

# ANNUAL REPORT 2012/13



South African  
Weather Service



South African  
Weather Service

ISO 9001 Certified Organisation

Getting the nation weather-ready



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# MESSAGE

FROM THE  
MINISTER OF WATER AND  
ENVIRONMENTAL AFFAIRS

I am pleased by the contribution that the South African Weather Service (SAWS) continued to make towards sustainable development and climate change adaptation efforts during the reporting period. South Africa needs to continuously deal with environmental threats, particularly the availability of enough clean water and the maintenance of an acceptable level of clean air. The work of SAWS contributed towards the improvement of the overall management of the country's water resources as SAWS provided, among others, flood forecasts for dam level management. SAWS's involvement in the South African Air Quality Information System (SAAQIS) also contributed towards mitigating the adverse effects of air pollution.

South Africa is known for its biodiversity and we are recognised internationally for our wealth of indigenous resources in the animal and plant kingdoms. With climate change becoming a reality, a change in regional climates will directly affect the current biodiversity that is supported by the region. This could have a detrimental effect on economic activities and future activities, such as agriculture, tourism and bio-prospecting. With this in mind, I want to commend SAWS for its foresight in engaging in a project with the Water Research Commission (WRC) to determine future climate change impacts on drought and flood hazards in South Africa. The findings from this project will enable government and partnering stakeholders to formulate response measures that will minimise the vulnerability of the population, particularly rural communities, to increased weather and climate disasters.

During normal seasonal cycles, droughts and floods are inevitable, but the increase in weather severity continues to create more and larger weather and climate disasters than ever before. The veld fires that raged in exceptionally dry areas in the Western Cape during 2012, causing millions of Rands of damage, confirm the inherent threats associated with the impacts of severe weather. In this respect, SAWS's implementation of the McArthur Fire Danger Rating (FDR) System as a tool to accurately establish the risk of veld and forest fires in South Africa, is commended. As this tool was adapted for local conditions, it will create a nation ready to proactively respond to related warnings issued by SAWS and it will help to better prevent disasters that have dire effects on the lives and property of citizens.

The oceans surrounding the southern tip of Africa are one of our most important assets, but also one of the most neglected. They provide livelihoods for thousands of South Africans and provide food to millions more. Dangerous waves and sea swells often threaten the lives of people working at sea or staying in coastal areas. SAWS's responsibility to forecast marine warnings for high seas, abnormal waves, and tropical cyclones contribute directly towards protecting the lives and property of those faced by the elements on a daily basis.

SAWS once again achieved wide recognition on international, regional and local platforms. Its contribution to the work of the World Meteorological Organisation (WMO) and its committees, as well as those of the South African

“ I am delighted that SAWS is emphasising this milestone in our history and is celebrating 150 years of service to South Africans. This will result in much attention, as well as an improved understanding of the value of meteorology amongst our people. ”

Development Community (SADC) and the Meteorological Association of Southern Africa (MASA) is well-documented. In intensifying our contribution towards a weather-ready South Africa and the sub-region, a cooperation agreement in meteorology was signed by my Namibian counterpart and I, in the presence of the Heads of State. The agreement aims to facilitate the exchange of information, and provide opportunities for us to attend matters of joint interest as observers and hold consultations. Furthermore, a cooperation agreement signed between SAWS and the German Weather Service is expected to contribute to achieving the highest level of skills and technological development at SAWS. As both agreements focus on improved service quality, research, capacity building and technology sharing, our efforts to create public weather-readiness will be significantly strengthened.

The legal mandate of SAWS was extended to include the hosting of the South African Air Quality Information System (SAAQIS). Phase I of the implementation of SAAQIS consisted of completing the Ambient Air Quality Module and I am pleased that we are now in Phase II, completion of the Atmospheric Emissions Module. The extension of the mandate necessitated the review of the SAWS Act which was submitted to parliament for discussion and further comments.

Lastly, let me take this opportunity to welcome the newly appointed Board under the leadership of Professor Lindisizwe Magi and wish them well as they steer the ship in the correct and more progressive direction. SAWS is a well-oiled machine constantly moving forward, and will therefore make the work of the Board easy and pleasant.

I would like to extend words of gratitude and appreciation to my colleague, Deputy Minister Rejoice Mabudafhasi, for her support, commitment and dedication to ensuring that we deliver on our mandate. I also want to acknowledge the Parliamentary Portfolio Committee on Water and Environmental Affairs for their oversight role; the SAWS Board for its sterling leadership going forward, and SAWS management and staff for their efforts, and a job well done.



**Mrs BEE Molewa, MP**  
Minister of Water and Environmental Affairs



# MESSAGE

## FROM THE DEPUTY MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

I am extremely proud to report on the successful second year of the joint venture of the Severe Weather Awareness Campaign, run by our ministry and SAWS. The campaign aims to take weather awareness information to the people in order to realise a weather-ready nation. This year the campaign focused on Limpopo which was extremely affected by heavy rains and floods as well as the dry Northern Cape. The World Meteorological Day celebrations were held in Upington with 'Watching the weather to protect life and property' as a theme. It was during this celebration that SAWS unveiled its 'Face of the Youth in Meteorology', Mr Tsietsi Monare. With empowerment of the youth being one of government's priorities, Mr Monare is tasked with taking careers in meteorology as well as weather related messages to his peers, promoting the agenda 'For the youth by the youth'.

Lightning, floods and drought are still the most disturbing weather hazards in South Africa. Their impact can only be reduced if all sectors of the community understand the necessary weather precautionary measures. SAWS road-shows receive positive ratings from all stakeholders involved, as they are seen to empower and make the communities pro-active instead of reactive to weather hazards.

In support of the country's social development programmes, SAWS has progressed well with its Corporate Social Investment programmes. The second phase of the school which was under construction for the Highbury Community in Mthatha has been completed and is already

in use. The Highbury Community houses and provides security to one of SAWS's many radars. This radar has ignited the interest of students in the surrounding areas, who are now considering meteorology for tertiary studies.

The Fognet Water Harvesting Project continued. The challenges experienced with the quality of the Fognet structure have been overcome. Engineers were included in the expansion of the project to ensure that the new structures can withstand weather hazards.

A new structure was constructed and an Automatic Weather Station was also installed at the Tshanowa School in Limpopo.

SAWS continues to train its staff as well as students. The Memoranda of Understanding signed with academic institutions like the Universities of Zululand and Fort Hare attempt to widen the scope of atmospheric science studies. The Regional Training Centre which was accredited by WMO in 2011 has, to date, trained 120 learners in meteorology, forecasting and observation.

I must express my delight in how SAWS continues to represent the country well internationally through its CEO, Dr Linda Makuleni who chairs the gender mainstream of the WMO. She was also elected as a full member of The American Meteorological Society. I would also like to congratulate the Western Cape and Northern Cape Regional Manager, Mr Johan Stander who was elected as co-president of

“

*Lightning, floods and drought are still the most disturbing weather hazards in South Africa. Their impact can only be reduced if all sectors of the community understand the necessary weather precautionary measures.*

”

the Joint Commission on Marine Meteorology (JCOMM), at the 4<sup>th</sup> session of the commission held in Korea. This position will enhance South Africa's existing oceanic role and provides SAWS with an opportunity to influence the marine-related activities at leadership and strategic levels internationally. The occupation of these very important seats is international recognition of South Africa's skills and capabilities.

I would like to thank the donors who funded various SAWS projects. These included the Water Research Commission, UAE prize for excellence, National Disaster Management Committee (NDMC) flash flood systems and Solar radiation project.

Lastly, let me extend my gratitude to the SAWS Board for its leadership, as well as to SAWS management and staff for ensuring that the organisation continues to render excellent services. I would also like to acknowledge with appreciation the support given to SAWS by my colleague, Minister Edna Molewa. Together we are definitely doing more to create a weather-ready nation by watching the weather to protect life and property.



**Ms Rejoice Mabudafhasi, MP**

Deputy Minister of Water and Environmental Affairs

# VISION, MISSION AND SHARED VALUES

## VISION

In delivering on its mandate and statement of purpose, SAWS sets for itself the following vision:

“To be the foremost provider of relevant services in respect of weather, climate and related products, which contribute to sustainable development in South Africa and the African Continent”

## MISSION

In achieving the above vision, SAWS sets itself the following statement of mission:

We, in line with our quality policy statement, provide useful and innovative weather, climate and related products and services for all South Africans and the African Continent, through:

- Enhancing observational data and communication networks;
- Effectively developing and managing talent;
- Enhancing collaborative partnerships and effectively disseminating weather products to users;
- Utilising cutting edge technology to convert data into meaningful products and services for risk mitigation;
- Advancing the science of meteorology, research and relevant applications;
- Enhancing fiscal discipline and optimal resource mobilisation to ensure sustainability;

in order to inform decision making and contribute to the safeguarding of life and property.

## VALUES

SAWS is guided by and committed to a set of internal values, set out in the values statement below:

- **Professionalism:** Self-control and behaviour that is aligned to best business practices, and displays a high standard of excellence in the job.
- **Integrity:** A consistent sense of honesty, truthfulness and trust in one’s own actions while valuing others’ opinions and beliefs.
- **Caring:** A commitment to create a supportive environment that promotes compassion and understanding, both internally and externally.
- **Accountability:** A commitment to take responsibility for things expected from the position and/or role occupied- Responsible for own actions.
- **Recognition of Excellence:** A willingness to identify, recognise and acknowledge individuals and teams who demonstrate outstanding performance.
- **Teamwork:** A willingness to work together towards achieving a common goal by making use of and / or appreciating individuals’ diverse strengths and abilities.

## QUALITY POLICY STATEMENT

The South African Weather Service (SAWS) is a provider of useful and innovative weather, climate, and related products and services. In line with the organisation's philosophy and ethos, SAWS has generated and implemented a Quality Management System commensurate with the highest quality standards, to ensure that both its products and services are fit for use by its customers, and in accordance with the requirements of ISO 9001:2008.

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

In pursuing the achievement of meeting and exceeding client requirements and expectations, we commit ourselves to the establishment and maintenance of a Quality Management System that will be our guarantee to all our clients by:

- Setting Quality Objectives and reviewing them periodically in order to improve processes that yield quality products and services;
- Improving our existing products and services;
- Improving our operational efficiency and effectiveness through careful planning and documentation of all our processes;
- Recognising and responding to operational and client requirements;
- Providing resources needed for implementing and supporting continuous improvement;
- Communicating this Quality Policy Statement to all employees and stakeholders, and
- Reviewing our Quality Management Policy and our Quality Policy Statement to ensure their ongoing suitability.

“

*We are committed to Quality, and Quality is the commitment we give to all our clients and stakeholders.*

”



# REVIEW

BY THE  
CHAIRPERSON  
OF THE BOARD

It is always exciting to be part of the South African Weather Service's achievements. Once again let me applaud management and staff for the outstanding implementation of the business plan, the driver behind attaining a weather-ready South Africa.

During the period under review, SAWS continued to conduct its business in line with corporate governance best practices, with a view to building trust among its Shareholder and relevant stakeholders. The term of office of the old Board ended on 31 May 2012 and that of the new Board commenced on 1 June 2012.

In compliance with legislative and governance frameworks, the Board ensured, among others, that SAWS's Five-Year Strategy for 2013/2014 to 2017/2018; and the Annual Performance Plan and Budget for 2012/2013 were approved by the Board and submitted to the Shareholder within the prescribed timelines. The audited Annual Financial Statements and Annual Report for 2011/2012 were approved by the Board and submitted to the relevant authorities within the prescribed timelines. In accordance with King III, emphasis was placed on the roles and responsibilities of the Board relating to the governance of risk and IT. An enterprise-wide risk management review was thus undertaken and the Risk Register established. Governance documents such as the Risk Management Policy; ICT Governance Charter and ICT Governance

Framework were reviewed and approved, to strengthen internal controls and to highlight compliance with corporate governance best practices.

In the reporting year, SAWS has complied with the applicable regulatory frameworks locally and internationally. This was achieved by, among other things, the submission of all required weather and climate data to various sectors and industries in the country to the Safety of Life at Sea (SOLAS) Convention, the World Meteorological Organisation (WMO) and the International Civil Aviation Organisation (ICAO). Provision of severe weather warnings to the aviation and marine industries and the Disaster Management Centres complied with the WMO, International Maritime Organisation (IMO) regulations and the Disaster Management Framework as well as the strides made in relation to the Veld Fire Act.

On behalf of the Board, I would like to congratulate Dr Linda Makuleni for winning the Oliver Empowerment Award as Public Sector Executive as well as being a finalist in the 'Most Influential Women Awards' for CEO Magazine.

Furthermore allow me this opportunity to thank the Shareholder for its continued support throughout the year. My appreciation also goes to the old and new members of the Board for their sterling leadership as well as

“ The continuous financial constraints once again proved to be a challenge, but did not cripple the excellent service delivery. The strong technical and leadership capabilities of SAWS have facilitated full implementation of the SAWS Business Plan – despite limited financial and human resources. ”

ensuring that a culture of corporate governance is continuously instilled in the organisation. I also wish to extend my appreciation to management and staff for their commitment to, and collective efforts in realising the SAWS vision of becoming the foremost provider of relevant weather services, climate and related products. These services contribute to sustainable development in South Africa and the African continent. Most importantly, I am grateful for their warm welcome and unwavering support of the new leadership and members of the Board.



**Prof Lindisizwe Magi**  
Chairperson: SAWS Board



# REPORT

BY THE  
CHIEF EXECUTIVE OFFICER

In 2012 the South African Weather Service (SAWS) celebrated its eleventh year as a government entity and we managed to excel in service delivery and the provision of quality products, in our quest to create a weather-ready nation.

As Climate Change increasingly affects our weather and climate, we need to ensure the continued relevance of the organisation in delivering meteorological and climatological products and services, for the benefit of the South African community. To this end, applications we have developed address weather variability and adapt to and mitigate climate change. In particular, we have enhanced our severe weather guidance system for southern Africa; operationalised weather-related disaster risk applications; driven major developments in Phase II of the South African Air Quality Information System (SAAQIS), and continued to conduct trace gas monitoring at one of three Global Atmosphere Watch stations on the African continent.

As part of our response to issues relating to climate change, SAWS also participated in the development of the International Panel on Climate Change (IPCC) Fifth Assessment Report (AR5), with particular focus on Chapter 22, which assesses climate change impacts, adaptation and vulnerability in Africa.

In line with national concerns and priorities, SAWS recognises the increasing demand for up-to-date and robust climate change information to underpin adaptation planning.

Looking at future scenarios for the impacts of drought and flood hazards, in line with our endeavours to create a weather-ready nation, we secured a R1,113,000.00 project with the Water Research Commission (WRC) for the three-year period starting 1 May 2013 to 30 April 2016. We look forward to the way in which this project will inform robust strategies and response measures, aimed at reducing the vulnerability and exposure of rural communities to increased weather and climate disasters.

During the reporting period, several tools were also developed and implemented to enhance forecasting accuracy and efficiency. Research was done on climate change topics of relevance to South Africa. Of particular importance is the projection that 10-year droughts over the western and central areas of southern Africa could increase in severity, directly threatening the sub-region's food security and economies. This dire projection provides even more reason for us to get the nation weather-ready and ensure that it is able to adapt to future changes in weather and climate.

We addressed the inherent threats associated with weather variability by enhancing our forecasting and warning service offering to be 98.8% accurate. Our provision of accurate warnings and our efforts to encourage the public to become aware of the dangers of impending severe weather, supported our goal to get the nation weather-ready.



*As Climate Change increasingly affects our weather and climate, we need to ensure the continued relevance of the organisation in delivering meteorological and climatological products and services, for the benefit of the South African community.*



The reporting period was once again characterised by severe weather events. Among others, the Vhembe district in Limpopo, was declared a disaster area in January 2013, after heavy rains and flooding resulted in the loss of lives and damage to infrastructure, requiring millions of Rands to restore infrastructure to an acceptable level. This unfortunate event was followed up with a Severe Weather Awareness Roadshow, led by Deputy Minister Rejoice Mabudafhasi, where an understanding was gained about the trauma the community suffered while having to cope with severe weather issues of this nature.

SAWS provided meteorological support for major national events, such as the 2012 ANC Conference in Mangaung and the 2013 African Cup of Nations (AFCON) by presenting weather briefings prior to, and during the events. Once again, we were able to demonstrate the value of a national weather service to government, the private sector, the aviation and maritime industries, the public and the most vulnerable communities.

As the designated Aviation Meteorological Authority in South Africa, SAWS continued to ensure compliance with the International Civil Aviation Organisation (ICAO) Annex 3 International Standards and oversaw aeronautical services and products to the aviation industry.

SAWS's Total Quality Management systems were implemented effectively to meet the minimum requirements of ISO 9001:2008 and SAWS was recommended for retention of the certificate. Maintaining certification remains a challenging journey and requires dedication, as SAWS has to comply with WMO and ICAO requirements regarding the ISO certification of meteorological services.

SAWS ensured the effective management of stakeholder, partner and key client relations at international, regional and local level. Internationally, SAWS was acknowledged for its leading role in the World Meteorological Organisation (WMO), where the focus was on improving service delivery and capacity building, especially on the African continent. Meetings of ICAO focused, in particular, on the ICAO Audit Committee and the 12<sup>th</sup> Air Navigation Conference.

Building on resolutions taken during COP17 in 2011, SAWS participated in the Global Framework for Climate Services (GFCS) with the delegation led by the Director General of the Department of Environmental Affairs. An opportunity was created for the Director General to meet with senior officials of WMO, the WMO African Regional President and the Meteorological Association of Southern Africa (MASA), allowing the creation of strategic relationships with key role players internationally.



Winner of the Oliver Empowerment Awards



Staff Awards Function 2012

The African Ministers Conference on Meteorology (AMCOMET) Second African Ministers' Conference on Meteorology, which took place in Zimbabwe, developed a regional strategy for socio-economic development in key sectors. The SAWS Regional Specialised Meteorological Centre (RSMC) hosted the 4<sup>th</sup> WMO training session for SADC, addressing severe weather forecasting. This training and regional cooperation in severe weather forecasting was recognised by regional user groups as being extremely effective in the enhancement of regional early warning systems. This initiative is extremely important in light of the increasing frequency and magnitude of severe weather events, which are associated with climate change.

