achieving organisational sustainability, our internal environment will be continuously nurtured, while the improvement of our BBEEE status to support our competitive ventures, will receive priority.

In conclusion, I am pleased to present this game-changing strategy, noting that the achievement of these planned outcomes will rely heavily on the organisation's ability to engage its stakeholders towards resource mobilisation, the strategic positioning of SAWS and continued relevance through the execution of relevant projects. The planned studies will not only inform the organisation with respect to product and service requirements but will be invaluable in regional and national policy formulation reform. This can only be achieved through committed strategic partnerships and collaboration. Stakeholder engagement remains a pervasive theme throughout this strategy. Although this strategy consolidates the approach to commercialisation, it should be noted that there is appreciation that research is the bedrock of the organisation. As a result, a number of initiatives are planned in terms of research and innovation under Programme 2, entitled Research and Innovation.

I would like to take this opportunity to thank the Minister and the Deputy Minister of Environment, Forestry and Fisheries, for their exceptional leadership and support as well as the Board of the South African Weather Service for their continued commitment to the success of the organisation. I would also like to thank the management and staff of the organisation for their dedication and continually breaking new ground in ensuring that we continue to protect lives and property.

**Dr. Jonas Mphepya**  
Acting 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 Environment, Forestry and Fisheries.
- (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 2020/2021 to 2024/2025.

Ms. Julia Mphafudi  
Executive: Corporate and Regulatory Services

Signature: 

Mr. Lulama Gumenge  
Acting Chief Financial Officer

Signature: 

Mr. Tshepho Ngobeni  
Acting Executive: Weather and Climate Services

Signature: 

Mr. Mnikeli Ndabambi  
Executive: Infrastructure and Information Systems

Signature: 

Dr. Jonas Mphepya  
Acting Chief Executive Office

Signature: 

Ms. Nana Magomola  
Board Chairperson

Signature: 

Approved by:  
Ms. Barbara Creecy, MP  
Executive Authority

Signature: 

# ■ PART A: Our Mandate

---

## 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 as follows:

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.

## 2. Legislative and policy mandates

The 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 section 3A entity as per the PFMA and in terms of its enabling Act; Act no 8 of 2001 (as amended), SAWS is mandated to:

- Provide reliable weather services to support public good and its commercial ventures.
- Provide aeronautical and marine meteorological services.
- Provide ambient air quality services.

The requirements above have been incorporated in the formulation of the strategic outcomes and impact.

The objects of SAWS as stipulated in the SAWS Act no. 8 of 2001 (as amended) are:

- To maintain, extend and improve the quality of meteorological and ambient air quality-related information services for the benefit of all South Africans;
- To provide public good services and commercial services to all South Africans;
- 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;

- As the Aviation Meteorological Authority, to fulfil the international obligations of the Government under the Convention of the International Civil Aviation Organization. There is an intention is for the Meteorological Authority to be absorbed by the CAA;
- To provide services that are sensitive to the demographic realities of the country;
- To fulfil such other weather-related or ambient air quality information, international obligations as the Minister may direct;
- To be the custodian of the South African Air Quality Information System (SAAQIS).

### 3. Institutional 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' Strategic Plan with Government priorities. The key driver for such alignment is the objects and provisions of the South African Weather Service Act (as amended). Below are Government Priorities as well as the NDP outcomes to which the entity's programmes and policies are directed towards.

#### Alignment to Government Priorities

From the NDP vision 2030, Outcome 10; which focuses on environmental assets and natural resources, remains the key government outcome to which SAWS aligns. However, SAWS has extended its line of sight in this respect to include relevant priorities from the Sixth Administration as below:

#### Education, skills and health

SAWS continues to play a critical role in the implementation of the Vaal and Highveld Priority Area Air Quality Management Plans and monitoring of air pollution in these areas. The efficient maintenance of the Vaal Triangle, Waterberg Bojanala and the Highveld Priority Area Ambient Air Quality Monitoring networks ensures data availability for research purposes and the management of air quality by the regulatory authorities.

Implementation of the above ensures that authorities can monitor the effectiveness of emission control measures and programmes, which will ultimately 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.

In addition, the accessibility of air quality data and information through the SAAQIS is beneficial to different stakeholders in air quality management such as academia, government, industry and the public; contributing towards education and increases in skills of interested parties. The mandatory provision of emission data through the South African National Atmospheric Emissions Inventory System (NAEIS) will be part of the contribution by SAAQIS to meet the air quality and climate change commitments made by the South African government.

The Entity is an active participant in the attempts to improve the Science and Technological Skills of our country through a bursary initiative for University students, targeting meteorological related training. Discussions with Universities Institutions to conscientize them about international training requirements for meteorological and climatological training are being held. The Regional Training Centre (RTC) of SAWS is also in alignment to the competency requirements of WMO as found by the external review of WMO.

### **Social cohesion and safe communities**

SAWS is engaged in a variety of projects to address issues of social cohesion and safe communities. These projects also address the national imperative of the National Climate Change Response Policy. It is through such projects, that the Entity collaborates with other key stakeholders such as the National Disaster Management Centre to address Disaster Risk Reduction and Management under the adaptation umbrella at a national, provincial and local government level (Section 5.9 of the deliverables of the White Paper on Climate Change).

More specifically, the Entity plays an active role in addressing the concern of “Continual development of and improvement of early warning”, with the emphasis now moving towards Impact-based warnings. The notable contribution is through the enhancement of the Severe Weather Warning System to include only those alerts that can lead to disastrous events. This leads to the streamlining of Watches and Warnings to only six severe weather-related hazards. These are disseminated via different channels including SMS, Radio, TV and e-mails with the intention to reach all citizens of the Republic, in particular; those vulnerable to harsh impacts of the weather.

Furthermore, by continuously enhancing the early warning system and educating vulnerable communities about severe weather events as part of the development of adaptation mechanisms, these initiatives also address national priority related to Education and Skills, as they include aspects of innovation, knowledge development, skills acquisition and the implementation of adaptation strategies.

The Department of Environment, Forestry and Fisheries plays the lead role in respect of Chapter 5 of the NDP, with SAWS as the contributing Entity of the department.

### **Economic transformation and job creation**

Weather and Climate related solutions are becoming more important to economic growth as many sectors are weather sensitive and exposed to the impacts of climate variability and change. Apart from reducing the weather and climate related risk to economically sensitive sectors, weather and climate services are now also becoming an integral part of business planning and routine operational decisions. By providing fit-for-purpose solutions, the Entity is contributing to economic development in a wide range of economic sectors. Such a sector critical for economic transformation is the Marine Sector.