Our success as an organisation was once again confirmed by testing public perception for overall service delivery during the report period. The survey revealed a remarkable overall satisfaction of 85.3% with the SAWS experience. This increase in satisfaction bears testimony to the way in which SAWS followed through on its strategic goals to ensure continued relevance of the organisation and effective relationships with key clients and stakeholders.

In terms of media relations and engagement, SAWS received free media coverage of around R26 million Adver-

tising Value Equivalent. Many reports centred around severe weather, its dangers and precautions and I would like to thank the media for playing such a vital role in making the South African nation weather-ready.

To ensure continuous organisational effectiveness and efficiency, we re-aligned our services by addressing operational needs, especially in the forecasting field by stabilising our computer-driven observation network and dissemination platforms.

In addressing our goal to create a strategy-driven human capital capacity for SAWS's performance, we have managed to lower the turnover of critical and scarce skills to an average of 4.18% in the period under review. The southern African region is faced with the challenge of a lack of training facilities for its technical personnel. SAWS, in collaboration with partner tertiary institutions in South Africa, continued to provide training assistance to personnel from neighbouring countries, receiving recognition for the excellent role we played as a leading Regional Training Centre (RTC).

I am extremely proud to announce that our General Manager: Human Capital Management, Mr Lindani Gcwensa, won the Senior HR Executive of the year: Public Sector 2012



Finalist in the Most Influential Women Awards 2012

award at the Avusa Media Annual Recruitment Awards (AMARA). Ms Gaborekwe Khambule, Senior Manager Aviation also made us proud as a finalist in the CEO Magazine’s Top Women Awards.

SAWS celebrated its library centenary during April 2012. The library contains more than a century’s valuable, well-maintained records and is one of the oldest meteorological libraries in the world. As part of the celebrations, employees donated books which were subsequently distributed to learners from various schools in the Lehurutshe region and the Funanani centre in Mamelodi. I would also like to congratulate the team that participated in Scifest Africa in March 2013 (Science on the Move), who did us proud by winning a second place for the best exhibition, themed, ‘A Voyage Below 40 degrees South.

SAWS has once again obtained an unqualified audit and managed to realise the achievements mentioned, despite the weak economy that took a toll on its commercial revenue, resulting in a deficit of R1.7 million for the year under review. SAWS, having an innovative spirit, continued with the introduction of a new product called the hybrid AWS/CCTV that is proven popular with the metropolitan governments.



Severe Weather Awareness Roadshow: Venda

I would like to conclude by expressing my appreciation to SAWS’s staff and management for the excellent work done during the year. The support from the Shareholder and the Board is also highly valued. Let us continue to watch the weather to protect lives and property and build a weather-ready nation.

**Dr Linda Makuleni**  
Chief Executive Officer

# BOARD MEMBERS



- 01** PROF LINDISIZWE MAGI - CHAIRPERSON
- 02** DR NOLULAMO GWAGWA - DEPUTY CHAIR
- 03** MR SIYABONGA MAKHAYE
- 04** MR ANDILE MVINJELWA

- 05** MR JONTY TSHIPA
- 06** PROF ELIZABETH MOKOTONG
- 07** MR ROWAN NICHOLLS

# BOARD MEMBERS



**08** MS NTSOAKI MNGOMEZULU  
**09** DR SHADRACK MOEPHULI  
**10** MR ZOLA FIHLANI

**11** MS JUDY BEAUMONT - DEA REPRESENTATIVE  
**12** DR LINDA MAKULENI - CEO  
**13** MR SLINGSBY MDA - CFO

# EXECUTIVE MANAGEMENT



**01** MR LINDANI GCWENSA - HUMAN CAPITAL MANAGEMENT

**02** MS MODJADJI MAKOELA - CORPORATE AFFAIRS  
*UNTIL 30 JUNE 2012*

**03** MS ANTO BADIMO - CORPORATE AFFAIRS  
*ACTING FROM JULY 2012*

**04** MR MNIKELI NDABAMBI -  
OPERATIONS

**05** DR LINDA MAKULENI - CHIEF  
EXECUTIVE OFFICER

**06** MR SLINGSBY MDA - CHIEF  
FINANCIAL OFFICER

## Executive Management in Action



*Reaching out to the community of Mphego Village*



*Signing of MoU with Fort Hare University*



*Celebrating SAWS's birthday and Nelson Mandela Day*

# SENIOR MANAGEMENT



- 01** MS ANTO BADIMO - STAKEHOLDER RELATIONS MANAGEMENT
- 02** MS KENOSI MACHEPA - CORPORATE COMMUNICATIONS
- 03** MS NOMATHAMSANQA TABATA - HUMAN CAPITAL DEVELOPMENT

- 04** DR NHLONIPHO NHLABATSI - RESEARCH
- 05** MS MICHELLE HARTSLIEF - COMMERCIAL
- 06** MR MARK MAJODINA - INTERNATIONAL RELATIONS
- 07** MS ZANDILE NENE - COMPANY SECRETARY

# SENIOR MANAGEMENT



- 08** MR LULAMA GUMENGE - FINANCE
- 09** MR BUHLE SHANDU - OCCUPATIONAL HEALTH AND SAFETY
- 10** MS GABOREKWE KHAMBULE - AVIATION
- 11** MR NISH DEVANUNTHAN - TECHNICAL SERVICES

- 12** MS SIHLE MASHABANE - SUPPLY CHAIN MANAGEMENT
- 13** MR TSHEPHO NGOBENI - FORECASTING
- 14** MS DUMAZILE NGCOBO - HUMAN CAPITAL SERVICES
- 15** PROF THEMBA DUBE - CLIMATE SERVICE

# PERFORMANCE AGAINST TARGETS

Strategic Goal 1: To ensure the continued relevance of the organisation in delivering meteorological and related products and services in compliance with all applicable regulatory frameworks					
Strategic Objective	Programme Activity	Performance Indicator	Strategic Objective Targets 2012/2013	Means of Verification	Result
<b>1.1 Organisation-wide compliance with all applicable national and international regulatory frameworks</b>	Annually review Framework of Accountability	Unqualified audit	Unqualified audit	Letter of opinion from the AG  Internal Audit Executive Summary reports	Achieved Unqualified audit report
	Strengthen and manage internal controls	Unqualified audit	Unqualified audit	Approved Risk Register (Board resolution)	Achieved A risk assessment was conducted and the Risk Register approved by the Board in May 2012. and progress reports on the implementation thereof submitted to the Board through the Audit and Risk Committee.
	A fully-functional MET Authority	Annual Report produced in line with international best practice	Annual Report produced in line with international best practice	MET Authority Annual Report	Achieved Annual Report is available and reflects the inspections that were conducted at 20 licensed aerodromes. It furthermore confirms the commitment of SAWS to promote compliance in accordance with ICAO standards.
	Maintain Regional Telecommunications Hub (RTH)	Quarterly RTH data availability report	Quarterly RTH data availability report	Quarterly RTH data availability report	Achieved RTH report is available. Successfully swapped the GTS data exchange from the old Washington line to the new RMDCN, linking to Exeter.
	Custodian of national climate data	Quarterly data availability reports on national climate data	Quarterly data availability reports on national climate data	Availability of climate data report	Achieved AWS = 97.4% ARS = 90.7% Rainfall = 96.1% Upper Air = 98.4% VOS = 99.0%
<b>1.2 Develop, implement and improve programmes and applications for weather and climate variability, climate change adaptation and mitigation</b>	Prediction research as per approved Research and Development Strategy and Implementation Plan	Approved and implemented R and D Strategy and Implementation Plan	Refine Severe Weather Guidance System for Southern Africa	Operational SWGS for SADC	Achieved Operational through RSMC web.  SARFFG phase two commenced according to WMO milestones.  RSMC, SWFDP, SARFFG progress reports submitted.

**Strategic Goal 1: To ensure the continued relevance of the organisation in delivering meteorological and related products and services in compliance with all applicable regulatory frameworks (cont.)**

Strategic Objective	Programme Activity	Performance Indicator	Strategic Objective Targets 2012/2013	Means of Verification	Result	
	Development and operationalisation of weather-related disaster risk applications	Number of disaster risk reduction applications implemented	Refine Severe Weather Warning System for South Africa	Results of Disaster Management User Survey	Achieved Developed and operationalised the following Disaster Risk Applications: 1. Hail Mass Aloft product 2. Lightning Potential Maps 3. Radar precipitation estimation 4. Fire Danger Rating System (FDR) 5. Snow Product	
			Refine Tsunami Early Warning System for South Africa	Results of Disaster Management User Survey	Achieved Tsunami EWS operational with National Guidelines and SAWS work instructions.	
	Air quality information service operationalised	SAAQIS Phase I (Ambient air quality) fully developed and implemented	Functional SAAQIS database	Finalised MOU and funding model with DEA and Board approved  Functional SAAQIS database	Developed SAAQIS phase II	Achieved Data from 76 Air Quality monitoring stations and 78 from the Johannesburg Dust Fallout Network available on the SAAQIS website.
						Achieved Beta (trial) version of the National Atmospheric Emission Inventory System (NAEIS) has been tested and is ready for piloting.  The APPA (Air Pollution Prevention Act) database has been transferred to SAWS from the DEA.
		SAAQIS Phase II fully developed and implemented	No National Atmospheric Emission Register and database but stand-alone GHG inventories in place for 1990, 1996 and 2000	Developed SAAQIS Phase III	The development of SAAQIS Phase III is due to commence in 2015. This deliverable should not have been in the 2012/2013 business plan.	
		SAAQIS Phase III fully developed and implemented	Development of SAAQIS Phase III	Developed SAAQIS Phase III	Developed SAAQIS Phase III	The development of SAAQIS Phase III is due to commence in 2015. This deliverable should not have been in the 2012/2013 business plan.
	Trace gas, including green house gas, monitoring and submission of reports according to international standards. (Global Atmospheric Watch)	Continuous monitoring and provision of trace gas data reports	Report on availability of trace gas data in the World Data Centres  Quarterly MINMEC and bi-annual Cabinet reports submitted	Report on availability of trace gas data in the World Data Centres  Quarterly MINMEC and bi-annual Cabinet reports submitted	Achieved Trace gas data submitted to World Data Centres and SAAQIS.  MINMEC Outcome 10 reports submitted.	
<b>1.3 Develop and deliver products and services</b>	Enhance the Forecasting and Warning Service offering	Improved accuracy of maximum temperature and 24-hour forecasts	71% accuracy for maximum temperature and 24-hour forecast within two degrees	Quarterly Temperature Accuracy Report	Achieved Maximum temperature = 77.0% Models were more accurate.	
		Percentage forecast availability as per schedule	Forecast availability as per schedule at 99%	Quarterly Forecasting Availability Report	Achieved Provincial weather forecast availability = 99.6% Provincial temperature forecast availability = 99.0%	
		Percentage SOLAS (Safety of Life at Sea) forecast availability	99% SOLAS (Safety of Life at Sea) forecast availability	Quarterly report on SOLAS (Safety of Life at Sea) forecast availability and warnings provided	Achieved Availability = 99%	

Strategic Goal 1: To ensure the continued relevance of the organisation in delivering meteorological and related products and services in compliance with all applicable regulatory frameworks (cont.)					
Strategic Objective	Programme Activity	Performance Indicator	Strategic Objective Targets 2012/2013	Means of Verification	Result
		Percentage of accuracy of severe weather warnings provided	Accuracy according to international benchmark of severe weather warnings	Quarterly report on percentage of accuracy of severe weather warnings provided	Achieved Severe weather warnings accuracy = 98.8%
	Establish Hydrometeorology and Agrometeorology application expertise within SAWS	Operationalised Hydrometeorological and Agrometeorological function in SAWS	Feasibility study on appropriate structure and establishment of Hydro- and Agrometeorological application expertise	Feasibility study report	Achieved Agro- and Hydrometeorology Feasibility Study completed and approved.
		Number of Hydro-meteorological and Agrometeorological applications developed	N/A	Feasibility study report	Agro- and Hydrometeorology Feasibility Study completed.
	Deliver and enhance the Climate Information Service	Percentage success rate in publishing Public Good Products according to agreed timeframes Client satisfaction survey	96% success rate of publishing according to timeframes	Publications	Average success rate: 92.5% Not achieved due to ICT challenges within the organisation.
			Continuation of commercial service related to climate data and/or information	Continuation of commercial service related to climate data and/or information	Achieved Achieved as evidenced by note 17 of the AFS where the commercial income from the sales of climate data is disclosed.
	Deliver and enhance the regulated Aviation Service	Percentage improvement in the accuracy of TAF and TREND	90% accuracy for TAF	Report on TAF accuracy	Achieved TAF accuracy = 92.5% Models were more accurate.
			92% accuracy for TREND	Report on TREND accuracy	Achieved TREND accuracy = 96.0% Models were more accurate.
	Report on SIGMET availability	Percentage availability of SIGMET	Report on percentage availability	Report on development of availability tool	Achieved Software for checking availability was developed, reporting started from February 2013. Availability = 100%

Strategic Goal 2: To ensure the effective management of stakeholder, partner and key client relations					
<b>2.1 Maintain and enhance beneficial relationships with key stakeholders and improve programmes that ensure effective communication</b>	Implementation of the Stakeholder Relations Programme with key strategic stakeholders	Overall customer satisfaction	Overall customer satisfaction at 85%	Perception Survey Report	Achieved Overall customer satisfaction at 85.3%.
		Score on overall corporate image	Overall corporate image to score 85%		Achieved Overall corporate image at 84.7%.
		Score of quality of service/products	The quality of service to score 85%		Achieved Overall quality of service at 84.6%.
	Implemented programmes which ensure effective internal and external communication	Progress in implementation of the rolling three-year Communication Strategy	Implement phase one of the 2011/2012 to 2013/2014 Communication Strategy	Quarterly implementation report	Achieved Quarterly Reports available on the implementation of Phase 1 of 2011/12 to 2013/2014 Communication Strategy.

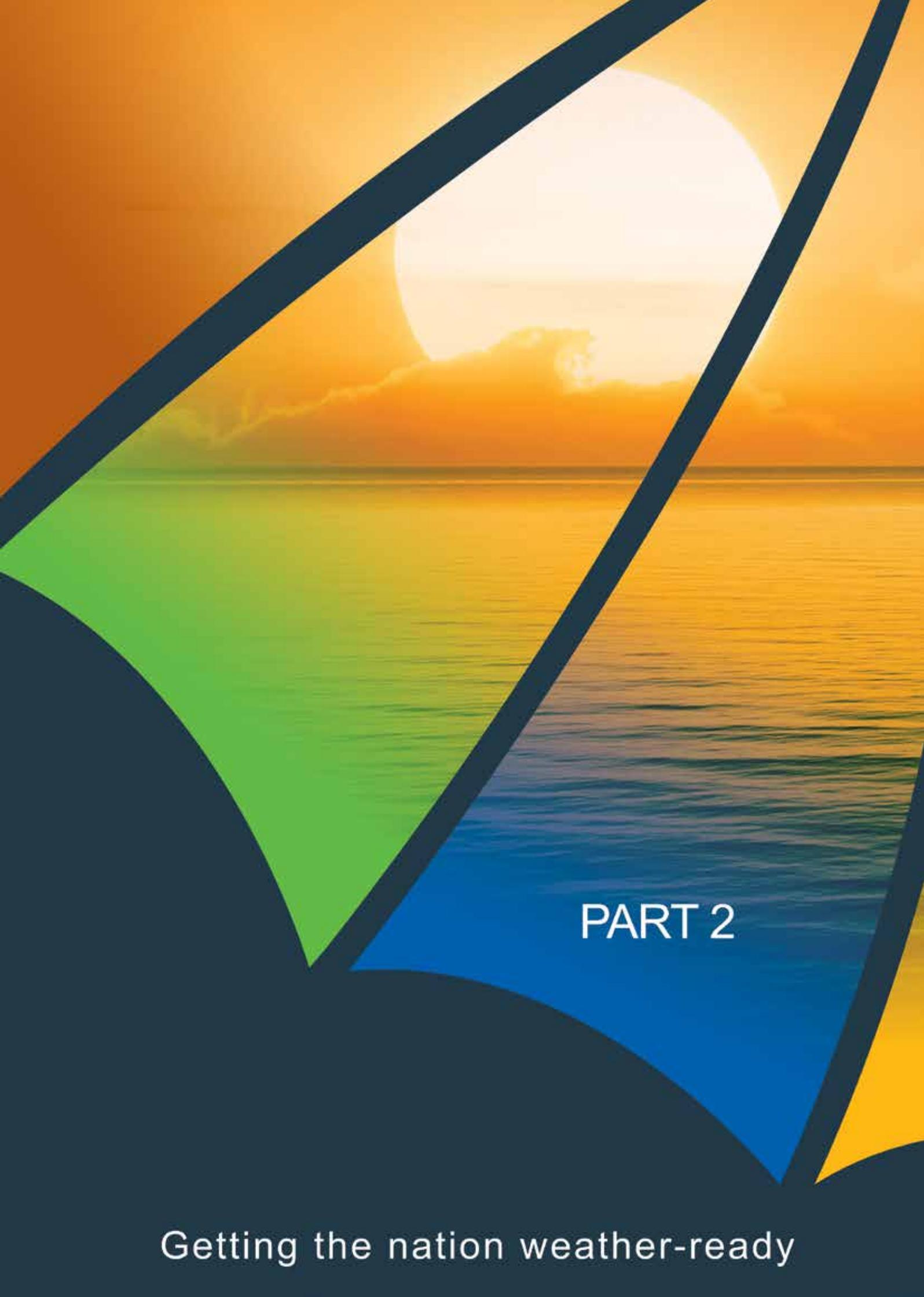
Strategic Goal 2: To ensure the effective management of stakeholder, partner and key client relations (cont.)					
Strategic Objective	Programme Activity	Performance Indicator	Strategic Objective Targets 2012/2013	Means of Verification	Result
<b>2.2 Maintain and promote international relations and cooperation</b>	International Relations and Cooperation promoted	Active participation and involvement in governance structures, Boards, Think Tanks, etc.	Quarterly report on the status of international leadership and positioning	Quarterly report on the status of international leadership and positioning	Achieved Quarterly reports available detailing SAWS's international participation and cooperation.
		Participation in the full implementation of phase two of the SADC Regional Meteorological Development Project Participation in SADC Region governance structures	Report reflecting participation in the implementation of the SADC Regional Meteorological Development Project	Report reflecting participation in the implementation of the SADC Regional Meteorological Development Project	Achieved Project funding for the SADC Regional Meteorology Development Project cancelled by the Finnish Government. Alternative funding sources are being sought. SAWS hosted and provided secretariat services to the Meteorological Association of Southern Africa.

Strategic Goal 3: To address the short-term viability and long-term sustainability of SAWS revenue and ensure continued fiscal discipline					
<b>3.1 Grow optimised public good revenue</b>	Engage Treasury, DEA around the philosophy and the approach to the funding model, based on ABC model	Percentage growth	6% ( 133)	Minutes of meeting with National Treasury and DEA	Achieved
	Generation of aviation revenue according to approved tariffs	Growth in Rand value of aviation revenue	R78 million revenue generated	Annual Financial Statements	Not achieved R4 million below budget, but regulation process allows SAWS to recover the money in 2015/2016.
<b>3.2 Grow and optimise commercial revenue streams</b>	Non-regulated commercial revenue generation	Growth in Rand Value of alternative commercial revenue	R23 million alternative commercial revenue	Annual Financial Statements	Not achieved R10 million below budget. With the new commercial strategy, the implementation plans will focus on commercial growth.

Strategic Goal 4: To ensure continuous organisational effectiveness and efficiency					
<b>4.1. An optimal organisational design which supports the organisational strategy</b>	Business optimisation and realignment to the Organisational Effectiveness Inventory (OEI)	Approved OEI and implementation per schedule	Workforce Plan incorporating the Realignment plan approved Draft OEI	Approved OEI	Achieved Realignment with regards to services was reviewed and concluded. This involved the re-allocation of some personnel from regional offices to address operational needs which arose as a result of a number of personnel leaving SAWS to take up forecasting roles in other countries.
	Business Optimisation and Realignment Programme developed and implemented	Waterkloof Land Development Project Master Plan Implementation	Completed EIA and Board Approved Business Case	Completed Feasibility Study	Achieved Business Case was approved by the Board. Master plan and pre-feasibility study report completed. Report submitted together with land rezoning application.

Strategic Goal 4: To ensure continuous organisational effectiveness and efficiency (cont.)					
Strategic Objective	Programme Activity	Performance Indicator	Strategic Objective Targets 2012/2013	Means of Verification	Result
<b>4.2 An optimal observation network; processing and dissemination platforms</b>	Implementation of an integrated organisation-wide asset management and maintenance programme	Percentage implemented as per agreed milestones	Implementation as per agreed milestones subject to resource availability	Approved revised plans. Developed ICT Master Plan	Achieved ICT MSP development started in June 2012 and finished in December 2012 after a bid process. Most deliverables captured under, 'Stabilise the environment' were addressed. These projects will be rolled out in 2013/2014.

Strategic Goal 5: To create a strategy-driven human capital capacity for SAWS performance					
<b>5.1 Ensure availability of specialised and core competencies to ensure delivery of high quality projects; optimal availability of specialised and core competencies</b>	Develop and implement an annual Human Resources Development Strategy	Percentage availability of requisite skills within employee budget	80% of requisite skills and competencies available	Quarterly Report	Achieved 80% of requisite skills and competencies available.
		Percentage utilisation of training in line with SDP plan	80% throughput (pass rate/ completion of training/courses) SAWS Skills Development Plan in line with determined skills requirements	Annually reviewed skills development	Achieved There is 90% throughput (pass rate/completion) of training courses. All courses are in line with the SDP.
		Readiness of identified successors	30% readiness of identified successors to take over positions	Reports on readiness of identified successors	Achieved 40% readiness of identified successors to take over positions.
		Staff turnover percentage on critical and scarce skills	6% staff turnover on critical and scarce skills	Quarterly turn-over statistics	Achieved The employee turnover for critical and scarce skills is at 4.18%.
		Number of bursaries granted	40 approved bursaries granted	Number of bursaries granted	Achieved 42 approved bursaries granted.
		Percentage of bursaries absorbed by SAWS in critical strategic areas	At least 62% uptake of graduates in critical scientific and technological areas	Percentage of bursaries absorbed by SAWS in critical strategic areas	Achieved Met Technicians: 87 % uptake of graduates which represent 13 students out of 15. Forecasting: 67% of graduates in forecasting were absorbed in November 2012.
		Percentage of bursary beneficiaries from previously disadvantaged backgrounds	75% or more of bursary beneficiaries from previously disadvantaged backgrounds	Percentage of bursary beneficiaries from previously disadvantaged backgrounds	Achieved 85% or more of bursary beneficiaries from previously disadvantaged backgrounds.



PART 2

Getting the nation weather-ready

# 1. CORPORATE GOVERNANCE

During the period under review, SAWS continued to conduct its business in line with corporate governance best practices, with a view to building trust among its Shareholder and relevant stakeholders. The term of office of the old Board ended on 31 May 2012 and that of the new Board commenced on 1 June 2012.

## 1.1 Shareholding

The South African Government represented by the Minister of Water and Environmental Affairs is the sole Shareholder.

## 1.2 Mandate of the Board

The mandate of the Board is derived from the South African Weather Service Act, No. 8, 2001 (as may be amended). The mandate is augmented by the relevant

provisions of the Public Finance Management Act, No. 1 of 1999 (PFMA), as amended and the Treasury Regulations issued in terms of the PFMA; and to the extent possible, the Code of Corporate Practices and Conduct as contained in the King III Report on Corporate Governance for South Africa, among others. The Board's functioning is also guided by an approved Board Charter and respective Committees' Terms of Reference.

## 1.3 Board Governance Structure

### 1.3.1 The Board

The composition of the Board was in compliance with corporate governance best practices, with a majority of non executive members. The Table below reflects Board membership in the 2012/2013 financial year and the transition from the old to the new Board.

**Table 1: Board Members**

Board Members	Tenure		
	Date Appointed	Date Retired	Date Reappointed
Ms Khungeka Njobe (Chairperson)	01/04/2008	31/05/2012	-
Ms Medi Mokuena	01/04/2008	31/05/2012	-
Mr Welcome Msomi	01/04/2008	31/05/2012	-
Dr Thembakazi Mali	01/04/2008	31/05/2012	-
Mr Siyabonga Makhaye	01/04/2008	-	01/06/2012
Prof Lindisizwe Magi (Chairperson)	01/04/2008	-	01/06/2012
Mr Peter Lukey (Department of Environmental Affairs Representative)	01/04/2010	31/05/2012	-
Dr Linda Makuleni (Chief Executive Officer)	01/04/2008	-	01/06/2012
Mr Slingsby Mda (Chief Financial Officer)	01/04/2010	-	01/06/2012
Dr Nolulamo Gwagwa (Deputy Chairperson)	01/06/2012	-	-
Mr Andile Mvinjelwa	01/06/2012	-	-
Ms Ntsoaki Mngomezulu	01/06/2012	-	-
Mr Jonty Tshipa	01/06/2012	-	-
Dr Shadrack Moephuli	01/06/2012	-	-
Mr Zola Fihlani	01/06/2012	-	-
Prof Elizabeth Mokotong	01/06/2012	-	-
Mr Rowan Nicholls	01/06/2012	-	-
Ms Judy Beaumont (Department of Environmental Affairs Representative)	01/06/2012	-	-

### 1.3.2 Board Meetings

Board meetings were held in accordance with the provisions of the Board Charter and in line with the Board calendar. The Board Charter makes provision for special meetings to be held as and when the need arises.

Board meetings were held on 29 May 2012, 27 July 2012, 6 November 2012, and 28 January 2013. Two ad-hoc meetings were held for the Board Induction on 22 June 2012 and the Strategic Planning Session on 7 August 2012. The number of meetings held and attended is reflected in the Table below.

**Table 2: Board Meetings**  
**1 April 2012 to 31 May 2012**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Ms Khungeka Njobe (Chairperson)	1	1	-	-
Ms Medi Mokuena	1	-	-	-
Mr Welcome Msomi	1	1	-	-
Dr Thembakazi Mali	1	1	-	-
Mr Siyabonga Makhaye	1	1	-	-
Professor Lindisizwe Magi	1	1	-	-
Mr Peter Lukey	1	1	-	-
Dr Linda Makuleni (CEO)	1	1	-	-
Mr Slingsby Mda (CFO)	1	1	-	-

**1 June 2012 to 31 March 2013**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
*Prof Lindisizwe Magi (Chairperson)	3	3	2	2
Dr Nolulamo Gwagwa (Deputy Chairperson)	3	3	2	2
Mr Siyabonga Makhaye	3	3	2	1
Mr Andile Mvinjelwa	3	3	2	2
Ms Ntsoaki Mngomezulu	3	3	2	2
Mr Jonty Tshipa	3	3	2	2
Dr Shadrack Moephuli	3	2	2	2
Mr Zola Fihlani	3	1	2	2
Prof Elizabeth Mokotong	3	3	2	2
Mr Rowan Nicholls	3	3	2	2
Ms Judy Beaumont	3	2	2	1
Dr Linda Makuleni (CEO)	3	2	2	2
Mr Slingsby Mda (CFO)	3	3	2	2

\*Assumed the role of the Board Chairperson from June 2012

### 1.3.3 Board Committees

In the execution of its mandate, the Board was assisted by three (3) Committees with clear Terms of Reference (TORs); namely, the Audit and Risk Committee, the Human Resource and Remuneration Committee, and the Strategic Programmes Committee. However, any such delegation does not absolve the Board from its responsibilities. Committee meetings are held in accordance with the provisions of the Terms of Reference as well as the calendar. The Committees' TORs make provision for special meetings to be held as and when the need arises.

**a) Audit and Risk Committee**

The committee's primary responsibility is to assist the Board in discharging its duties relating to, among others:

- The review of financial management processes, systems and internal controls;
- The governance of risk and Information Technology (IT);
- The review of the audit processes;
- Monitoring compliance with applicable laws, regulations and governance frameworks; and
- Overseeing the safeguarding of assets, and the preparation of accurate financial reporting and statements in compliance with all applicable legal requirements and accounting standards.

The external auditors, internal auditors, the CEO and CFO of SAWS were invited to all committee meetings. An invitation to attend committee meetings was also extended to the CFO from the Department of Environmental Affairs.

The committee is also at liberty to hold meetings with the auditors, without management.

Committee meetings were held on 22 May 2012, 16 July 2012, 15 October 2012, 7 December 2012 and one joint workshop was held with the Strategic Programmes Committee on 27 September 2012.

The membership of the committee, as well as the number of meetings held and attended are reflected in the Table below.

**Table 3: Audit and Risk Committee meetings  
1 April 2012 to 31 May 2012**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Ms Medi Mokuena (Chairperson)	1	-	-	-
Mr Siyabonga Makhaye	1	1	-	-
Mr Melusi Ntumba	1	1	-	-
Dr Thembakazi Mali	1	1	-	-

**1 June 2012 to 31 March 2013**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Mr Siyabonga Makhaye (Chairperson)*	3	2	1	1
Mr Zola Fihlani	3	2	1	1
Mr Rowan Nicholls	3	3	1	1
Mr Jonty Tshipa	3	3	1	1

\*Assumed the role of the Committee Chairperson from June 2012

**b) Human Resource and Remuneration Committee**

The committee assists the Board in discharging its duties to ensure that SAWS has an appropriate Human Resource Strategy and adequate human resource-related policies and systems in place, in compliance with all applicable legislation and governance frameworks. The committee also assists the Board with issues relating to succession

planning and makes recommendations to the Board on executive management appointments and remuneration. Committee meetings were held on 9 July 2012, 8 October 2012 and 7 December 2012. The membership of the committee, as well as the number of meetings held and attended were as reflected in the Table below.

**Table 4: Human Resource and Remuneration Committee meetings  
1 April 2012 to 31 May 2012**

No committee meetings were held during this period. However, the membership of the committee was as follows:

- Prof Lindisizwe Magi (Chairperson)
- Ms Khungeka Njobe
- Ms Medi Mokuena
- Dr Linda Makuleni (CEO)

**1 June 2012 to 31 March 2013**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Dr Nolulamo Gwagwa (Chairperson)*	3	1	-	-
Prof Lindisizwe Magi	3	3	-	-
Ms Ntsoaki Mngomezulu	3	3	-	-
Mr Jonty Tshipa	3	3	-	-

\*Assumed the role of the Committee Chairperson from June 2012

\*\* Executive Management are not members of the HRR Committee as per TOR

### c) Strategic Programmes Committee

The committee considers, monitors, and makes recommendations to the Board, on all scientific programmes and special projects in the organisation, including research, developmental and business activities and opportunities (both for the public good and commercial services) and ensures that these are managed effectively and efficiently.

Committee meetings were held on 16 July 2012 and 15 October 2012 and 16 January 2013. One ad-hoc meeting/joint workshop with the Audit and Risk Committee was held on 27 September 2012. The membership of the committee, as well as the number of meetings held and attended were as reflected in the Table below.

**Table 5: Strategic Programmes Committee meetings**

#### **1 April 2012 to 31 May 2012**

No committee meetings were held during this period. However, the membership of the committee was as follows:

- Mr Welcome Msomi (Chairperson)
- Dr Thembakazi Mali
- Mr Siyabonga Makhaye
- Mr Peter Lukey
- Dr Linda Makuleni (CEO)
- Mr Slingsby Mda (CFO)

#### **1 June 2012 to 31 March 2013**

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Mr Andile Mvinjelwa (Chairperson)*	3	3	1	1
Dr Shadrack Moephuli	3	3	1	1
Prof Elizabeth Mokotong	3	3	1	1
Ms Judy Beaumont (Department of Environmental Affairs Representative)	3	2	1	1
Dr Linda Makuleni (CEO)	3	3	1	1
Mr Slingsby Mda (CFO)	3	3	1	-

\* Assumed the role of the Committee Chairperson from June 2012

### 1.3.4 The Secretariat

In accordance with corporate governance best practices, the Board also had the support of the Company Secretary, in ensuring the effective functioning of the Board and its committees; and compliance with applicable corporate governance frameworks. While Board members have unrestricted access to the advice and support of the Company Secretary; they are also entitled to seek independent professional advice at SAWS's expense, should it be deemed necessary.

### 1.4. Board Induction and Development

The new Board was appointed, effective 1 June 2012 and held its Induction Session on 22 June 2012. Board development is considered critical to keep the Board members abreast of relevant governance developments. The Company Secretary facilitated Board members' membership to the Institute of Directors Southern Africa (IoDSA), as a result of which Board members get regular updates on Board and corporate governance-related topics.

## 1.5. Board Evaluation

Board performance for the 2011/2012 financial year was accordingly evaluated.

## 1.6. Board Remuneration

Board members are remunerated and/or reimbursed for expenses incurred in the course of executing SAWS-related activities, in accordance with the Remuneration Framework determined by the Executive Authority, annually. Please refer to Note 26 of the Annual Financial Statements for the disclosure of Board fees for 2012/2013.

## 1.7. Compliance with Corporate Governance Prescripts

In compliance with applicable legislative and governance frameworks, the Board ensured that:

- The SAWS Five-Year Strategy for 2013/2014 to 2017/2018; and the Annual Performance Plan and Budget for 2012/2013 were approved by the Board and submitted to the Shareholder within the prescribed timelines;
- Quarterly Reports were submitted to the Shareholder within the prescribed timelines;
- The audited Annual Financial Statements and Annual Report for 2011/2012 were approved by the Board and submitted to the relevant authorities within the prescribed timelines;
- The Internal Audit Plan; and the External Audit Strategy were reviewed and approved; and their implementation monitored accordingly;
- The Enterprise-wide Risk Management Review was undertaken accordingly and the Risk Register established; and
- A number of Policies were also reviewed and approved, to strengthen internal controls and to ensure compliance with corporate governance best practices. The Board Charter and its committees' Terms of Reference were also reviewed accordingly.

### 1.7.1 The Governance of Risk and Information Technology (IT)

The King III Report on Corporate Governance puts emphasis on the roles and responsibilities of the Board, related to the governance of risk and IT. SAWS has adopted an Enterprise-Wide Risk Management (ERM) approach. Part of the reason is that ERM supports the alignment of

the strategy, process, people and information technology. The ERM review was conducted during the period under review, allowing the organisation to identify, prioritise and effectively manage those risks considered critical. The review process culminated in the establishment of the Risk Register, which also forms the basis for the development of an Internal Audit Plan.

The ICT Governance Charter and ICT Governance Framework were also developed and approved by the Board. The implementation of the Risk Register, the ICT Governance Framework and Charter and matters related thereto, are monitored by the Board through its Audit and Risk Committee. At an operational level, SAWS also has the Risk Management Committee chaired by the CEO and has established the ICT Steering Committee to ensure that risk and IT governance matters are effectively addressed.

### 1.7.2 Materiality and Significance Framework

In line with the relevant provisions of the PFMA, the Materiality Framework was reviewed and approved, and acceptable levels of materiality and significance agreed upon with the executive authority.

### 1.7.3 Delegation of Authority

SAWS has a Delegation of Authority Policy in place, with its principles derived mainly from sections 56 and 57 of the PFMA, 1999 (as amended); regarding the assignment of powers and duties by the accounting authorities; and the responsibilities of other officials in a public entity respectively.

### 1.7.4 Audit

During the period under review, SAWS had an internal audit function outsourced to an independent firm, SizweNtsalubaGobodo; and the external audit function provided by the Auditor-General.

- **The internal auditors** assist SAWS in identifying, evaluating and assessing significant organisational risks and provide the Audit and Risk Committee and management with the assurance on the effectiveness of internal financial controls and systems; in line with the approved Internal Audit Plan.
- **The external auditors** are responsible for independently auditing and reporting on the financial statements in accordance with the auditing standards; and in line with the approved External Audit Plan.

## 2. ORGANISATIONAL STRUCTURE



# 3. METEOROLOGICAL AUTHORITY

The Meteorological Authority (MET Authority) ensures that aeronautical meteorological services to international air navigation comply with the ICAO Annex 3 International Standards and Recommended Practices (SARPs) and it oversees aeronautical meteorological services and products provided to South Africa's aviation community.

The MET Authority has a responsibility to certify aerodrome meteorological instrumentation in accordance with the Memorandum of Agreement between the South African Weather Service and the South African Civil Aviation Authority (SACAA). It conducts aeronautical meteorological inspections at licensed aerodromes provided by SACAA and inspections cover the entire spectrum of aeronautical meteorological services required by the International Civil Aviation Organisation (ICAO)- from aerodrome meteorological instrumentation to meteorological observations and forecasts.