Operation Phakisa launched in the 2015/16 financial year, is aimed at Growing the Ocean Economy and

other sectors. As a result, the Entity developed a Marine Strategy which seeks to address the development of services and products, as well as the provision of support human and infrastructure resources for for the sector.

In support of the presidential Operation Phakisa initiative, work will continue to focus in three main areas. First, SAWS, plays an active role in the continuous development of the CoastOps Decision-Support Tool (DeST). DeSTs form the functional part of the national Ocean and Coastal Information Management System (OCIMS) – a project under Initiative 6 of Operation Phakisa. The CoastOps DeST provides crucial met-ocean information to coastal stakeholders via the OCIMS online interface, whether they be small-craft operators, commercial maritime crews, small-scale fishers, aqua-culturists or coastal recreation and tourism stakeholders. Furthermore, added functionality within CoastOps – a Search and Rescue (SAR) planning tool – is being refined. This will aid agencies such as the National Sea Rescue Institute (NSRI) in fulfilling its mandate and enhancing safety of life within the coastal domain. The success of the CoastOps project hinges on two key factors; firstly, the enhanced accuracy and reliability of met-ocean forecast information generated by the Entity's research and development efforts (as opposed to far less reliable, global products) and second, the user-friendly interface and easy discovery of this met-ocean information enabled by the DEFF OCIMS platform. This support, in providing met-ocean information for public good, is a critical element in working with the DEFF towards the vision of a “one-stop-shop” for marine data and information. Furthermore, OCIMS provides a useful platform by which consumers of value-added products and/or climate data can be directed to normal SAWS channels.

Secondly, Operation Phakisa has various projects surrounding maritime domain awareness. This includes basic met-ocean information, but also issues around vessel tracking. SAWS Marine has been involved in discussions regarding the use of radar for vessel detection, in working towards combatting illegal fishing within South African waters. This involvement stems from work done by SAWS in the scoping of an HF Radar Network for the South African coast. HF Radar provides critical met-ocean information where satellites and in-situ solutions struggle; and is thought by some industry specialists to hold the key to various unsolved ocean-science and operational questions. It is hoped that should such a network be established; a secondary benefit of HF Radar data might be to assist in the detection of illegal vessels. Notwithstanding the interest in vessels tracking (which persists), the HF Radar project has become a close collaboration between the DEFF and SAWS, with met-ocean information being the primary interest.

Finally, the DEFF Oceans and Coasts is a key partner of the SAWS Marine Research Unit as laid out in the SAWS Marine Master Plan. The Marine Master Plan describes SAWS's intention to develop a unit to address scientific and operational challenges that cannot be solved within the scope of the traditionally-atmospheric focus of SAWS research. It will assist in ensuring that SAWS remains relevant within the marine science and operational fields, as well as ensuring that the organisation remains compliant with 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 works closely with the DEFF in various specific areas within this framework, with a key example being the South African National Antarctic Programme (SANAP); where SAWS provides personnel, training, expertise and equipment to the DEFF to ensure that operational meteorological stations can be operated at South Africa's remote science stations (Marion Island, Gough Island and SANAE IV Base on Antarctica). Furthermore, SAWS continues to provide meteorological support to the SA Agulhas II (the polar support and research vessel of the DEFF). It is through the above involvement in the Oceans Economy that SAWS will contribute towards the economic transformation of the marine sector as well as job creation in the sector.

#### **4. Relevant Court Rulings**

There have not been any recent court rulings with significant impact on the SAWS.

## ■ PART B: Strategic Focus

---

### 5. 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

## 6. Situational Analysis

The entity is ideally positioned and mandated to respond and contribute towards solutions related to extreme weather, natural disasters and climate. Furthermore, the growing demands for weather, climate and related environmental solutions are creating real opportunities for growth and enhanced relevance for the organisation.

SAWS' strong global and regional linkages, where best business practices and data are shared among Members of the World Meteorological Organization (WMO), academia and other bodies, are considerable strategic advantages. However, more global and local players, including the private sector are moving into this space and therefore SAWS needs to maintain and establish a competitive edge throughout the value chain; from the data obtained from the observational network to the eventually services and products delivery to society. It is quite clear that the Entity will also have to invest in research and innovation as it moves forward to optimally take advantage of new scientific insight, the rapid advancement of computing technology and the identified trends that affect business.

Optimal management of Infrastructure and Information Systems remains key in the Entity's value chain. It would be misleading to dismiss the challenges the Entity has endured with regards to its infrastructure. However, great turnarounds have materialised as a result of the Entity's openness with challenges facing infrastructure; particularly Radar Infrastructure, as well as efforts to be responsive to changes in the landscape within which SAWS operates. It is from challenges such as the above that the Entity must find a balance between its public good responsibilities and revenue-generating activities and keep the situation under constant review to ensure that the Entity remains sustainable and able to serve optimally.

The strategic focus for the next five years will be geared towards achieving outcomes related to the protection of lives and property against meteorological-related risks, as well as organizational sustainability. These outcomes will be derived as a result of outputs in the core operations of the Entity which are focused towards an enhanced Meteorological-Related Body of Knowledge, provision of Meteorological-Related Solutions to meet user needs, an Optimal Technological Capability and Internal Excellence.

In this medium-term, SAWS will be working towards implementing initiatives vis a vis each output area considering the results of the internal and external environmental analysis. These initiatives are strategic priorities ranging from developing real-time, value-adding, user friendly meteorological solutions to the increase in non-regulated revenue generation from meteorological solutions. A summary of the strategic priorities includes the below:

Strategic Outputs	Strategic Priorities
Enhanced meteorological-related body of knowledge	<ul style="list-style-type: none"> <li>• Develop real-time, value-adding, user-friendly meteorological solutions</li> </ul>
Meteorological-related solutions provided to meet user needs	<ul style="list-style-type: none"> <li>• Improve our promotion / marketing of meteorological solutions</li> </ul>
	<ul style="list-style-type: none"> <li>• Increase non-regulated revenue generation from meteorological solutions</li> </ul>
Optimal core technological capability	<ul style="list-style-type: none"> <li>• Improve life cycle management of technology</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve dissemination platform / channels</li> </ul>
	<ul style="list-style-type: none"> <li>• Leverage emerging technologies for improved solutions and competitiveness</li> </ul>
Internal excellence achieved within the organisation	<ul style="list-style-type: none"> <li>• Improve corporate governance within the organisation</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve performance management practices within the organisation (business and individual)</li> </ul>
	<ul style="list-style-type: none"> <li>• Leverage unique capability of strategic partners</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve our corporate communication / corporate branding</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve compliance to the quality management system</li> </ul>
	<ul style="list-style-type: none"> <li>• Develop a conducive corporate culture</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve acquisition, development and retention of key skills</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve supply chain management practices within the organisation</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve budget processes within the organisation in line with the strategic plan</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve expenditure management</li> </ul>
	<ul style="list-style-type: none"> <li>• Improve non-core assets management within the organisation (record keeping, Waterkloof land development)</li> </ul>
<ul style="list-style-type: none"> <li>• Improve knowledge management practices within the organisation</li> </ul>	

**Table 1:** Strategic Priorities

Looking beyond the medium term, it becomes critical for the Entity to redefine itself by deciding on the “best” future scenario to optimally position the Entity both nationally and internationally.

### Scenario Planning

Growth and adaptation strategies of SAWS are vital for its survival and sustainability. For this reason, Scenario Planning exercise was undertaken by the Entity to formulate a long-term perspective of the organisation. There is a compelling need to consider the Scenario Plan as an integral part of the strategic management approach to the conduct the business of SAWS, as it can allow us to create functional and operational views of alternative futures and possibilities for the Entity.

To adequately address uncertainties that affect the long-term viability and sustainability of the Entity, it is necessary to identify valuable mechanisms for articulating possible alternative futures for the Business. Emanating from the above, SAWS aspires for a realisation of a scenario that underpins a MEGA SAWS characterised by a context of additional mandate conferred on SAWS e.g. (treaty, SADC, etc.), resulting in a comprehensive “supersized” SAWS, wherein key elements include: an optimal scientific workforce, best-in-class contemporary technology and increased revenues from multiple sources, underpinned by high demand for SAWS' services and products. The Entity's positioning towards attainment of a MEGA SAWS scenario include the realisation of future positioning as summarised below.

Current Status	Future Positioning
SAWS not competitive in the commercial space in all identified sectors	Agility through an established commercial weather enterprise
	Leveraging unique capabilities of strategic partnerships
Inadequate MET capacity to meet current	Optimal MET capacity to meet current mandate
Inadequate technological advancements	Contemporary technological advancements
Inadequate air quality, modelling and forecasting capacity	Optimal air quality, modelling and forecasting capacity
National framework for climate service developed	National framework for climate service implemented
Tightly managed operating revenue with uncertain future revenue mix	Sustainable operating revenue through supportive funding model and cost
Declining government grant and commercial revenue not adequately addressing the gap	Increasing revenue streams to address the decline in the government grant

Manual and automated observational infrastructure	Fully automated observational infrastructure
Value and safeguarding of historical weather and climate records	Historical weather and climate records safeguarded
Inadequate high-performance computing	Optimal high-performance computing capability
Inadequate data management systems	Optimal data management systems

**Table 2:** SAWS positioning towards MEGA SAWS scenario

### 6.1 External Environment Analysis

Globally, the next decade will be characterised by the rapid growing needs of society for solutions related to environmental challenges. Many of these needs will centre on mitigating and adapting to climate variability and change and the weather and water impact. Over South Africa we can expect inter-annual and longer-term changes in the frequency and intensity of heatwaves, droughts, floods and severe storms as atmospheric circulations patterns shift between years and the atmosphere become more energetic due to long-term warming. In the South African context, these needs should be seen in the context of a growing and urbanizing population, and issues around food security and water availability, inequality and environmental health. These challenges will require enhanced weather, climate and related environmental information and user-specific solutions for wise decisions in support of socio-economic development of our diverse population, building resilience to cope and the protection of life and property on land, in the air and over our surrounding oceans.

The next decade will also be an era of rapid science and technology development that can be exploited through innovative science-based approaches to develop and deliver the required solutions. Such solution depends on a fit-for-purpose observational network, the regional and international exchange of knowledge and data, the appropriate communication and computing infrastructure and innovative service delivery mechanism to ensure that all South Africans benefit. This will require an accelerated investment in research and innovation and the attraction and retention of the appropriate skills. SAWS therefore find itself at a fortunate juncture as it is uniquely placed to be a key role player in this space nationally, regional and even internationally.

In development of this strategy SAWS focuses on a more inclusive approach to Earth System observations, modelling and as well as a seamless approach to service delivery, fully aware of the following emerging trends:

- The requirements of society are becoming more sophisticated in terms of the accuracy and relevance of solutions related to weather-climate events, their impacts and the way these solutions are delivered. This implies a new paradigm in which research, operations and users must work together from an early stage in identifying needs and opportunities and in co-designing and delivery of solutions.
- There is a growing need to quantify the benefit-cost of meteorological and climate services to motivate the investments needed and the efforts required. Indications are that these ratios will become even more favourable in future.
- There is a growing number of players in the weather-climate and related fields, some operating globally and others locally, many in the private sector but not limited to that. This mushrooming of role players is driven by the demands of society and the growing income generation potential that expertise and solutions in this space hold. These matters can only be addressed if operating from a position of strength both in terms of the scientific vigour behind products and services, the reliability of delivery but also in terms of the way partners are engaged.
- There is an urgent need to package solutions in a manner that people understand the messages to allow them to make wise choices in terms of their safety and support socio-economic development across weather-climate timescales. The importance of social science in the entity is growing to respond effectively to societal requirements.
- Due to the cost and complication in solving fundamental research questions and delivery of high-quality services there is an accelerating trend to pool resources between countries and even globally enabling the resources to do so more optimally. Furthermore, automation, artificial intelligence is changing the roles of traditional forecasters and meteorologists.
- There is a serious threat to the future of small sub-critical National Meteorological Services around the world especially those that cannot show the unique value they add, for the benefits of citizens, compared to the products available freely generated by global centres and the private sector.
- Regarding meteorological data, organisations are moving towards globalisation and the creation of regional specialist centres. This is facilitated through more open policies regarding data sharing. This pose both a threat and opportunity for SAWS to position itself as a Regional Specialist Centre.
- Models at all time-scales are evolving to consider additional elements of the Earth System to enhance predictive skill in the seamless context across the weather-climate continuum. Climate models already follow the Earth System approach where there is coupling between the atmosphere and its chemical composition, the oceans, land and terrestrial biosphere but these models don't deal with weather phenomena in detail. The Earth System approach is now filtering through to weather predictions models as well. The need for more data, not limited only to that about the atmosphere is becoming critical.