To ensure compliance with ICAO safety standards and the regulations of the South African Civil Aviation Authority (SACAA), aerodrome inspections were conducted at 20 licensed aerodromes. The oversight of aeronautical meteorological services and products provided by SAWS to international and national air navigation, as required by ICAO, confirms the commitment of SAWS to ensure that safety standards are maintained and also promotes compliance with the ICAO Annex 3 Standards and Recommended Practices (SARPs), as well as SACAA Regulations and Civil Aviation Technical Standards (CATS).

The MET Authority conducted interdepartmental meetings to ensure that meteorological services for both international and domestic flights were compliant with ICAO Annex 3 Standards and Recommended Practices (SARPs) as well as the guidance issued by the World Meteorological Organisation (WMO). Services and products were reviewed by SAWS and aviation stakeholders during meetings of the Advisory Committee for Aeronautical Meteorological Services (ACAMS) as well as with the South African Civil Aviation Authority (SACAA), to ensure that SAWS is prepared for the upcoming ICAO audit schedule for July 2013. The MET Authority set up measures and practices to ensure total compliance of all aviation products and services.

SAWS is the authority providing meteorological services for international air navigation on behalf of the government. The MET Authority attended meetings of the Civil Aviation Regulations Committee (CARCom) to ensure that regulations for meteorological services are developed and implemented for compliance. The MET Authority conducted assessments at different aerodromes to ensure aviation competencies of each aerodrome's meteorological forecaster and technician employed by SAWS.



## 4. INTERNATIONAL RELATIONS

SAWS continued to participate in international activities to enhance meteorology in South Africa and ensure fulfilment of the applicable international conventions.

A cooperation agreement in meteorology was signed by Minister Edna Molewa and her Namibian counterpart, in the presence of the two Heads of State, to formalise cooperation in meteorological services, research and capacity building. This cooperation enhances and formalises the cooperation of the South African Weather Service with the Namibian Meteorological Service to ensure improved quality of services, research, capacity building and accurate monitoring of weather systems between the two nations. The cooperation agreement signed with the German Weather Service will ensure cooperation in research, technology sharing and capacity building with one of the most developed national weather services in Europe.

SAWS also participated in key meetings of the World Meteorological Organisation (WMO) and the International Civil Aviation Organisation (ICAO). These WMO meetings included the 65<sup>th</sup> WMO Executive Council, the WMO Extra-ordinary Congress on the Global Framework for Climate Services (GFCS), from 29- 31 October 2012, the ICAO Audit Committee meeting and the ICAO 12<sup>th</sup> Air Navigation Conference, from 19- 30 November 2012. The WMO Executive Council meeting dealt with the key WMO programmes, particularly on improved service delivery and capacity building which are essential for improvement of meteorological services on the African continent. The GFCS conference dealt with the establishment of climate services to manage climate risks and thus contribute to the climate change adaptation initiatives. The South African delegation was led in this conference by the Director-General of the Department of Environmental Affairs. The Director-General also used this opportunity to meet with senior officials of the WMO Secretariat, the WMO African regional president and MASA Chairperson. These meetings were important for aligning South Africa's meteorological activities with the WMO regional and international programmes. These officials also highlighted the important regional responsibilities that SAWS fulfills in meteorology.

Within ICAO, SAWS participated in the Audit Committee meeting as a member to ensure good corporate governance. In the 12<sup>th</sup> Air Navigation Conference meeting of ICAO, a special note was made in the conference to recognise South Africa's and the SADC's active role in promoting regional cooperation in meteorology towards safer skies for air navigation.

SAWS also attended the 2<sup>nd</sup> African Ministers Conference on Meteorology (AMCOMET) in Zimbabwe. AMCOMET has identified the meteorological priorities and developed a regional meteorological strategy towards socio-economic development particularly for key sectors such as agriculture/food security, water resources management and health. Further international cooperation activities included a bilateral meeting with EUMETSAT to discuss technological cooperation in satellite meteorology and a meeting of SAWS/ Departments of Environmental Affairs, International Relations and Cooperation with the United Kingdom Foreign and Commonwealth Office (FCO), Foreign Affairs. The meetings with the FCO have made advances on cooperation in order to extend the SAWS observations on Gough Island (a UK overseas territory), which are essential for forecasting of cold front systems which affect South Africa and the general monitoring of weather in the southern oceans.

South Africa continued to host and provide secretariat services to the Meteorological Association of Southern Africa (MASA). SAWS, as the designated WMO Regional Specialised Meteorological Centre (RSMC), successfully hosted the 4<sup>th</sup> WMO training session in severe weather forecasting for SADC's national weather services. This training forms part of the WMO's Severe Weather Forecast Demonstration Project (SWFDP). The training and regional cooperation in severe weather forecasting were recognised by regional user groups as being extremely effective in the enhancement of regional early warnings systems. This initiative is extremely important in light of the increasing frequency and magnitude of severe weather events, which are associated with climate change.



*Heavy rains frequently cause flooding that damages property and infrastructure*

# 5. OPERATIONS

## 5.1 Products and Services

### 5.1.1 Forecasting and Warning Service

Weather forecasts and warning services form the backbone of creating a weather-ready nation, as they are the authoritative source of information that can assist the public to plan their daily activities. SAWS provides a 24-hour service, seven days a week, in order to ensure that weather forecasts and warnings are done on time and disseminated to the public, weather sensitive industries and disaster management structures. All forecasts and warnings are issued in accordance with the WMO specifications.

The following significant weather systems occurred during the reporting period. They were preceded by media alerts and followed up with warnings and watches as the systems developed:

- At the onset of the 2012 winter season a cold frontal system on 7 June 2012 led to a wide range of severe weather over the country, ranging from heavy rains and gale force winds in the south-west to very cold conditions over most of the high-lying areas. Moderate to heavy snowfall was also reported over the mountains in the north-eastern parts of the Eastern Cape, south-western KwaZulu-Natal and Lesotho.
- A cut-off low pressure system on 23 June 2012 resulted in scattered thundershowers over the central and eastern (summer rainfall) parts of the country, with widespread reports of damage and loss of life caused by severe thunderstorms and tornado activity. The occurrence of a tornado is unusual in the middle of winter, as it is only experienced when there are severe thunderstorms.
- Between 13 and 15 July 2012 a cut-off low pressure system (located in the mid to upper regions of the atmosphere) combined with a cold frontal system, moved across the country. This resulted in extreme weather conditions ranging from gale force winds, heavy rains and heavy snowfall. The province which was hardest hit was the Eastern Cape. The Western Cape, Northern Cape and Free State also experienced extremely severe weather conditions.
- Another significant weather event happened between 17 and 22 October 2012, when several weather systems caused heavy rains over the south coast areas of the Western and Eastern Cape provinces. An upper-air trough low pressure system caused the initial heavy rains on 17 and 18 October 2012. It was then followed by a cut-off low pressure system (located in the mid to upper regions of the atmosphere) combined with a ridging (advancing towards the country) surface high between 19 and 22 October 2012. This resulted in heavy rains along the south coast of the Western Cape and over parts of the Eastern Cape. Widespread flooding was experienced over the western part of the coastal areas of the Eastern Cape, between Cape St Francis and Port Alfred. The impact was highly significant as the affected areas had already experienced some precipitation (rain) even before this event.

The cut-off low pressure system that was well predicted by SAWS experts also caused very unstable conditions which were conducive to the development of severe storms over the north-eastern parts of the country. Several storms over Gauteng became severe on Saturday, 20 October 2012 and very large hail was experienced over some parts and there were widespread reports of damage to cars' wind-screens and house windows.

Table 6: New rainfall records for January 2013

Station	Previous record (mm)	Date of previous record	New record (mm)	Date of new record	Number of years in existence of station
Woodbush	200.2	1978-01-03	277.0	2013-01-15	53
Vondo	237.0	1978-01-12	392.0	2013-01-16	50
Elim Hospital	166.5	1967-01-28	169.0	2013-01-20	53
Hans Merensky Nature Reserve	119.0	1967-01-20	146.0	2013-01-20	53
Louis Trichardt	149.0	2000-01-03	294.0	2013-01-20	54
Mara	97.0	1976-01-31	101.8	2013-01-20	54
Palmaryville	115.0	1999-01-11	364.0	2013-01-20	53
Graskop AWS	133.8	2009-01-31	167.0	2013-01-15	22
Soekmeaar Police	147.0	2010-01-25	237.0	2013-01-20	48
Tohoyandou Weather Office	118.0	1991-01-28	282.2	2013-01-20	32

- Another significant weather event occurred between 15 and 21 January 2013, when a tropical low pressure system affected the north-eastern provinces of the country. This low pressure system resulted in two episodes of heavy rain over the Mpumalanga and Limpopo provinces, which led to widespread flooding over these provinces. The heaviest rains fell during the second episode, which was between 19 and 21 January 2013. As a result, the Vhembe District in Limpopo was declared a disaster area. Serious damage was caused to infrastructure (roads, bridges,

houses and schools) and 26 people were reported dead as a result of flooding.

The heavy rains were of such a magnitude that several climate rainfall records (highest rainfall in 24 hours) for January were broken during the event.

A total of 863 severe weather warnings were issued with the overall accuracy of 98.8%, probability of detection of 81.6% and a false alarm rate of only 11.9%.

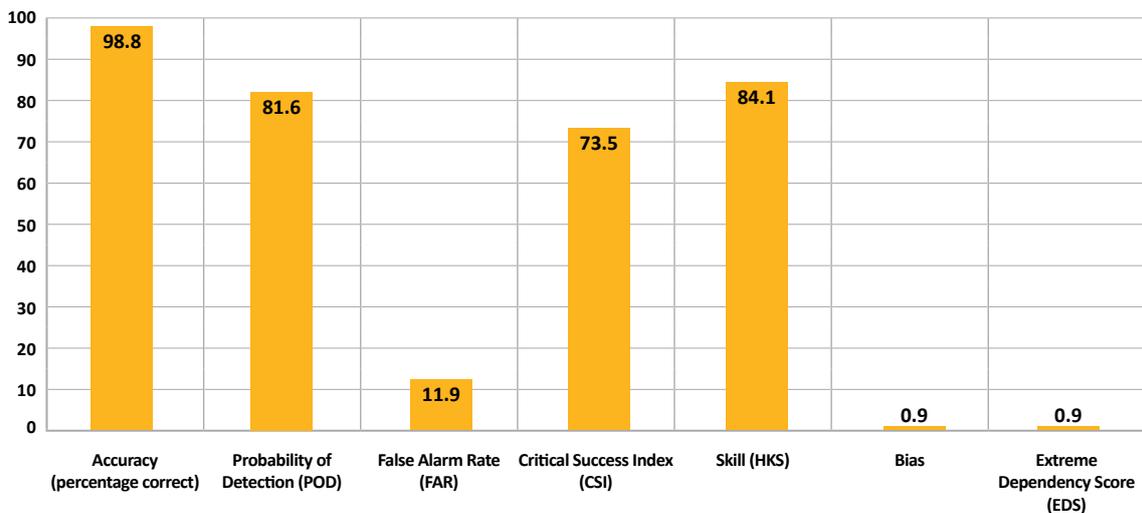


Figure 1: Forecast warnings

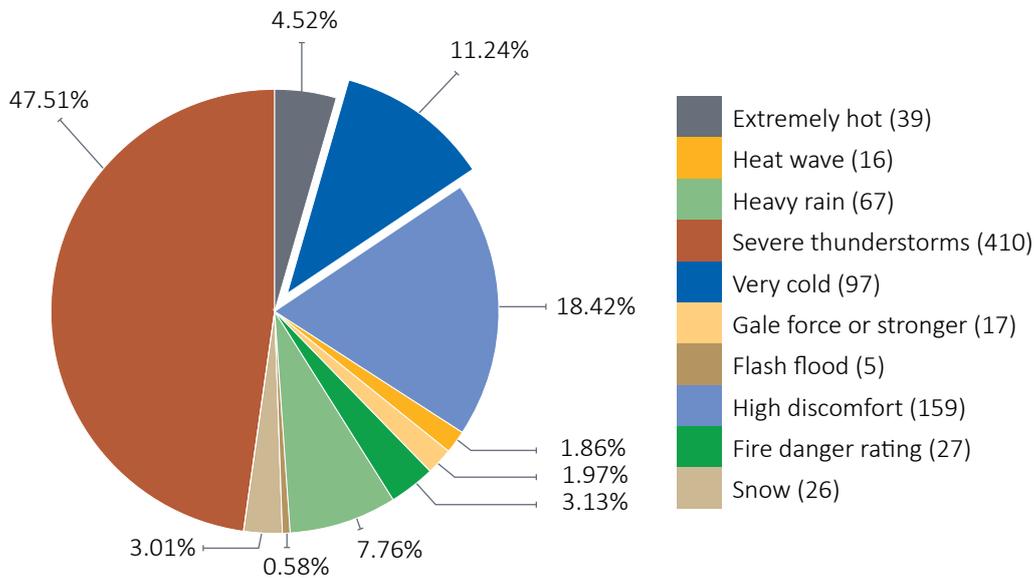


Figure 2: Forecast warning categories

A total of 410 warnings were issued for severe thunderstorms, while 159 warnings were issued for high discomfort values, 97 for very cold conditions and 67 for heavy rain.

Temperature accuracies remained a challenging area, but interventions introduced towards the end of the period resulted in an overall improvement in the accuracy of both minimum and maximum temperatures. This is expected to improve further in the new financial year.

SAWS was involved in monitoring weather conditions during the African National Congress (ANC) conference which took place from 16 to 21 December 2012 in Mangaung, Free State. It participated during the planning phase with the Provincial Joint Committee (ProvJOC) and National Joint Committee (NATJOC) meetings, briefed national and provincial stakeholders about expected weather conditions for the day and gave a five-day weather

outlook. Aviation-related forecasts were also presented to the Bloemfontein Joint Committee (JOC) twice a day to plan for delayed aircraft at all airports.

During the African Cup on Nations (AFCON) tournament, held from 19 January to 10 February 2013, SAWS monitored weather conditions in five cities across South Africa. Daily venue forecasts were issued to event organisers, National Joint Committee (NATJOC) as well as the ProvJOC's up to four days in advance. Presentations on the expected weather were made to the NATJOC, while forecasters presented to their respective PovJOCs in Bloemfontein, Mbombela, Durban and Port Elizabeth. Forecasters at the Nelspruit weather office were requested by the Mpumalanga ProvJOC to operate 24 hours a day for the duration of the tournament. SAWS agreed to this additional request and rendered the service at no cost.

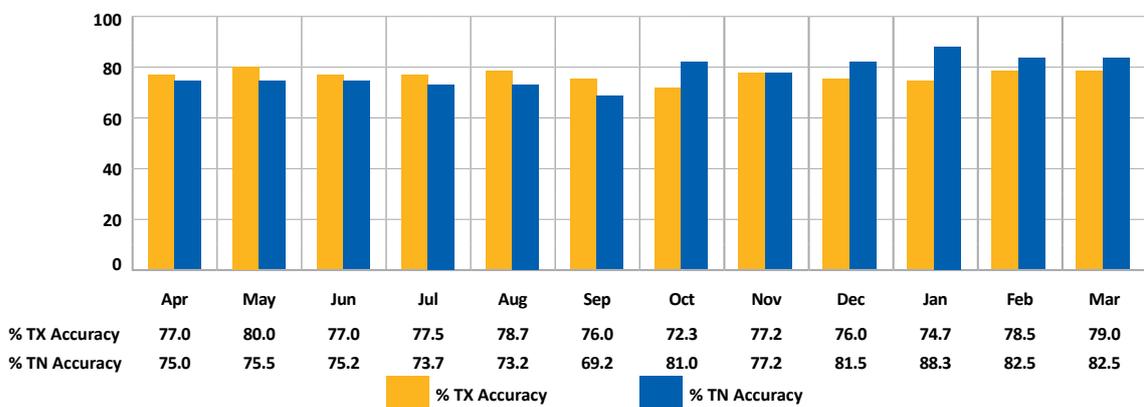


Figure 3: Temperature evaluations

### 5.1.2 Aviation

The Aviation industry in South Africa plays a large role in terms of South Africa's economy and aviation safety is regarded as essential to creating a weather-ready nation. For this purpose SAWS rendered aerodrome forecasts, significant weather warnings and forecasts en-route. Aviation weather forecasts were made available through the log-in facility on the aviation web, <http://aviation.weathersa.co.za>.

During the early months of 2013, the ICAO designator code for FAJS was changed to FAOR (OR Tambo). The planned transition was successful and the aviation services are now re-routed with the new ICAO designator.

A total of 184 aviation-related warnings, complying with ICAO regulations, were provided. The graphs below indicate the TAF accuracy of 92.5%, exceeding the target of 90% and TREND accuracy of 96.0%, also exceeding the 92% target.

The most accessed services on the aviation web, with the highest number of users, were Terminal Aerodrome Forecasts (TAF), Meteorological Routine Reports (METAR) and aerodrome warnings. The most accessed categories of warnings issued were on thunderstorms and strong winds. The Aviation Weather Centre (AWC) continued to provide these critical safety-related services to the industry as per schedule as detailed in Annexure 3, Standards and Recommended International Practices.

Figures 4 and 5 below depict the accuracy of TAF and TREND respectively.

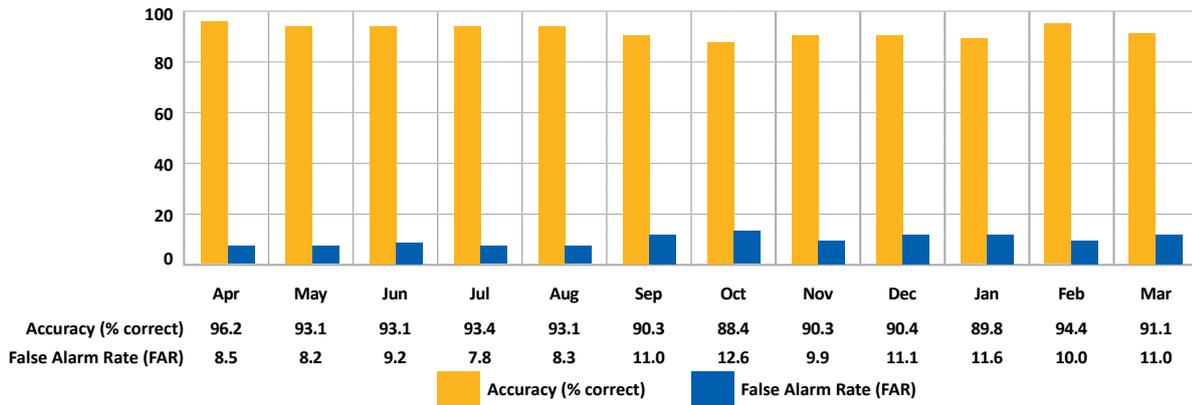


Figure 4: TAF accuracy

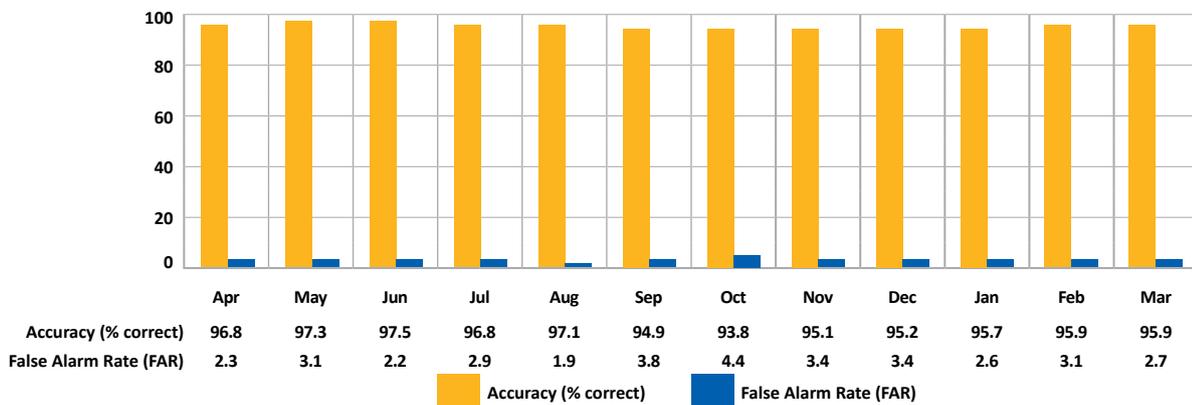


Figure 5: TREND accuracy

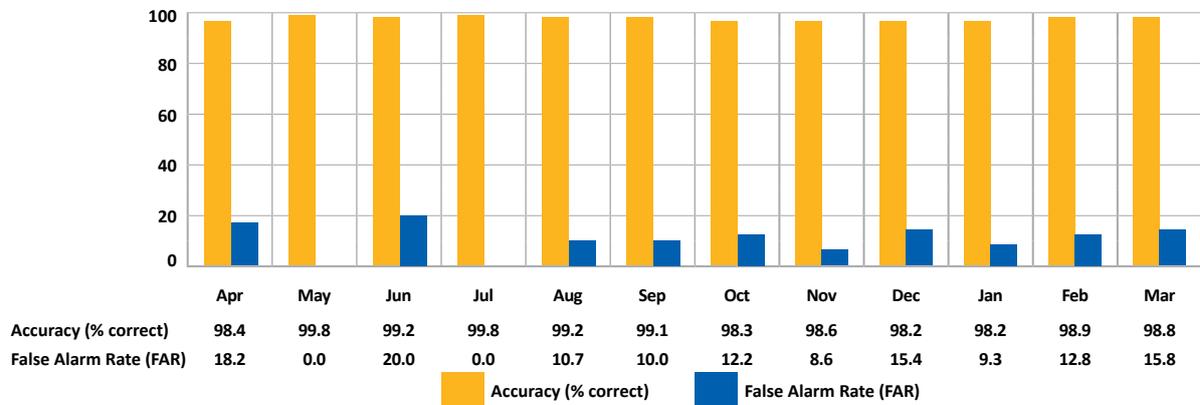


Figure 6: Aerodrome warnings issued

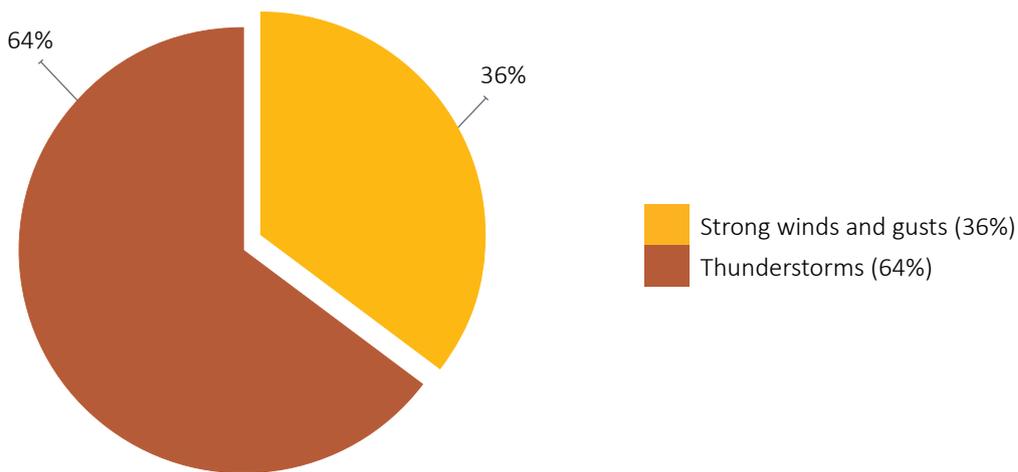


Figure 7: Aerodrome warning categories

The SIGMET/AIRMET plug-in interface, which eases the production of graphical output and web uploading, was completed and successfully implemented.

Following the decision of the third ICAO OPMET Management Taskforce, SAWS successfully monitored and reported on the reception of SIGMETs from the Europe region.

To ensure continuous availability of Operational Meteorological (OPMET) data, ongoing monitoring was performed at Pretoria Regional OPMET Data Bank (RODB). Quarterly reports were forwarded to ICAO regional offices.

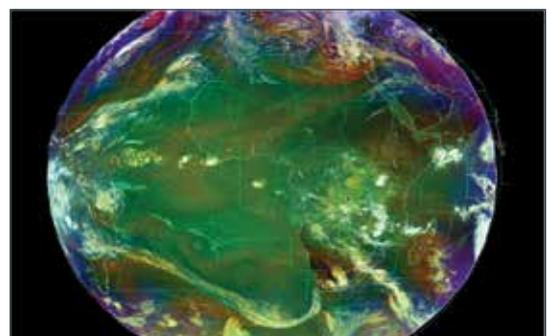


Image 1: The SIGMET / AIRMET plug-in interface eases the production of graphical output and web uploading

# Operational Activities



Aviation Workshop: October 2012



SWFDP workshop attended by international delegates



Weather briefing at airshows



Space Weather Balloon Launch: Irene Weather Office



O.R. Tambo weather office visited by U.S. delegation

In cooperation with ICAO regulations, three SIGMET tests were scheduled and successfully conducted for the Africa Indian Ocean Region (AFI-Region) during November 2012:

- Tropical Cyclone (TC) SIGMET Tests – 13/11/2012
- Volcanic Ash (VA) SIGMET Tests – 20/11/2012
- SIGMET tests for any other weather phenomenon (WS) – 27/11/2012

During the last test (WS), SAWS was once again requested to assist eastern and southern African (EASAF) and western and central African regions of ICAO by issuing SIGMET advisories to all Meteorological Watch Offices (MWOs) in the AFI Region. The Geocentric Information Briefing (GIB) System was then used for this purpose and ICAO acknowledged the continued support it receives from SAWS during SIGMET tests.

A new multi-AWS system was developed in response to a request by the Wonderboom Airport to view the data from AWSs at different points on the runway. This will provide more observation data contributing to safety

during take-off and landing. The system was successfully deployed in January 2013 and functions well.

### 5.1.3 Marine Services

#### **Marine forecasts, warnings and services**

In order to ensure a weather-ready nation, all SOLAS coastal and deep sea forecasts were provided to stakeholders twice per day, with an availability of 98.6%.

Special forecasts were provided to the research vessel SA Agulhas during her voyage to Marion Island, when drifting weather buoys were deployed, as well as during the first test voyage of the new SA Agulhas II. Various surface and upper-air observations were done over our data scarce South Atlantic.

A total of 389 marine-related warnings, complying with WMO and IMO regulations, were provided. Figure 8 below indicates the accuracy of 96.4% for marine coastal warnings issued.

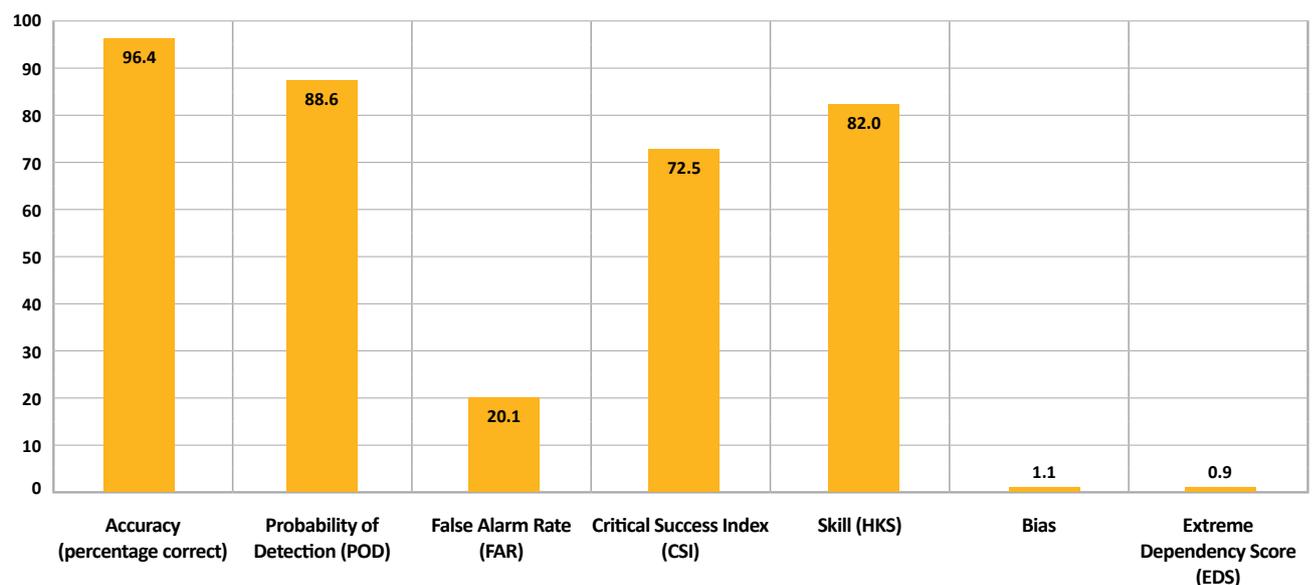
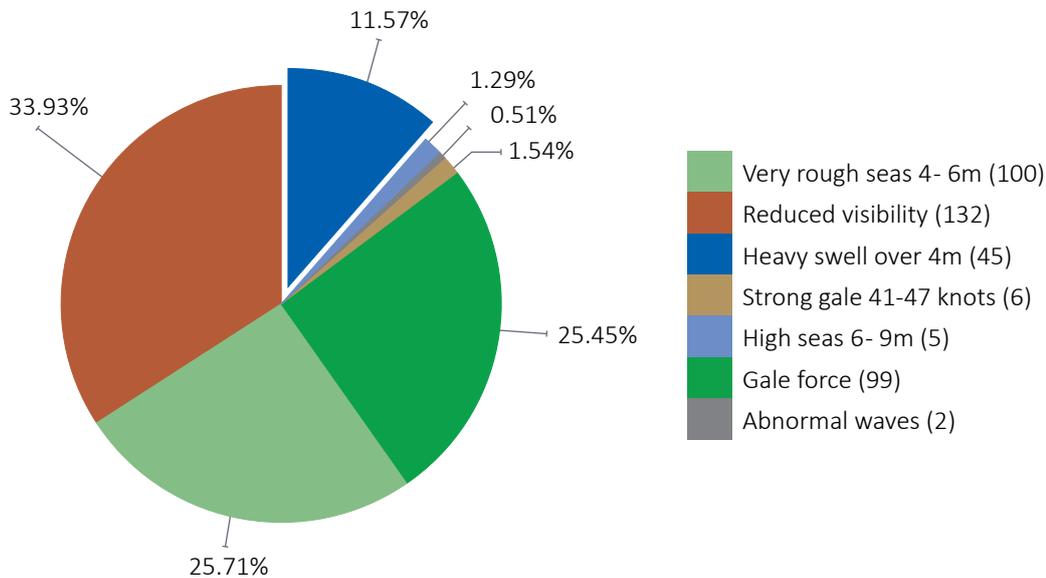


Figure 8: Marine warnings



**Figure 9: Marine warning categories**

SAWS manages the second biggest SOLAS area of the world. Figure 9 above shows the marine warning categories for which warnings and/or alerts were provided.

**Marine observations**

The deployment of weather buoys in the ocean ensures a constant feed of information, useful to marine forecasting and other activities. This ultimately contributes to getting the nation and weather sensitive industries weather-ready.

SAWS formed part of a National Oceanic and Atmospheric Administration (NOAA) process that deployed instruments from ships into the ocean to take observations called High Density Expendable Bathy Thermograph (XBT) run for NOAA between Brazil and Cape Town (AX18), US and Cape Town (AX8) as well as Cape Town and Antarctica (AX25). It was also represented in the DBCP Capacity Building Workshop for West Indian Ocean countries, more specifically RA1, as part of the training committee and receiving training to become a trainer. SAWS was highly praised for its inputs and assistance.

Eleven drifting weather buoys were deployed during the reporting period. The newly installed meteorological equipment on the SA Agulhas II provided 24-hour a day atmospheric observations. This will advance the science of meteorology, research and relevant applications given the data shortage over the ocean.

The captain of the SA Agulhas II ship vessel requested special products and services during the maiden voyage of the new SA Agulhas II to the Antarctic. In this context SAWS’s International SOLAS products as well as twice daily forecasts were provided. Forecasts related to the cruise as well as ice shift positions and movements were provided.

An interesting fact about the deployment and life span of iridium weather buoys is that one of the buoys purchased as part of a pilot study and deployed on 25 January 2010, continued to transmit data once-an-hour for nearly three years to date. This is one of the longest data records available for buoys deployed by SAWS.



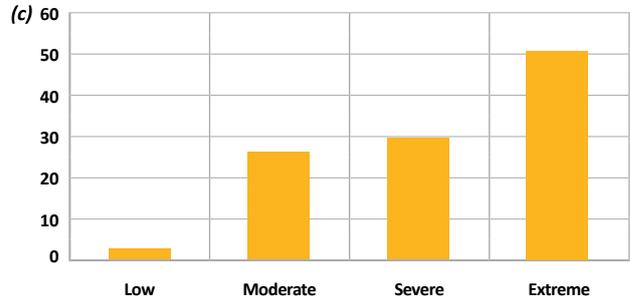
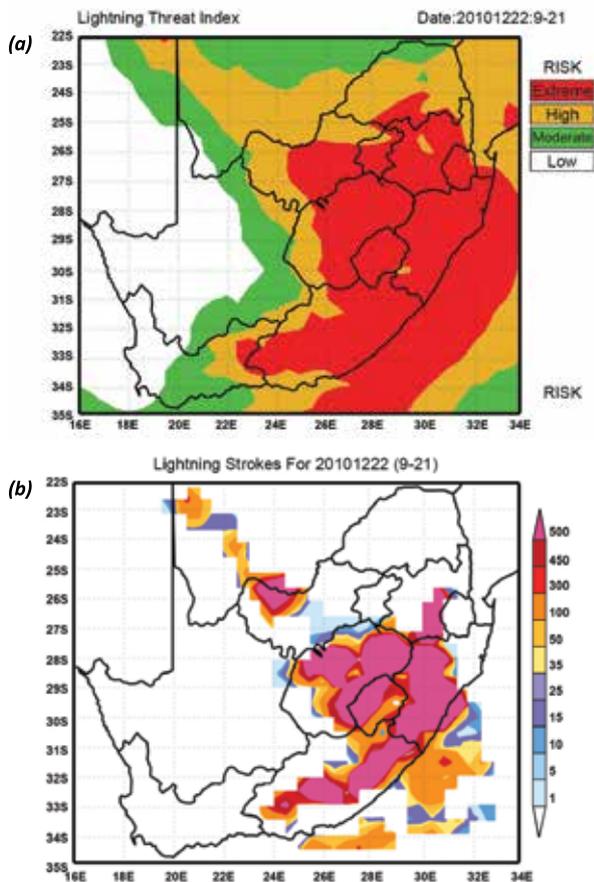
Buoy number: 486510.  
 WMO number: 17526  
 Position deployed: 53°S 36°W on 25 January 2010  
 Last position transmitted: 30°S 76°E on 31 December 2012

**Figure 10: Track of buoy 17526 deployed north of South Georgia which stopped transmission in the south Indian Ocean after 35 months**

### 5.1.4 Research and Development

Weather and climate phenomena influence the day-to-day functioning of the public, disaster management structures and weather sensitive industries. These phenomena occur over a wide range of time scales, varying from hours to climate change time scales (decades, centuries) and require continuous research to ensure high-quality products and services in line with the latest technological trends and developments.

Several tools that enhance forecasters' ability to forecast severe weather were introduced during the course of this year. These include, the Hail Mass Aloft system (HMA) to be used as a warning for hail; the development of a new radar precipitation estimation technique, as well as a lightning potential indicator. South Africa's fatality rate due to lightning is four times more than the global average and products such as these can have a major impact on the issuance of warnings to the public and ensuring that the public is weather-ready.



**Figure 11: The Lightning Potential map (a) compared to the observational data from the SAWS lightning detection network (b). The graph shows the average percentage of the total lightning for a day falling in the different categories (c).**

SAWS also participated in the verification activities of the International Precipitation Working Group (IPWG) where a variety of satellite and model-based quantitative precipitation estimation (QPE) algorithms were evaluated and verified on a daily basis over South Africa.

The short-term prediction of veld fire risk by SAWS, as well as the dissemination of fire-related severe weather alerts to the public, various media and to disaster management structures is SAWS's legislative responsibility, as defined in Chapter 3 of the Veld and Forest Fire Act. As of 1 April 2012, SAWS implemented the McArthur Fire Danger Rating (FDR) System as a tool to accurately estimate the risk of veld and forest fires in South Africa. The FDR is a local adaptation of the well-established Australian McArthur system and its implementation was the result of a number of years of collaborative effort between SAWS, the Council for Scientific and Industrial Research (CSIR) as well as the Department of Agriculture, Forestry and Fisheries (DAFF).