- There remains an urgent need to improve the accuracy and usefulness of sub-seasonal to decadal predictions as it is at these timescales that decisions need to be made in terms of water resource management, infrastructure development, energy, health and agriculture.
- Data assimilation in which observational data is ingested into models is a critical process to enhance the return on investment of local observations in the prediction process. Not only does data assimilation allow for better predictions but the initial fields produced by this process is a value product as it produces data-based gridded fields at fine resolution that are consistent with the physics of the atmosphere.
- Observation networks, in terms of locations of individual sensors, the parameters to be measured and quality of data required in future will have to be designed based on more objective considerations in which the value of investment is optimised through the value chain towards service delivery and where the observational requirements will have to be reviewed as needs evolve. Observation networks globally are under threat exactly at the time that better long-term and quality data is required.

This strategy provides guidance to accelerate progress through key interventions, addressing the above trends and based on a seamless approach across weather and climate time scales, while using the appropriate technologies and innovations to serve society and contribute towards the interventions for national challenges. The challenges facing the Republic to which the SAWS plays a role to solving, include the following:

### **National Framework for Climate Services (NFCS)**

The National Framework for Climate Services encourages policy alignment to create an enabling environment for the NFCS and the National Climate Change Response Policy to be implemented successfully. This also supports the DEFF M&E data-sharing framework.

Effective national implementation of the Global Framework for Climate Services (GFCS) will realise the enhancement of climate observations and monitoring, transformation of climate information into sector-specific products and applications, and the dissemination of those products widely.

Inter-institutional collaboration on outreach - opportunities have been identified for strengthening collaboration in climate-related outreach work between institutions; Multi-disciplinary collaboration includes that between climate and social scientists.

It facilitates continued championing of climate variability and change efforts at the highest national leadership level.

SAWS contribution to operational climate services is a natural extension of its well-established operational weather services in context of the seamless prediction and service delivery approach.



An enhanced effort in the enhancement of predictive skill in the sub-seasonal to decadal prediction time frame is critical for future planning and resilience. The Entity sees itself in a key role in the research and development, working in close partnership with the international research community to service key sector of the South African society, as a unique contribution to the NFCS.

### **Resolving the Energy Challenge**

As Government works towards a reliable energy supply to ensure energy security for now and the future, and to enable economic growth, SAWS has over the past few years implemented several initiatives aimed at supporting the energy sector, in particular; the renewable energy sector. It has in collaboration with the Department of Science and Technology (DST) established a Solar Radiation Network and developed a Solar Atlas. This enables the nation to monitor key variables in support of operations for solar farms. The Entity continues to ensure that the established network functions optimally and contributes towards the improvement of the energy challenge.

Likewise, a Wind Atlas has been developed to provide information for the potential of wind energy in the country as well as applications in support of the effective operation of wind farms. The organisation continues to strengthen its efforts in this area.

### **Revitalising Agriculture and the agro-processing Value Chain**

In support of this strategy, SAWS is strengthening its Agro-meteorology capacity and capability. The organisation has established a functional Agro-meteorology structure and scientists are now conducting relevant research and developing applications and products geared toward enabling this sector.

## **6.2 Internal Environment Analysis**

As a Meteorological Authority, SAWS is a science based, services-oriented and technology driven organisation tasked with providing weather and climate services to the 57 million South African citizens. In a quest to deliver quality products and services, the Entity relies on the effective implementation of its Integrated Services Strategy (ISS). The integrated view emanating from the ISS will enable SAWS to leverage economies of scale and skill that ensures effective resource allocation for effective implementation of the Strategic Plan and supporting APPs.

In order to comply with the Broad-Based Black Economic Empowerment (BBBEE) Act, the SAWS intends to improve on its BBBEE status from a level of non-compliance to that of level 3 by 2023/24 financial year.

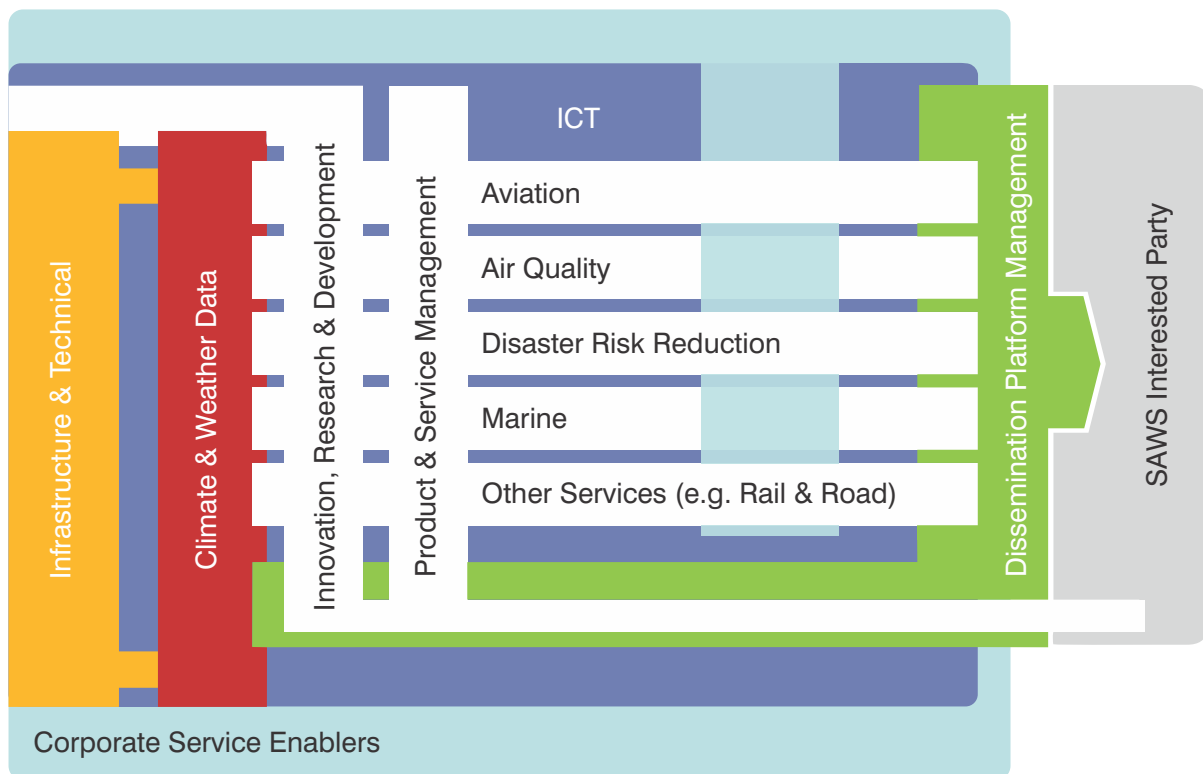
### **Integrated Service Strategy**

The Integrated Service Strategy (ISS) concept was borne from primarily the need to refocus SAWS back to its core mandate i.e. dissemination of climate and weather information that improves societal preparedness for severe weather events that are associated with climate variability. SAWS recognised