A product utilising the Unified Model (UM) to forecast snow for day one and two was also developed and verified during the 2012 winter. Researchers from SAWS and the United Kingdom Meteorological Office (UKMO) developed a Severe Weather Forecasting Demonstration Project (SWFDP) website for East Africa.

SAWS also conducted groundbreaking research in a South African and African context, by developing the first coupled ocean/atmosphere model for operational implementation as part of a Water Research Commission funded project. The project addressed areas related to

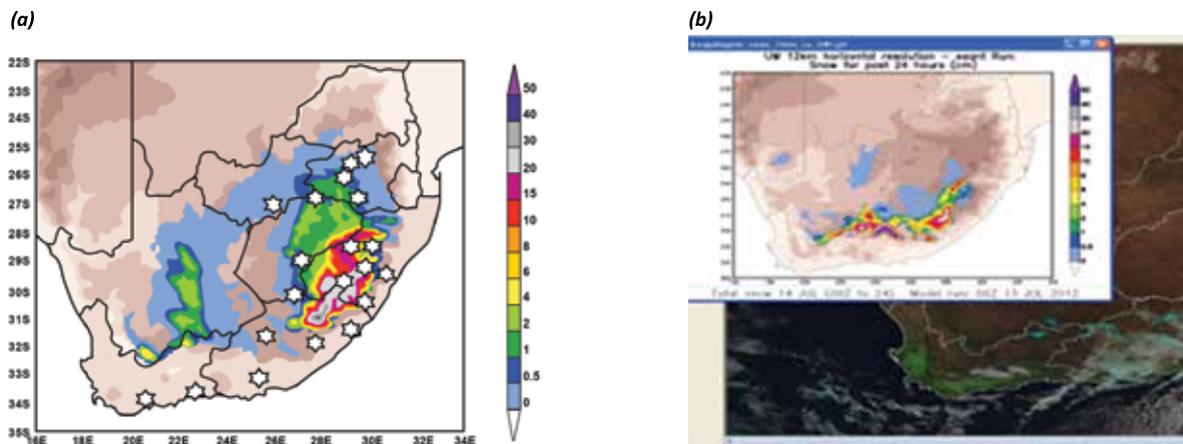


Figure 12: SWFDP website

the use of two-tiered and one-tiered forecasting systems for seasonal forecasting and explored areas which can potentially enhance climate predictability in our region.

Studies related to climate change topics were conducted during 2012. An analysis of moisture transport and associated processes into the country was investigated. The study reveals a complex response of moisture transport showing that there are significant changes in the way in which moisture is transported around the country. This study shows that this response is caused by the combined effect of increasing greenhouse gas concentrations and ozone depletion. It further shows that ozone recovery will play an important role in changing moisture transport into the country during the summer.

SAWS also contributed to the WMO initiated Climate Variability and Predictability (CLIVAR) and other climate-related research and operational activities within SADC. The research was aimed at developing future climate

scenarios that could inform adaptation planning, decision-making and similar efforts aimed at addressing the challenge of climate change within the region. Figure 13 presents an example of projected changes in austral summer December, January, February (DJF) mean and extreme precipitation over southern Africa by the Coupled Model Intercomparison Project Phase 5 (CMIP5) ensemble of models, driven by the Representative Concentration Pathway (RCP) 4.5. The models project an increase in the severity of 10-year droughts over western and central SADC (see shaded region in panel (a)). To the southwest, the reduction in mean precipitation (panel (b)) and a decrease in the intensity of 10-year wettest events (panel (c)) imply a negative shift of the whole rainfall distribution.

SAWS was invited to contribute to Working Group II (WGII) of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). WGII assesses climate change impacts, vulnerability and adaptation issues such as water resources, agriculture,

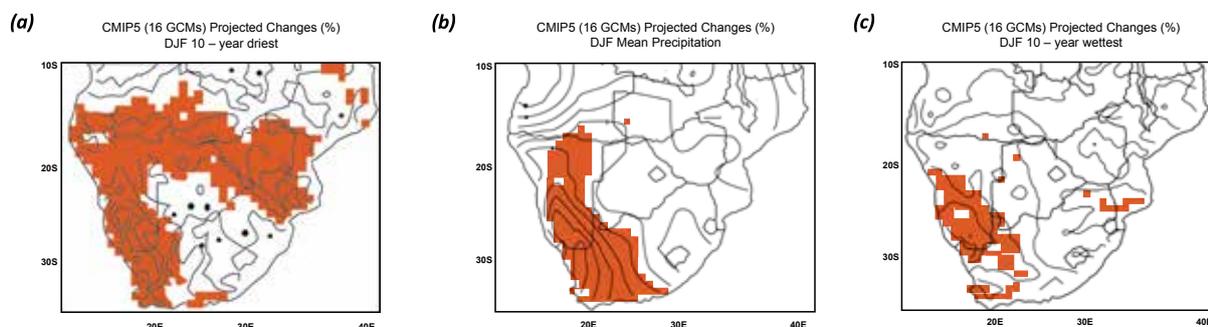


Figure 13: Projected changes (%) in: a) 10-year driest summers (DJF); b) mean precipitation; and c) 10-year wettest events over southern Africa. Contours display the ensemble median change simulated by the ensemble 16 CMIP5 GCMs. Shading indicates areas where at least 80% of the models project changes of the same sign.

human health and biodiversity across a range of sectors. SAWS's contribution covered a broad consideration of drivers of climate change over southern Africa and their interactions, including additional topics such as observed and projected extreme events and related disasters.

Collaboration between climate change roleplayers within South Africa received a major boost with a project proposal that was accepted by the WRC for funding. The objective of the proposed study is to investigate the impacts of climate change on the intensity, frequency and spatial extent of floods and droughts in the future climate. It is expected that the findings from this project will provide valuable information for planning and decision making processes and also contribute to the development of a weather-ready nation.

The Global Atmosphere Watch (GAW) station, one of 29 stations world-wide and the oldest of three stations in Africa, continued its long-term trace gas monitoring activities at Cape Point, and supplied collected data to world data centres (WDC). In order to expand the GAW activities to the southern oceans, a proposal was also submitted to the South African National Antarctic Programme (SANAP) to have the SA Agulhas II Antarctic supply a research vessel fitted with GAW instrumentation. This will involve atmospheric ozone, solar radiation, greenhouse gases and other important trace gas measurements. It will also supplement ocean-based measurements in the vast unknown southern ocean regions and make a valuable global contribution towards improving our scientific understanding.

SAWS also obtained funding from the Department of Science and Technology to establish a solar radiation atlas for South Africa and re-establish and enhance the solar radiation network within the country. The project will contribute to increased weather-readiness among the public.

A feasibility study on the implementation of agro- and hydrological services at SAWS was undertaken. There is also a Solar Radiation Project funded by the Department of Science and Technology (DST) which has been modified, on the instruction of DST, on the number and types of solar irradiance stations to be installed.

## 5.2 Climate Change Adaptation and Mitigation Services

### 5.2.1 Climate Change and Variability

The Coupled Model Inter-comparison Project Phase 5 (CMIP 5) models demonstrated that the warming rate over much of southern Africa will outpace global warming by up to 1,5 times.

SAWS continued to actively participate in the development of the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5). The organisation was invited to contribute to writing Chapter 22 of the IPCC Working Group II, which assesses climate change impacts, adaptation and vulnerability in Africa. The Working Group II AR5 government and expert review will run from 28 March 2013 to 24 May 2013. SAWS registered to participate in the expert review process of the AR5.

Two research projects were conducted:

- a. Moisture Transport Processes - results of this study indicated that heavy rainfall over South Africa is influenced by transported moisture originating over the eastern parts of the Indian Ocean and the equatorial South Atlantic Ocean. The transport of moisture over long distances in the Indian Ocean is facilitated by wave/flow interaction mechanisms, hence the finding that heavy rainfall over South Africa is influenced by large scale dynamics of the southern hemisphere.
- b. Climate Change Scenarios for South Africa - SAWS developed regional climate change scenarios for South Africa and each of the nine provinces, using the CMIP5 ensemble, downscaled to approximately 20km horizontal resolution. The results showed that the interior of the country will warm more rapidly than coastal regions. This warming, which occurs during all seasons throughout the year, is expected to amplify as a function of time.

### 5.2.2 Air Quality Modelling and Forecasting

SAWS continued with the development of the Air Quality Modelling System. The latest version (Version 6.1) of the dispersion model, NAME, was successfully downloaded and installed at SAWS. Emission data for the Vaal Triangle Air shed Priority Area, courtesy, Air Shed Professionals, was given to SAWS. The data was prepared to a NAME readable format and used to run the model. The results were compared with the measured data in order to investigate model performance. The results showed that NAME III was a good dispersion model to use in air-quality forecasting.

### 5.2.3 Improving Model Input Data

SAWS compiled an ad hoc point-source emission data file for the Vaal Triangle Airshed Priority Area which is based on literature. The file has been tested in the NAME III model and was found to be compatible.

### 5.2.4 SA Air Quality Information System (SAAQIS); National Ambient Air Quality Monitoring Network (NAAQMN)

The South African Air Quality Information System (SAAQIS) is a project that is managed in partnership between SAWS and the DEA. This project meets the requirements of the National Framework for Air Quality Management in the Republic of South Africa in terms of the provision of air quality information to the public and the management of air quality data collected through the National Ambient Air Quality Monitoring Network and other government and privately-owned air quality monitoring networks. Two phases of the SAAQIS project are currently in operation or the late stages of development. SAAQIS phase I focuses on ambient air quality, while SAAQIS phase II deals with the development of the National Atmospheric Emissions Inventory System.

In terms of SAAQIS Phase I, a total of 168 air quality monitoring stations are reporting to SAAQIS. This includes 90 ambient air quality monitoring stations (of which 78 are government-owned) and an additional 78 dust fallout monitoring stations from the Durban Roodepoort Deep (DRD) Dust Fallout Network in Johannesburg.

The six stations in the Vaal Triangle Airshed Ambient Air Quality Monitoring Network (VTAAAQMN) that are operated by SAWS had an average collection efficiency, after data validation, of 86.2%. The collection efficiencies after validation were 86.1% for Zamdela, 83.7% for Three Rivers, 81.4% for Sharpeville, 86.9% for Sebokeng, 94.1% for Kliprivier and 85.9% for Diepkloof.

National Ambient Air Quality Standards (NAAQS) that were exceeded were reported for the criteria pollutants during the monitoring period.

The following stations recorded exceedances of the National Standards for PM10, PM2.5 and ozone:

- Zamdela;
- Three Rivers;
- Sharpeville;
- Sebokeng;
- Kliprivier; and
- Diepkloof.

The SAAQIS Phase II project, the National Atmospheric Emission Inventory System (NAEIS) is an important project in that it provides information on the amount of atmospheric pollutants and greenhouse gases that are produced through the various sectors and regions in South Africa. The output of this project includes the information and knowledge management needs of government with respect to air quality management. Phase II of the SAAQIS concentrated on the development of the National Atmospheric Emission Inventory around:

- Criteria air pollutants for which national ambient standards have been set in terms on Section 9(1)(a) and (b) of the AQA, including sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM10 and PM2.5), benzene (C<sub>6</sub>H<sub>6</sub>) and carbon monoxide (CO);
- All associated emissions from the listed activities defined in Section 21(3)(a) and (b) of the Air Quality Act; and
- The six principal greenhouse gases considered under the Kyoto Protocol, namely carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).

The SAAQIS II module of the SAAQIS, which commenced in April 2011, made significant progress in each of the immediate objectives set to meet the overall project objectives. For Immediate Objective A (the Information Objective) the system design was finalised in September 2012, based on the project's terms of reference, followed by the development and critiquing of the alpha-version and the completion and testing of the beta-version of the NAIES on the SAWS server in December 2012, containing more than 1 000 industrial sources from the APPA (Air Pollution Prevention Act) data base.

A comprehensive regulatory review has been completed to inform the NAEIS design in terms of Immediate Objective B (the Information Monitoring and Reporting Objective). Immediate Objective C (Capacity building) in terms of the NAEIS and emission inventories advanced well through an internship programme and focused system workshops with DEA and SAWS.

In reviewing emission inventory systems abroad and in working with the alpha- and beta-versions of the NAIES, the SAAQIS Phase II Project Management Team (PMT) worked on enhancements to the beta-version to add significant value to the captured emission data for improved air quality management services, as well as for improved greenhouse gas emission reporting and tracking. Recognising that the subsequent phase of the SAAQIS will include dispersion modelling, the PMT therefore recognised the value of capturing appropriate data for modellers and making emission data easily available in the appropriate format.

### 5.2.5 The National Climate Database

A complete review of the SAWS's Climate Data Management System (CDMS) was undertaken in line with WMO's recommendations for CDMS. The review revealed that SAWS had most of the components of a WMO recommended CDMS and efforts will be made in the future to address the gap highlighted by the review.

SAWS prides itself in the hosting and maintenance of a 152-year old National Climate Database. In an effort to further ensure the integrity of the database, a study was completed to provide a set of procedures to quantify the

quality of climate data at all time-scales and to provide the basis of future quality control of all historical climate data. This study was limited to temperature, precipitation, wind and radiation with remaining climate parameters to be addressed in follow-up studies. Basic integrity checks were done to identify rough errors - these were found to be less than 1% of the total values checked for each parameter.

### 5.2.6 Research on the National Climate Database

#### (a) Wind Atlas Project

SAWS is involved in the Wind Atlas for South Africa Project, an initiative of the Department of Energy (DoE), with the South African National Energy Development Institute (SANEDI) as executing partner. This project is an essential input into the assessment of the potential of renewable energies for the country.

SAWS is responsible for the assessment of extreme winds and developing maps of extreme winds at various time-scales. Further developments include the estimation of extreme winds with modelled data, which is already underway. Due to the strong-wind locations where future wind farms will be situated, the outcome of the research will guide developers in the deployment of appropriate wind turbine infrastructure. In addition to this, the results will also be used to revise the South African Loading Code, thus benefitting not only the wind energy industry, but the entire South African built environment as well.

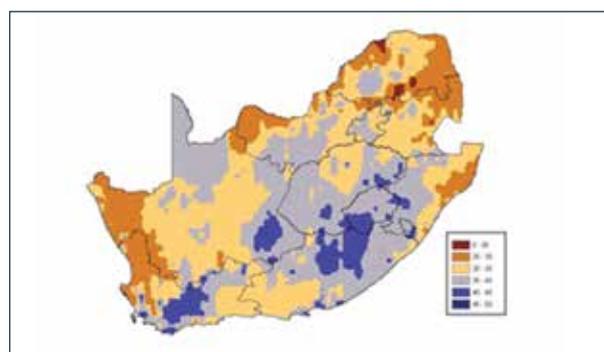


Figure 14: 1:50 year gust estimations from observed data



Figure 15: 1:50 year gust map with provisions for uncertainty

**(b) Climate trends research**

SAWS continued to assess the change and variability of our climate through the analysis of historical climate data. This included mainly temperature and rainfall, but recently wind as well. In this regard scientific papers are produced on a regular basis, e.g. through the Annual Climate Assessment edition of the Bulletin of the American Meteorological Society. In addition to the assessments of climate trends, the most significant weather events and the annual evolutions of temperature and rainfall anomalies are also discussed.

The benefits of historical climate change research include the verification of global change models and the identification of regions in the country which are already stressed, due to climate change. The western parts of the

country stand out as the region that has become the most stressed. Strong warming over this region already has an effect on the local ecosystems. SAWS is thus busy with a collaborative research project with the Percy Fitzpatrick Institute at the University of Cape Town, to investigate the likely effects this has had on local bird populations in the region.

**5.2.7 Climate Information Service**

SAWS's Climate Information Service saw a total number of 3 236 enquiries attended to during the reporting period. Sixty percent of those enquiries was commercially related, while 40% related to Public Good service delivery. The majority, about 63%, of commercial enquiries, came from the insurance industry, mostly requesting lightning verification reports. About 30% of the total commercial income generated by Climate Information came through enquiries submitted by the insurance industry.

**5.3 Infrastructure Modernisation**

**5.3.1 Infrastructure Modernisation Programme**

A multi-AWS system was successfully deployed with a display at the Wonderboom Airport. This development augers well for the proposed commercial opportunity in the deployment of aviation weather systems for the Namibian Weather Service. The Wonderboom Airport is

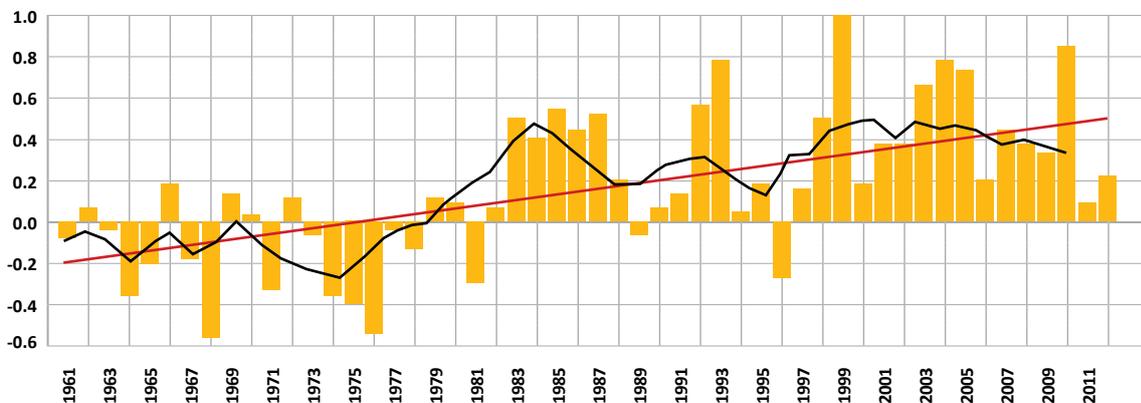


Figure 16: Average temperature trend for 21 selected weather stations for the period 1961 to 2012 (Bulletin of the American Meteorological Society).

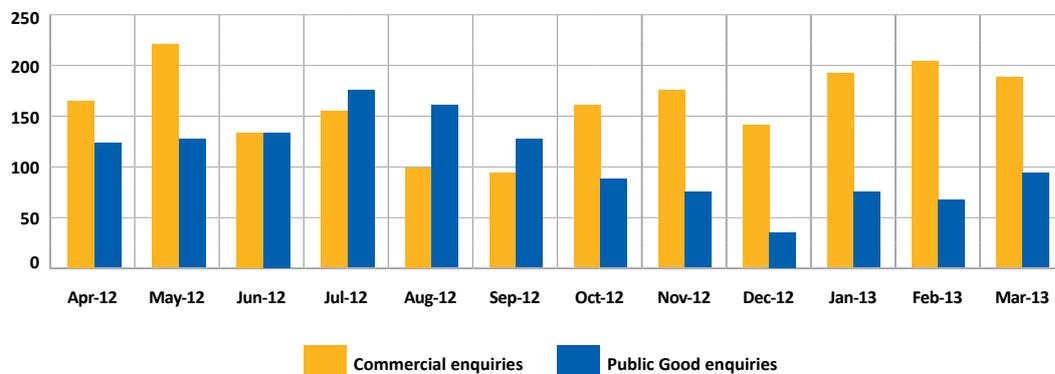


Figure 17: Climate enquiries – commercial and public good

now the first airport in South Africa that has three of the SAWS AWS systems installed, providing information on a single display.

Two new Aviation AWSs were successfully deployed at the Langebaanweg and Waterkloof Air Force Bases.

IB-lite diesel generator monitoring technology was also deployed to all radar sites to improve the monitoring of the radar sites' power and improve data availability by improving preparedness for power outages.

### 5.3.2 Business Optimisation and Realignment Programme

Realignment was achieved by redefining some processes, in light of the shortage of core personnel. The forecasting functions of the Nelspruit Weather Office were transferred to the national forecasting and aviation offices.

## 5.4 Information and Communications Technology (ICT)

In close collaboration with the Washington (NOAA) and Exeter (UK-Metoffice) Global Telecommunication System (GTS) teams, ICT successfully swapped the GTS data exchange from the old Washington line to the new RMDCN linking to Exeter. The old GTS links to Washington were then terminated. The direct links to Nairobi and Harare were also terminated as these administrations did not want to restore the links on their side. This resulted in a monthly saving of R34 000. These administrations' GTS data is now linked over the Internet with GTSSOCK.

The ICT Master System Plan Project was concluded during the period under review. The ICT Steering Committee became fully-functional with its Terms of Reference, Governance Charter and Governance Framework developed. ICT Change Management and ICT Security groups were constituted as part of the governance processes.

ICT was able to address a large number of the infrastructure problems experienced, by publishing a number of tenders at the beginning of 2013, after funding became available in December 2012.



*Our coasts are frequently affected by severe weather and storm surge*

## Contribution of SAWS staff to published articles during the report period

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\*Names of staff underlined

# Organisational Engagements



*Celebrating Heritage Day 2013*



*Celebrating our cultural diversity*



*Gauteng Corporate Golf Day, 2013*



*Welcome back to our karate champion*



*On Women's Day, SAWS assisted ladies in the Mamelodi community to make their own blankets in a quest to create a weather-ready nation*



*World Meteorological Day, Upington*

# 6. CORPORATE AFFAIRS

## 6.1 Legal Services

### 6.1.1 Contract Management

The approved SAWS Contract Management Framework serves as guideline to management service levels, as well as identifying potential contractual risk. SAWS regularly reviews, vets and drafts various contracts and Memoranda of Understanding in order to ensure that SAWS is not exposed to legal risk. The Contract Management Framework is also reviewed annually.

### 6.1.2 Policy Reviews

SAWS is governed and guided by various policies. As part of compliance monitoring, SAWS reviewed its policies with an aim to strengthening its internal controls, as well as taking into consideration changing working environments.

### 6.1.3 Promotion of Access to Information Compliance

The provision of access to information within SAWS is regulated in terms of the approved SAWS Access to Information Manual. During the period under review, there were no requests for access to information in terms of the provisions of the Promotion of Access to Information Act, Act No. 2 of 2000.

### 6.1.4 SAWS Litigation

There was no ruling against SAWS in a litigation matter during the period under review. A total of R120 000.00 was collected for legal costs from third parties. Furthermore, SAWS was not involved in any major litigation with third parties.

### 6.1.5 Review of SAWS Act

The SAWS Amendment Bill of 2011 was withdrawn by the Minister of Environmental Affairs. Subsequently a revised SAWS Amendment Bill 2013, Memorandum and Objectives were forwarded to the Minister to table for approval in Cabinet.

## 6.2 Corporate Communications

### 6.2.1 Severe Weather Awareness Campaigns and World Meteorological Day

SAWS focussed on raising awareness on severe weather among communities. In partnership with the Department of Environmental Affairs, Limpopo PDMC, Vhembe DMC, the Vhembe District Municipality and the Thulamela Local Municipality, SAWS successfully hosted an awareness campaign on severe weather in Limpopo, Vhembe district. This area was declared a disaster area after the heavy rains and floods in January 2013. Deputy Minister for Water and Environmental Affairs, Ms Rejoice Mabudafhasi spearheaded the campaign which received wide media coverage.

World Meteorological Day celebrations were held in conjunction with the second leg of the severe weather awareness roadshows in Upington, Northern Cape on 14 March 2013. The event included communities of the Siyanda District Municipality as well as the Kharahais Local Municipalities, school learners and the media. Deputy Minister Rejoice Mabudafhasi, who is fully involved in SAWS's severe weather awareness roadshows, delivered the keynote address which was centred around the WMO's theme: "Watching the Weather to Protect Life and Property", with the subtheme: "Celebrating 50 Years of World Weather Watch". The aim of holding

the celebrations in Upington was to develop a weather-ready nation that knows what to do and that responds appropriately to severe weather warnings as the area had recently been affected by flooding.

SAWS also used the day to unveil its 'Face of the Youth in Meteorology' ambassador, Mr Paul Monare who encouraged the youth to consider careers in meteorology.

### 6.2.2 External Communication

The department continued to communicate with external stakeholders to increase the visibility of the organisation's operations and create awareness in order to reinforce its effectiveness. In order to realise some of the objectives, brochures on severe weather awareness were developed and translated into four languages, namely: isiXhosa, isiZulu, Setswana and Tshivenda. The brochures were distributed in various rural communities.

As part of SAWS's external communication drive to raise awareness on severe weather and create a weather-ready nation, the following awareness articles were developed:

- **Sea Rescue Magazine** – An A4 advertorial about marine weather awareness during the summer season.
- **Johannesburg plus 10** – "Riding the Tides and Storms" – a four-page article about the role of

the South African Weather Service in Sustainable Development, as well as a description of its commercial and Public Good services.

- Three advertorials, each in **Move** and **Kuier** (December 2012/January 2013) magazines in English and Afrikaans focussing on severe weather hazards during the summer season.
- Ten articles and calendar strips in the **MiniMag** magazine – each month containing a topic relevant to the type of weather expected during that month.
- A four-page wrap about weather awareness in **The Daily Sun** (14 March 2013), a double-sided A1 poster in 'The Teacher', an educational subsidiary of **Mail and Guardian** (March 2013) and an eight-page weather awareness brochure in **Beeld** (14 March 2013) focusing on most severe weather awareness events that can influence the public.

SAWS joined the social networks by launching a Twitter account during COP17 to create awareness about the conference, and gain publicity on social media platforms. During the period under review, the Twitter account was aligned to become an overall corporate information and dissemination tool, which includes daily weather and warnings for all regions, media releases and other relevant corporate information. The SAWS Twitter account grew from 2 300 to 7 100 followers and 7 000 tweets during the period under review.

**Table 7: Media Coverage Summary**

Summary	Print		Broadcast		Online
	Articles (No)	Adspend (R)	Inserts (No)	Adspend (R)	Inserts (No)
Analysis	12	84 754-	21	499 740	6
Forecast	84	287 858	30	613 248	63
Mention	16	32 076	-	-	69
Phenomena	224	3 263 751	62	4 362 670	109
Products and Services	-	-	-	-	3
Warning	24	154 845	47	668 164	63
Social Responsibility	16	311 472	1	43 800	
Research	1	1 620	1		
Profile			1	168 000	
<b>Grand Total</b>	<b>497</b>	<b>5 490 328</b>	<b>306</b>	<b>12 515 564</b>	<b>567</b>

The 497 articles published during the reporting period had an Advertising Value Equivalent (AVE) of R5,490,328. This indicates the amount that SAWS would have spent for advertorial or editorial space. In terms of broadcast the AVE was R12,515,564. In total SAWS gained Adspend value of R18,005,892.

**6.2.3 Internal Communication**

Following SAWS’s ISO 9001:2008 certification and the registration of its logo as a trademark, the SAWS Corporate Identity Manual (CIM) was reviewed to contain the relevant changes. Three branding awareness workshops were held at Bolepi House, reaching around 25 brand ambassadors and Total Quality Management auditors. The CIM communication campaign was taken to all regional offices including Bolepi through workshops and staff meeting roadshows held in September 2012. The changes were also communicated, effected and implemented in media. Workshops on reputation management were conducted with senior and executive management and also presented to internal staff at Bolepi house, while an internal Communication Week was held from 26 to 30 November 2012, addressing aspects such as the Communication and Media Policy, the Communication Strategy, reputation management, branding awareness (and the application of the new logo) and public speaking.

To ensure SAWS’s staff is informed, communiqués, newsletters, staff meetings and the intranet were used as channels to communicate SAWS programmes and other information to employees.

**6.3 Stakeholder Relations Management**

Stakeholder relations management continued to be a strategic dimension for ensuring continued relevance of the organisation and its sustainability. The approach adopted promoted synergistic and strategic relations, as well as contributing optimally to the effective management of risk that may be associated with potential challenges or competition around the mandate and resource base of SAWS.

**6.3.1 Stakeholder Perception Survey and Impact Assessment**

Annually, SAWS conducts a stakeholder survey to establish key drivers of stakeholder satisfaction. This includes an evaluation of overall satisfaction with the quality of services, products as well as organisational image.

During the period under review, the survey was based on face-to-face and telephonic interviews of 300 respondents. The survey revealed that the South African Weather Service’s customers and other stakeholders remain satisfied with the service provided by SAWS giving the organisation an overall satisfaction rating of 85.3%.

The figure below indicates SAWS’s performance scores for each area surveyed.

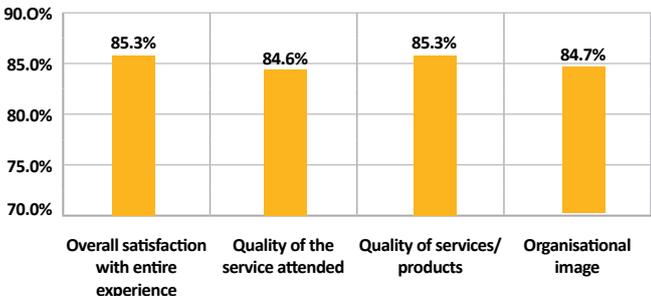


Figure 18: Performance scores on overall components of satisfaction

### **6.3.2 Corporate Social Investment**

#### ***Charity Golf Days***

SAWS held two successful golf days during the period under review, namely the Western Cape Golf Day at the Bellville Country Club on 13 April 2012 and the Gauteng Corporate Charity Golf Day at the Blue Valley Golf Estate on 8 March 2013. Proceeds were donated to relevant charitable organisations.

#### ***Fognet Water Harvesting Project***

The Fognet Water Harvesting Project continued in Limpopo. The design was refined to create a structure that can withstand severe weather conditions. In partnership with engineering students from the University of Pretoria, a more solid structure was created which will be mirrored as the project expands to Mpumalanga.

#### ***Highbury School***

The building of the school was completed in the period under review, and the school is currently in use by the community. Two blocks of two and three classrooms respectively were built with new ablution facilities. SAWS also donated a container which is now used as an administration facility after the mud structure which was initially used was demolished.

This project would not have been possible had it not been for the partnership with Eskom Foundation which donated the funds for the school building.

#### ***Adopt-A-School initiative***

In the period under review, SAWS adopted Thomas Makgatho High School in Shakung Village, near Winterveld, Madibeng Municipality in the North West Province. The purpose of the relationship was to educate learners on selected topics in Geography in preparation for their Grade 12 examinations.

As a way of further building a relationship with this school and exposing the learners to the science industry, girl learners were invited to participate in the Take a Girl Child to Work Day® by visiting SAWS offices at Bolepi on Thursday, 31 May 2012. The objective was to expose young girl learners to the 'world of work' and the wide range of career opportunities within atmospheric sciences. The learners spent the day in various divisions within SAWS experiencing what it entails to be in a working environment.

#### ***Moletši Cultural Day***

The Moletši community in Limpopo, led by Kgoši Kgabo Moloto III, celebrates Cultural Day on 16 December each year. The purpose of the event is to encourage the community to preserve its culture. The initiative is also aimed at promoting activities that can uplift members of the community; improving life for all in that area. SAWS participated by sharing information on the importance of embracing indigenous knowledge. It was also a platform to raise awareness on severe weather and careers in atmospheric science.

#### ***SAWS Women in Action***

The women at SAWS contributed to various communities around them. SAWS Women in Action approached various companies for partnerships. Anglo-American Group joined hands with the women and donated furniture, bedding and curtains to the Mamelodi Society for Care of the Aged (MASCA).

The Women in Action identified that some girls in rural areas do not have access to sanitary towels. Female employees donated sanitary towels monthly and these were delivered at the Manotshi Moduane High School.

#### ***Women's Day Celebrations***

The Gauteng Women's Day 2012 was hosted at the Funanani Centre in Mamelodi. Ladies from Bolepi house and Irene attended the event, which included ladies of the

local community. A blanket making project was embarked upon, which not only provided a great deal of fun, but also created a wonderful team spirit amongst ladies and a warm feeling of 'giving back to the community'. Everyone in attendance took home the blanket they made. The Cape Town and Port Elizabeth weather offices initiated local outreaches to charities of their choice.

#### **Book Donation**

SAWS held a three-fold celebration on Nelson Mandela Day, celebrating SAWS's 11<sup>th</sup> birthday and SAWS library's centenary. For the 67 minutes, SAWS employees and some alumni donated books to the library which were then handed over to the Funanani Centre in Mamelodi. Some of the books were also donated to various schools in the Lehurutshe region during a Career Day held to promote meteorology as a career of choice.

#### **Space Explorers**

A group of six primary school learners, who called themselves the 'Space Explorers', supported by their parents and educators, contacted SAWS with an initiative to follow the path of a weather balloon. By adding a water-tight camera to the weather balloon, the group managed to get footage of the balloon launch into the atmosphere, until the balloon eventually burst. The group located the camera by means of GPS technology on a farm outside Bronkhorstspuit. This experiment attracted attention and gained publicity from various publications.

## **6.4 Total Quality Management**

SAWS obtained ISO 9001 certification in October 2011 and has since undergone two surveillance assessment audits and has managed to retain the certificate. SAWS remains committed to maintaining the high standards required of the organisation in terms of the quality of its service offering, by ensuring continuous compliance to ISO 9001 standard requirements.

The organisation is now more customer-focused as a result of Total Quality Management implementation.



*In our efforts to maintain relationships, a SAWS alumni function was held in July 2012*



*Lightning is spectacular, but can be deadly*

*Photo courtesy of Craig Powell: SAWS*

# 7. COMMERCIAL SERVICES

## Commercialisation Programme

SAWS's commercial revenue is comprised of regulated aviation revenue and other non-regulated income. The regulated aviation revenue is based on a regulated tariff that allows SAWS to recover its costs, whilst providing a value-added service to all commercial airlines within the Aviation Industry. The tariff is dependent on the number of flights flown and the total load of the aircraft, and with the downturn in the global economy, Aviation revenue has decreased from R81,7 million in 2011/12, to R73,8 in 2012/13.

In respect of non-regulated revenue, valuable time and expertise were provided by both internal and external stakeholders to update the Commercial Strategy which will be presented to the Board in July 2013. Eight industry sectors will be targeted together with the support of additional commercial partners in order to grow revenue significantly in the next five years. Commercial sales decreased by 12% from R15,4 million in 2011/12 to R13.9 million in 2012/13. This was partly due to the fact that the project to use the aircraft for cloud seeding activities internationally was not active in this financial period. However, now that the fundamentals of both an updated commercial strategy and an organisational focus on commercial revenue streams are in place, it is envisaged that this trend will be reversed.

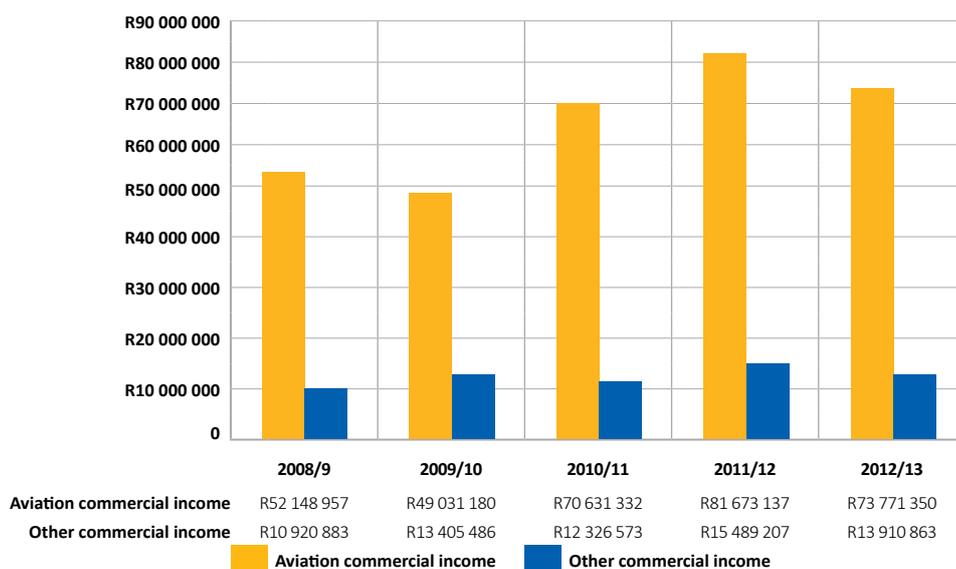


Figure 19: Revenue trends over a five-year period

# Developing our Human Capital



*Awarding basic meteorological course participants*



*SAWS Intern Group 2012/13*



*SAWS Library Centenary: Donation of books to Funanani Centre*



*Meteorological Technician Certificate Ceremony*



*Career Day, Bergville*



*Employee Awards Function 2012*



*Finalist in the Most Influential Women Awards 2012*



*Winner of Amara Awards 2012*

# 8. HUMAN CAPITAL MANAGEMENT

Human Capital Management has the responsibility to attract, select, employ and retain qualified individuals to suit all areas of expertise within SAWS. SAWS continuously grows and develops its pool of highly-skilled individuals in the multidisciplinary skills required by the organisation.