that to sustain the fulfilment of this mandate, it needs to review its services strategy. This review culminated in the ISS whose primary goal is to leverage economies of scale and scarce skills, to address the lack of capacity coupled with the ever-dwindling grant funding. Secondly, through successful implementation of the ISS, SAWS will be well positioned to recover most of its cost of delivering on its mandate.

In the context of the ISS, the SAWS primarily disseminate its core services to citizens with a principle to recover the cost of production for such services as a part-solution for mitigating resource constraints. This cost recovery principle ensures reduced reliance on the ever-diminishing government grant while sustaining the provision of SAWS services. The ISS recognises the need to consolidate and integrate; through collaboration, the way services are developed and disseminated throughout the SAWS value chain. This integrated view of service development and deployment will enable SAWS to leverage economies of scale and skill that ensures effective resource allocation and deployment.

Through ISS SAWS developed its service/operating model which describes the way how the entity will organise itself to deliver the ISS. The service model embodies the interaction or integration of the various functional areas to maximise economies of skill, and scale, clarifying each role and accountability. This further creates focus and addresses the challenge of duplication of effort and building of services that are not linked to a user or interested party's need or expectation; the requirement SAWS Integrated Services Model describes as informed by the value chain.



**Figure 1:** SAWS Integrated Services Model

### Revenue generation as part of ISS

As per Section 4.(1) (a) of the SAWS Act of 2001, the Weather Service must provide such meteorological services, including public good services and Commercial services, as are necessary to achieve its objectives, provided it is in the interests of the Weather Service and the State.

For SAWS to remain relevant, revenue generation through the provision of products and services will be important in order to ensure the sustainability of SAWS. SAWS will continue to follow revenue models that focus on the increasing revenue generation internally via various channels to linking with external partners that provide unique capacities and capabilities that are not available in-house. In order to realise sustainable revenue flows, SAWS needs to tap into innovative opportunities and solutions which include, but are not limited to:

- Integrated multi-sector data and infrastructure management
- Weather-Smart research and innovation
- Hosting of the NFCS Centre
- Developing innovative and relevant products and solutions for various sectors including the media
- Link with International agencies and funders to broaden the revenue generating mechanisms

# ■ PART C: Measuring Performance

## 7. Institutional Performance Information

This section of the strategic plan expresses the impact, outcomes and indicators that will facilitate the assessment of the entity's contribution towards the NDP. The Results-Based Approach based on the Theory of Change has been followed to produce the SAWS' Strategic Framework which provides an overview of the intended impact and outcomes to be realised. SAWS understands the importance of inputs that will set the foundation for the entity's activities, geared toward realisation of outputs which contribute to the desired impact. The above is depicted in the figure 2 below.

The entity sees its desired impact contributing towards a realisation of 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.

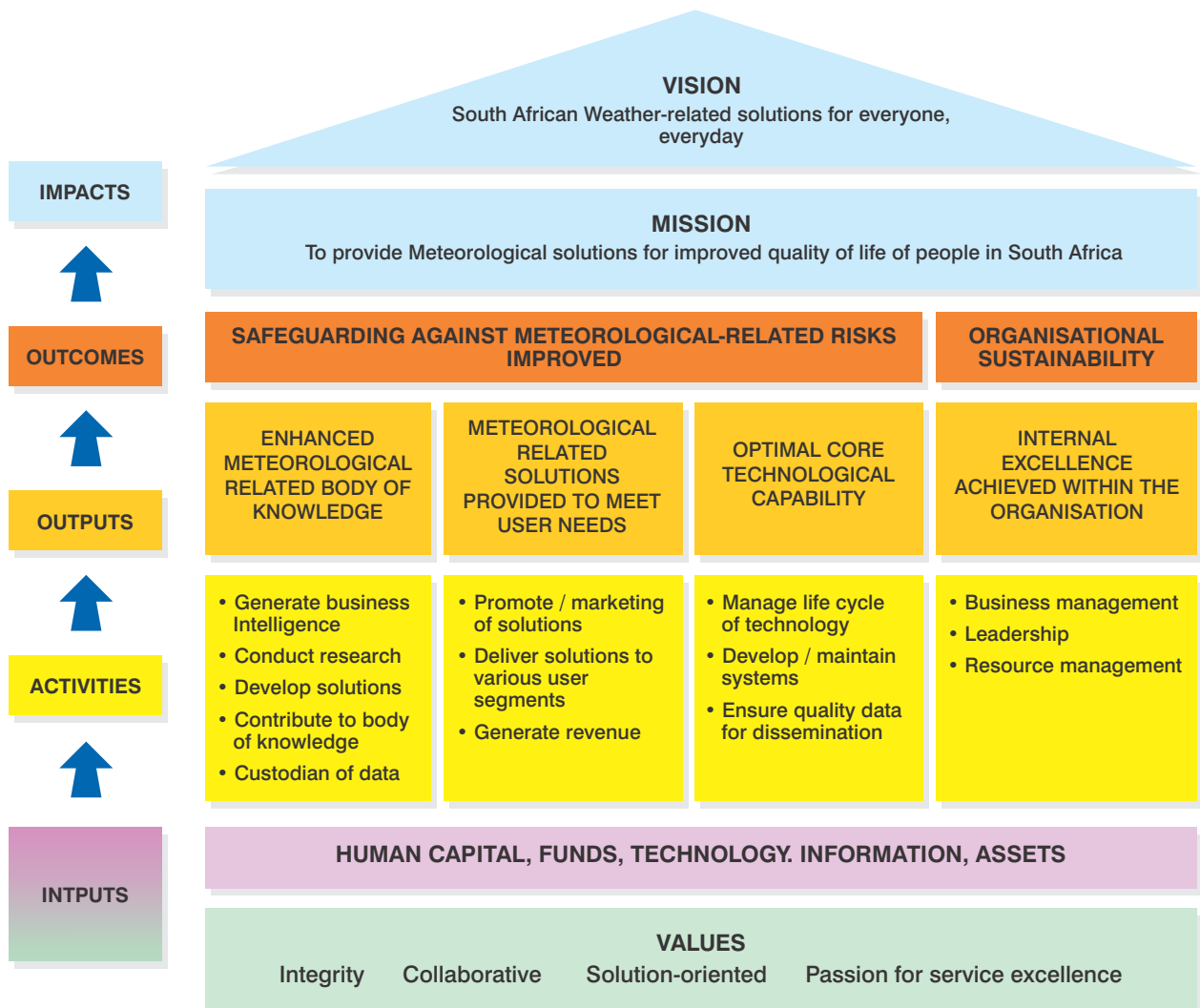


Figure 2: SAWS Strategic Framework

### 7.1 Measuring the Impact

Impact Statement	Improved quality of life for all in South Africa
------------------	--

### 7.2 Measuring Outcomes

Outcome	Outcome indicator	Baseline (2018/19)	Five-year target
Lives and property protected against meteorological-related risks	Percentage accuracy of aviation information (%)	90%	≥90%
	Percentage availability of weather-related services (%)	96%	≥96%
Organisational sustainability	Number of engagements to reach vulnerable communities (n)	2	20
	Total non-regulated income growth (R value)	R32.4 million	R53.1 million
	Number of accreditations maintained (n)	10	10

### 7.3 Planned Performance Over the Five-Year Planning Period

#### Lives and property protected against meteorological-related risks

Extreme weather events, natural disasters, and the failure of climate-change mitigation and adaption poses the biggest risk to humanity. This is indeed also the case in South Africa as experienced from recent weather-related events. There is a strong link between climate change and variability, and the weather experienced on a daily. As the global climate is changing, the frequency and intensity of extreme weather events are also evolving. This is a strong motivation for South Africans to consider weather forecasts and alerts, including climate information and projections; to protect their lives and property on a day-to-day basis against meteorological-related risks.

SAWS aims to use its provision of weather-related services and products to the public and marine industry as contribution to the achievement of this goal. Of highest priority will be to increase the reach in order to make sure that the weather alerts reach more people than before, especially those who are very vulnerable to extreme weather. In order to achieve the above, SAWS will need qualified and competent personnel throughout its value chain. In addition, quality infrastructure and the funding that is associated with it becomes crucial for delivery on the intended outcome. There is also need for innovative technology solutions to assist in the dissemination of forecasts and alerts and it calls for strategic partnership with other institutions, public and/or private.

In the context of aviation meteorological service provision, this outcome is perfectly aligned to the priorities of the International Civil Aviation Organization (ICAO) as prescribed in the Global Aviation Safety Plan. At the core of these priorities is the need for continuous improvement of aviation safety by preventing aircraft accidents through the provision of relevant air navigation facilities and services. As the global airline operation continues to grow at a much faster rate, the airspace becomes saturated and the risk of aircraft accidents is increased. This may result in loss of life and property if steps are not taken to mitigate the risk.

Amongst the Entity's core mandate, as enshrined in the SAWS Act No. 8 of 2001, as amended through the SAWS Amendment Act, Act No. 48 of 2013, is the provision of accurate aviation meteorological services required to assist the aviation industry in the planning and safe conduct of their operation. The provision of accurate meteorological services will help increase situational awareness on the existence of hazardous meteorological phenomenon during all stages of the flight (take-off, en-route and landing) thus reducing the risk of aircraft accident(s) which may result in the loss of live and property.

To continue meeting the evolving and future needs of the aviation industry, SAWS needs to align its strategic outcomes to the objectives of ICAO as prescribed in the Global Air Navigation Plan in terms of competencies of personnel, infrastructure, research and technology. This will enable the provision of accurate meteorological information which will help protect lives and property as well as improve the environmental and economic sustainability of air transport in South Africa and the region.

### **District model approach and Impact based forecasting**

SAWS will also be engaged in the awareness campaigns which will include the roll out of impact-based forecasting and warning service through the district model approach as described by the Presidency. Impact-based approach is needed to alert the communities at risk of the expected adverse impacts that the weather may have on them. This is a paradigm shift from “what the weather will be” to rather, “what the weather will do”. Impact-based system will also use simple and plain language, devoid of any meteorological terminology. This has been necessitated by the fact that despite recent major improvements in accuracy and timeliness of warnings, a good response which could lead to safety of life or avoidance of major economic disruptions, cannot be guaranteed. As such, a severe weather warning needs to be tailored provide useful, timeous and relevant information to the users (disaster managers and the general public) on the expected severity and the associated likely level of adverse impact due to the hazard to support their decision-making on the most appropriate actions. Initially, this concept has been started in disaster risk reduction, but can be easily applied to other weather-sensitive spheres. As contribution towards the District Development Model, SAWS will be engaged in the following:

Project/ Programme name and description	District Municipality	Focus area/ Intended socio-economics outcomes	Project budget	Project start and end date	Social partners
Weather and climate early warning awareness campaign	44 District Municipalities over the MTSF period	Educate communities on understanding and responding to weather and climate warnings.	R15 million	2020/21 to 2024/25	Emergency Services and Disaster Management (National, provincial and district), Local Municipalities, Traditional Authorities.
Public Weather Awareness Campaigns	20 Vulnerable Communities	Engaging vulnerable communities through severe weather awareness campaigns where SAWS can raise awareness and educate communities, enabling them to make informed decisions that save lives and property.	R50 million	2020/21 to 2024/25	Emergency Services and Disaster Management (National, provincial and district), Local Municipalities, Traditional Authorities.

## Organisational sustainability

To ensure that the organisation is sustainable, excellence would have to be achieved on several factors. These factors include amongst others; ensuring that 65% of the procurement budget is spent locally on affirmative procurement, that the BEE level is improved to be on level 6 in 2020/21 financial year and that commercial revenue is increased to R39,18 million during the period. Increasing commercial revenue is part of the mandate as per the South African Weather Service Act as amended, and would assist in alleviating financial challenges faced by the organisation in the wake of decreasing budget allocations.

The SAWS Corporate and Regulatory Services support operations in many ways, ensuring that the entity makes the best possible use of synergies across the organisation. The SAWS' Human Capital Management shall set the overarching key HR objectives and associated action plans to assist and support the delivery of the SAWS five (5) Year Strategy.

SAWS recognises that talent is the basis for sustained competitive advantage in all areas of its operations. It is therefore committed to the attraction, development, deployment, succession and retention of people with the skills necessary to add value to the organisation. The organisation is committed to ensure that the strategic capabilities are leveraged by staffing critical positions with exceptional talent and managing any risks associated with human capital by implementing robust talent management initiatives to acquire and develop scarce and critical skills.

The development of the Entity's employees is paramount to the growth and future of SAWS, thus the Human Capital Management will focus on programmes that adequately develop and retain our critical and key workforce. The aim is to increase critical meteorological scarce and critical skills talent pool as part of talent sourcing initiatives through bursary schemes, learnerships and internships. One of the main objectives will be to upskill the technical teams that look after the SAWS infrastructure as well as accelerating the development of women within SAWS to senior management positions. SAWS will continue with initiatives and programmes that positively impact on employee performance, engagement and retention, wellbeing, and skills development. Effective on-boarding programme for new employees and career pathing and progression will form a cornerstone of employee retention, as well as the implementation of well-defined succession plans resulting in readily available successors for key positions in the organisation.

An Employee Wellness Programme will be developed and prioritised, with the primary objective to encourage employees to lead a healthy lifestyle and learn how to deal with stressful situations both from an external and internal perspective.

An unqualified audit opinion must be achieved whilst decreasing the attrition rate of the Entity. An unqualified audit opinion is part of organisational sustainability since it is a clear indication that funds are spent appropriately and that there is no wasteful and irregular expenditure. Local expenditure on the procurement budget would assist in improving the BBBEE level thus ensuring the SAWS get preference in the market for rendering services, which in turn will increase our revenue.



At the heart of SAWS's mandate of communicating weather information and warnings lie its key stakeholders as contemplated under the notion of “vulnerable communities”. It is for this reason that we aim to reach out to more people in rural and vulnerable communities who are impacted by the changing weather patterns.

On the communication front, our mandate requires us to disseminate weather information and warnings to 57 million South Africans daily. SAWS currently distributes weather information to over twenty-five million radio listeners daily and our aim is to communicate this information to all radio listeners in the country who are about thirty-four million. To achieve the above, SAWS aims to increase the number of radio stations and the regularity of interaction on the weather front. On the television front, the Entity reaches about 11 million viewers daily through the three SABC television channels alone. It is our intention to expand the number of television channels in order to reach out to more citizens of the Republic. To this end, we must increase the number of television channels we disseminate weather information to, to include community television stations.

SAWS further aims to maintain its stakeholder satisfaction rating of 85% throughout the five-year period whilst extending the reach of the SAWS brand to new platforms such as vehicle branding, airport branding and social media branding. On both the internal environment and international front, the Entity will maintain the current newsletters as platforms for branding to these stakeholders. These would create an army of brand ambassadors that the SAWS require. Word of Mouth is said to be the most powerful marketing tool an organization can have.

8. Key Risks

Outcome	Key risk	Risk Mitigation
Lives and property protected against meteorological-related risks	Insufficient quality education for science, technology, engineering and mathematics	SAWS will engage the Department of Higher Education and Training and learning institutions on the need for an increased Meteorological career path and which subjects should scholars be encouraged to pursue.
	Vandalism of infrastructure	The Met technicians will regularly do site inspections (ARS and AWS). Improving security measures, e.g. Installation of electrical fence for all ARS and AWS.
	Inaccurate information provided Un-timeous provision of meteorological information	Proper implementation of ARS and AWS maintenance plan (including buying of parts and spares). Upgrading of Network. Buying and maintenance of backup Generators and UPS (Power outages and Load shedding) at Regional offices where there's a need. Procurement of modern designed Mast(s) Regular communication between SAWS and stakeholders.
	Inadequate education on weather information (both public goods and commercial goods - stakeholders and community)	Weather educational/awareness campaigns for community/stakeholders in all the Provinces. All platforms will be explored in endeavor to reach even rural areas.
	Inadequate and ageing infrastructure used to collect weather data	Proper implementation of ARS and AWS maintenance plan (including buying and replacement of parts and spares). Spending of Budget on infrastructure assets in line with allocation and approved procurement plan/ and Modernisation plan.

Outcome	Key risk	Risk Mitigation
	Technological failure(s) of AWS & ARS which will result in loss/inaccurate of data (service disruption)	Proper implementation of ARS and AWS maintenance plan (including buying and replacement of parts and spares).
	Poor communication with relevant stakeholders	Development and implementation of Year plan/programme for engagements between SAWS and stakeholders.
Organisational sustainability	Inadequate government allocation for public goods	Develop a priority list in line with approved procurement plan. Source funding from other Partners/Agencies.
	Inadequate revenue generation (sales of products and services)	Revise/develop marketing strategy for SAWS products and services. Develop Debtors management policy.
	Diminished competitive edge	An integrated communications and branding strategy implementation.
	Fraud and corruption	Adherence to SCM policy – all Bids. Development of Fraud prevention plan. Regular communication of code of conduct and Ethics to all employees (old and new) (e.g. quarterly via emails, departmental meetings, induction, etc).
	Creditors not paid within 30 days which might lead to litigation claims	Develop Creditors management policy. EXCO will consider Creditors age analysis and Finance will develop a priority list for payment of creditors.

## ■ PART D: Technical Indicator Description (TID)

Indicator Title	<b>Accuracy of aviation information (%)</b>
Definition	To measure the degree of representativeness of the aviation forecasts against the actual weather for contribution towards the safety of skies.
Source of data	OPMET and Aviation Website
Method of Calculation / Assessment	Quantitative: Average of TAF, TREND, Aerodrome Warnings and Take-Off Data.
Assumptions	Availability of Numerical Weather Prediction (NWP) models, ICT Infrastructure.
Disaggregation of Beneficiaries	N/A
Spatial Transformation	N/A
Desired performance	≥90%
Indicator Responsibility	Senior Manager: Aviation

Indicator Title	<b>Availability of weather-related services (%)</b>
Definition	Public and Marine products and services developed and delivered to relevant stakeholders
Source of data	Internal Message-Handling-System (MHS)
Method of Calculation / Assessment	Quantitative: Average availability of Public Weather Bulletins (FPZA41), SOLAS (FQZA31, FQZA30)
Assumptions	Availability of Numerical Weather Prediction (NWP) models, ICT Infrastructure.
Disaggregation of Beneficiaries	N/A
Spatial Transformation	N/A
Desired performance	≥96%
Indicator Responsibility	Senior Manager: DRR

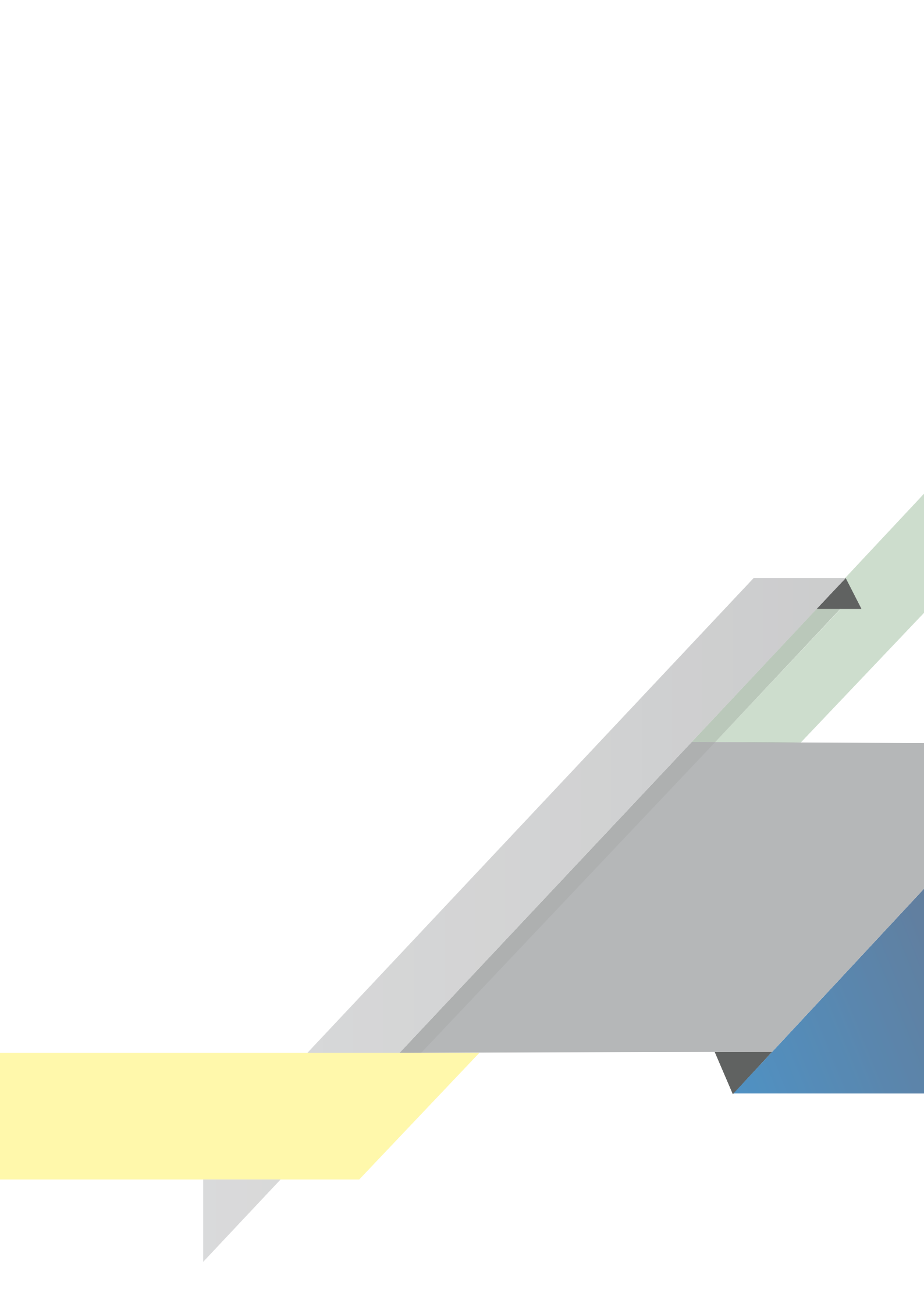
■ **PART D:** Technical Indicator Description (TID)

Indicator Title	<b>Number of engagements to reach vulnerable communities (n)</b>
Definition	Engaging vulnerable communities through severe weather awareness campaigns where SAWS can raise awareness and educate communities, enabling them to make informed decisions that save lives and property.
Source of data	Stakeholder engagement reports
Method of Calculation / Assessment	Quantitative: Number of communities reached per financial year
Assumptions	None
Disaggregation of Beneficiaries	N/A
Spatial Transformation	N/A
Desired performance	20 engagements
Indicator Responsibility	Senior Manager: Communication, Marketing and Stakeholder Relations

Indicator Title	<b>Total non-regulated income growth (R value)</b>
Definition	Growth in commercial revenue (non-regulated) for the financial period.
Source of data	NetSuite, Revenue and Pricing Models
Method of Calculation / Assessment	Quantitative:
Assumptions	Quality (accuracy and completeness) as well as availability of the data
Disaggregation of Beneficiaries	N/A
Spatial Transformation	N/A
Desired performance	R53.1 mil
Indicator Responsibility	CFO

■ **PART D:** Technical Indicator Description (TID)

Indicator Title	Number of accreditations maintained (n)
Definition	To maintain the accreditations that SAWS received from outside (national and international) stakeholders. This includes certifications of the organisation.
Source of data	Designations, accreditations and certifications received
Method of Calculation / Assessment	Quantitative:
Assumptions	Designations, accreditations and certifications received
Disaggregation of Beneficiaries	N/A
Spatial Transformation	N/A
Desired performance	10 accreditations
Indicator Responsibility	Senior Manager: Compliance



## HEAD OFFICE

South African Weather Service, Eco Glades block 1b, Eco Park,  
Cnr Olievenhoutbosch and Ribbon Grass Streets, Centurion, 0157  
Tel: +27 (12) 367 6000

National Forecasting Centre Tel: 012 367 6000

Weatherlines: Dial **\*120\*7297#**

[www.weathersa.co.za](http://www.weathersa.co.za)

Facebook: @WeatherService

Twitter: @SAWeatherService