An Annual Human Resources Development Strategy is followed, where 80% of the requisite skills as well as training in line with the SDP plan are required. SAWS met the 80% requisite for available skills and competencies and achieved a 90% pass rate/completion rate for training courses in line with the SDP.

In terms of staff turnover, a 6% target for staff turnover on critical and scarce skills was set and SAWS achieved a percentage of 4,18%.

## 8.1. Human Capital Development

### 8.1.1. TETA SETA

The 2011 to 2012 WSP (Workplace Skills Plan) and Annual Training Reports were submitted to the TETA SETA on 30 June 2012 in compliance with the governing frameworks. The TETA SETA provided information on the Organising Framework of Occupation Codes for different occupations. TETA SETA visited SAWS to conduct monitoring and verification in line with requirements of implementation of the organisation's discretionary grants.

National Skills Development Strategy (NSDS III) reports were submitted to the TETA SETA. The reports contained information on the process of implementation of skills development, learnerships and the number of students who received funding as part and full-time bursaries as well as internships. These activities ensure that SAWS invests in the heightening of productivity levels within the

organisation and contributes to the alleviation of unemployment amongst the youth, particularly those from historically disadvantaged backgrounds.

Documents for DG 474 and 478 to TETA SETA were submitted in compliance with requirements to receive discretionary grants.

### 8.1.2 Training and Development

Training was coordinated for the following skill programmes:

- Communication and Presentation Skills – thirteen staff members
- Risk Management – nine staff members
- Mentoring and Coaching – seven staff members
- First Aid and Fire Fighting - seventeen personnel in various regions

Training that was undertaken was captured in the NSDS III documents and sent to TETA SETA.

### 8.1.3 Bursaries

Out of forty-two bursaries awarded in 2012/2013, thirteen bursary holders were employed by SAWS and twenty-nine are still finalising their studies.

### 8.1.4 Internships

Eleven interns from 2011/2012 completed their internship programme. Two interns were absorbed as permanent employees within SAWS, one was offered a six-month contract and two a two-month contract each.

### **8.1.5 Memorandum of Understanding**

The Memorandum of Understanding between the University of Fort Hare and SAWS was signed on 6 August 2012. The two parties formalised a joint cooperation in atmospheric science through research, skills development and creation of critical mass to serve the South African people.

A joint working group will be established to ensure the implementation of the MOU between the University of Fort Hare and the South African Weather Service. Meetings will take place during the 2013/2014 financial period.

### **8.1.6 Career and Outreach programmes**

During the period under review, SAWS visited a number of schools in all the regions. This led to improved awareness about the role of weather in all facets of life.

The content of the programmes dealt with the following:

- Presentation on weather awareness, weather safety, explanations on data collection and storage, seasonal outlook, and upper-air ascents.
- Encouraging upcoming scientists to embark on future careers in mathematics, science and technology careers.
- Raising public awareness on SAWS's strategic objectives and its role in promoting a healthy climate for the country and the world.

### **8.1.7 SAWS Training Matrix**

The training matrix was developed to integrate information on the post allocation, function and role of each incumbent in the organisation. This will assist the organisation in identifying gaps in skills and training needs.

### **8.1.8 Regional Training Centre**

The Training Centre of the South African Weather Service is a WMO recognised Regional Training Centre. All training courses (Meteorological Technician, Forecasting and Air Force) were successfully completed and an awards ceremony took place on 28 November 2012.

Three students registered for the new forecasting course and all passed with distinction. One student opted to study further and was not appointed.

Competency training of the forecasters continued according to the training plan. Areas for improvement were identified for the personnel audited.

A successful EUMETSAT MSG course took place from 23 to 27 April 2012 and eleven SADC representatives were trained. In addition, three island courses were offered to staff going to the remote islands.

A basic course in Understanding Meteorology was conducted on 5 July and twenty-six people attended the course. The second South African Air Force course started on 1 October 2012.

The Aviation Competency seminar, where the UKMO and SAWS, with the assistance of WMO, were training competency assessors from SADC and beyond, took place from 1 to 5 October. Sixteen people from outside South Africa, as well as SAWS personnel were trained.

The Severe Weather Forecasting Demonstration Project workshop was held from 12 to 23 November. The workshop enhanced the forecasters' ability to recognise severe weather events by using different tools available. The first week concentrated on improving the skills of the forecasters. The second week concentrated on collaboration between the forecasters' and public weather focal points, to ensure that the right message is going out to the communities that need it.

The second Aviation Observer course for the South African Weather Service took place from 1 October to 28 November. The third South African Air Force Aviation Observer course was held between 21 January and 27 March, with 17 learners attending. Seven SATREP online sessions (distance learning sessions via computer) were held for our forecasters and others.

### **8.1.9 Library**

The library celebrated its centenary in 2012. The first event took place on 15 June, coinciding with Youth Day. A book drive was initiated where employees were requested to donate books throughout the year.

Book donations took place at the SAWS Career Day on 29 August in Zeerust, North West, which targeted Grade 9 to 11 learners in schools from the Lehurutse area. Other books were donated to the Funanani Educational Centre in Mamelodi. The formal centenary celebrations were held on 18 July, coinciding with international Mandela Day.

Outreach to staff continued throughout the year. Special information sessions were held to inform staff of the Meteorological and Geo-astrophysical Abstracts on the new ProQuest platform and survey feedback from the presentation was compiled in September.

SpringerLink provided free access to their online journals via their new platform until the end of November. Staff were encouraged to make use of the opportunity.

## 8.2 Human Capital Services

The Table below represents the employee relations activities for the year 2012/2013 and is indicative of the results of interventions made by Employee Relations.

Below is the Human Capital Services Report as of 31 March 2013. It includes work profile as per employment equity categories, employee relations statistics and staff turnover.

As on 31 March 2013, 375 permanent employees were employed at SAWS. When including interns/temporary employees, the employee establishment is at 387.

- The overall organisational turnover for the 2012/2013 financial year is 8,65%
- The overall scarce skills turnover for the 2012/2013 financial year is 4,18%

**Table 8: Employee relations activities**

Nature of cases	Black		White		Coloured		Asian	
	Male	Female	Male	Female	Male	Female	Male	Female
CCMA Cases	1	0	2	0	0	0	0	0
Grievances	0	0	0	0	0	0	0	0
Disciplinary Cases	2	2	0	0	3	0	0	0
<b>Total</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 9: Staff Profile as at 31 March 2013**

Occupational Levels	Male				Female				Foreign Nationals		Total	%
	A <sup>1</sup>	C <sup>2</sup>	I <sup>3</sup>	W <sup>4</sup>	A <sup>1</sup>	C <sup>2</sup>	I <sup>3</sup>	W <sup>4</sup>	Male	Female		
Top management	3	0	0	0	1	0	0	0	0	0	4	1
Senior management	7	0	1	2	6	0	0	3	0	0	19	5
Professionally qualified and experienced specialists and middle-management	34	4	1	21	13	1	0	8	3	1	86	23
Skilled technical and academically-qualified workers, junior management, supervisors, foremen and superintendents	51	4	5	25	25	3	4	19	0	0	136	35
Semi-skilled and discretionary decision making	27	7	0	6	20	3	0	4	0	0	67	17
Unskilled and defined decision making	28	9	0	2	18	4	1	1	0	0	63	16
<b>TOTAL PERMANENT</b>	<b>150</b>	<b>24</b>	<b>7</b>	<b>56</b>	<b>83</b>	<b>11</b>	<b>5</b>	<b>35</b>	<b>3</b>	<b>1</b>	<b>375</b>	
Temporary employees	4	0	0	1	7	0	0	0	0	0	12	3
<b>GRAND TOTAL</b>	<b>154</b>	<b>24</b>	<b>7</b>	<b>57</b>	<b>90</b>	<b>11</b>	<b>5</b>	<b>35</b>	<b>3</b>	<b>1</b>	<b>387</b>	<b>100</b>

Legend:

A<sup>1</sup>: African

C<sup>2</sup>: Coloured

I<sup>3</sup>: Indian

W<sup>4</sup>: White

### **8.2.1 Staff Assessments and Personal Development Plans**

Staff assessments and personal development plans were completed according to schedule and training needs determined.

### **8.2.2 Career-Pathing Implementation**

The first leg of the dual career-pathing for scientists was implemented in the 2012/2013 financial year. Eighty one scientific personnel benefited from the dual career pathing.

### **8.2.3 Employee Awards**

The 4<sup>th</sup> Awards Function for SAWS took place on 28 November 2012 with the goal of instilling a good work ethic, as well as, encouraging all employees to contribute to the achievement of organisational goals.

### **8.2.4 Bargaining Forum**

Five Bargaining Forum meetings were convened during the year. A policy review workshop for the forum took place on 12 June 2012. The Employment Equity Report for 2011/2012 was submitted to the Department of Labour on 1 October 2012. CCMA cases were handled within the CCMA rules and relevant legislation. Internal disciplinary cases and grievances were handled in compliance with SAWS Policies.

### **8.2.5 Employee Wellness**

SAWS participated in the Discovery 702 Fun Walk during July 2012 and 80 employees participated in the event. A SAWS Corporate Sports Day was successfully held on 7 September 2012 at the University of Pretoria where SAWS employees participated in their numbers. Presentations by medical aid schemes for the 2013 products were made to SAWS employees around the country. Voluntary eye and ear testing was conducted on 28 August 2012 and 30 October 2012, followed by the commemoration of World Aids Day on 30 November 2012 where 71 employees participated and voluntary counselling and testing were also performed.

## **8.3 Occupational Health and Safety**

Progress was made in terms of organisation-wide implementation of the provisions of the Occupational Health and Safety Act (OHSA) No. 85 of 1993. According to Section 19 of OHSA, a Health and Safety Committee was implemented in Gauteng and will be included in regional offices in 2013/2014. Reporting activities were enhanced. A total of fifteen incidents and seven potential dangers were reported.

Head office visitors' movements were monitored and controlled, and the electronic access control was upgraded. Regional access control is generally facilitated by access control structures of ACSA or relevant landlords responsible for accommodating SAWS.



*The Mthatha Radar forms part of the SAWS radar network that helps monitor severe weather throughout the country*



# FINANCIAL CONTENT



South African  
Weather Service

ISO 9001 Certified Organisation

# **PART 3**

## **SOUTH AFRICAN WEATHER SERVICE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2013**

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# REPORT BY THE AUDIT AND RISK COMMITTEE

The Audit and Risk Committee reports that it complied with its responsibility arising from section 38(1)(a) of the PFMA and Treasury Regulations 3.1.13. The Audit and Risk Committee reports that it adopted appropriate formal Terms of Reference as its committee charter, regulated its affairs in compliance with this charter and discharged all its responsibilities as contained therein.

## **Audit and Risk Committee: Members and Attendance**

The Audit and Risk Committee plays a crucial role in the corporate governance of the entity. The Audit and Risk Committee comprises the members listed in Table 3 under Corporate Governance. During the 2012/13 financial year, four meetings were held.

## **The Effectiveness of Internal Control**

The Audit and Risk Committee guided the Internal Audit Unit in the preparation and implementation of the annual audit plan. The internal audit function was outsourced to SizweNtsalubaGobodo. The systems of control are designed to provide cost-effective assurance that assets are safeguarded and that liabilities and working capital are efficiently managed. In line with the PFMA and the King II Report on Corporate Governance Requirements, internal audit provides the Audit and Risk Committee and management with assurance that the internal controls are appropriate and effective. This is achieved by means of the risk management process, as well as the identification of corrective actions and proposed enhancements to the controls and processes.

According to various reports from the internal auditors, the Audit Report on the Annual Financial Statements and the Auditor-General's Management Report, it was noted that no significant or material non-compliance with the prescribed policies and procedures had been reported. Accordingly, we can report that the systems of internal control for the period under review were effective and efficient.

## The Quality of Management and Monthly/Quarterly Reports submitted in terms of the PFMA and the Division of Revenue Act

The Audit and Risk Committee is satisfied with the content and quality of the monthly and quarterly reports prepared and issued by the entity's Chief Executive Officer during the period under review.

### Evaluation of Annual Financial Statements

The Audit and Risk Committee:

- reviewed and discussed the audited Annual Financial Statements to be included in the Annual Report, with the Auditor-General and the Accounting Officer;
- reviewed the Auditor-General's management letter and management's response thereto;
- reviewed changes in accounting policies and practices; and
- reviewed significant adjustments resulting from the audit.

The Audit and Risk Committee concurs with, and accepts the Auditor-General's conclusions on the Annual Financial Statements, and is of the opinion that the audited Annual Financial Statements should be accepted and read together with the Auditor-General's Report.

### Internal Audit

The internal audit is operating effectively and has addressed the risks pertinent to the entity.

### Auditor-General

The committee met with the Auditor-General to ensure that there are no unresolved issues.



**Mr Siyabonga Makhaye**

Chairperson of the Audit and Risk Committee

Date: 29 July 2013

# REPORT BY THE AUDITOR-GENERAL

## REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON SOUTH AFRICAN WEATHER SERVICE REPORT ON THE FINANCIAL STATEMENTS

### Introduction

1. I have audited the financial statements of the South African Weather Service set out on pages 80 to 125, which comprise the statement of financial position as at 31 March 2013, the statement of financial performance, statement of changes in net assets, the statement of comparison between budget and actual, the cash flow statement for the year then ended, and the notes, comprising a summary of significant accounting policies and other explanatory information.

### Accounting authority's responsibility for the financial statements

2. The accounting authority is responsible for the preparation and fair presentation of these financial statements in accordance with South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA), and for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor-General's responsibility

3. My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA), the *General Notice* issued in terms thereof and

International Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.
5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

### Opinion

6. In my opinion, the financial statements present fairly, in all material respects, the financial position of the South African Weather Service as at 31 March 2013, and its financial performance and cash flows for the year then ended in accordance with the South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA).

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

7. In accordance with the PAA and the *General Notice* issued in terms thereof, I report the following findings relevant to performance against predetermined objectives, compliance with laws and regulations and internal control, but not for the purpose of expressing an opinion.

### Predetermined objectives

8. I performed procedures to obtain evidence about the usefulness and reliability of the information in the annual performance report as set out on pages 19 to 23 of the annual report.
9. The reported performance against predetermined objectives was evaluated against the overall criteria of usefulness and reliability. The usefulness of information in the annual performance report relates to whether it is presented in accordance with the National Treasury's annual reporting principles and whether the reported performance is consistent with the planned objectives. The usefulness of information further relates to whether indicators and targets are measurable (i.e. well defined, verifiable, specific, measurable and time bound) and relevant as required by the *National Treasury Framework for Managing Programme Performance Information*.

The reliability of the information in respect of the selected objectives is assessed to determine whether it adequately reflects the facts (i.e. whether it is valid, accurate and complete).

10. There were no material findings on the annual performance report concerning the usefulness and reliability of the information.

### Compliance with laws and regulations

11. I performed procedures to obtain evidence that the entity has complied with applicable laws and regulations regarding financial matters, financial management and other related matters. My findings on material non-compliance with specific matters in key applicable laws and regulations as set out in the *General Notice* issued in terms of the PAA are as follows:

## Annual financial statements, performance and annual reports

12. The financial statements submitted for auditing were not prepared in accordance with the prescribed financial reporting framework as required by section 55(1)(a) and (b) of the PFMA. Material misstatements of leases and prior period errors identified by the auditors in the submitted financial statements were subsequently corrected resulting in the financial statements receiving an unqualified audit opinion.

### Internal control

13. I considered internal control relevant to my audit of the financial statements, the annual performance report and compliance with laws and regulations. The matters reported below under the fundamentals of internal control are limited to the significant deficiencies that resulted in the basis for opinion, and the findings on compliance with laws and regulations included in this report.

### Financial and performance management

14. Management did not perform an adequate review of the disclosure of leases and prior period errors for accuracy and completeness prior to submission of the annual financial statements. This resulted in the disclosure of leases and prior period errors being misstated due to a lack of review to ensure that financial information is valid and agree to appropriate supporting documentation.

*Auditor-General*

Pretoria  
31 July 2013



AUDITOR-GENERAL  
SOUTH AFRICA

*Auditing to build public confidence*

# STATEMENT OF RESPONSIBILITY BY THE BOARD

The Annual Financial Statements are the responsibility of the Board. The Financial Statements, presented on pages 80 to 125, were prepared in accordance with South African Statements of Generally Accepted Accounting Practices and South African Statements of Generally Recognised Accounting Practices, and include amounts based on judgement and estimates made by management. The Board also prepared the other information included in the Annual Report and is responsible for both its accuracy and consistency with the Financial Statements.

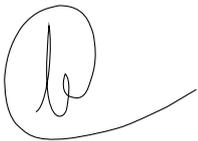
The Board is also responsible for the systems of internal control. These are designed to provide reasonable, but not absolute, assurance as to the reliability of the Financial Statements, and to adequately safeguard, verify and maintain accountability of assets, as well as to prevent and detect material misstatement and loss. The systems are implemented and monitored by suitably trained staff members, with an appropriate segregation of authority and duties. The Board reviewed the entity's systems of internal control and risk management for the year, and is of the opinion that the entity's systems of internal control and risk management were effective for the period under review.

The going concern basis was adopted when preparing the Financial Statements. The Board has no reason to believe that the South African Weather Service will not be a going concern in the foreseeable future, based on forecasts and available cash resources. The Financial Statements support the viability of the South African Weather Service.

The Financial Statements were audited by the Auditor-General, who had unrestricted access to all financial records and related data, including minutes of both Board meetings and meetings of all its committees. The Board believes that all representations made to the Auditor-General during his audit were valid and appreciated.

## Approval of Financial Statements

The Financial Statements on pages 80 to 125 were approved by the Board on 30 July 2013 and signed on its behalf by:



**Dr L Makuleni**  
Chief Executive Officer



**Prof Lindisizwe Magi**  
Chairperson of the Board

# REPORT BY THE ACCOUNTING AUTHORITY

Report by the Accounting Authority to the Executive Authority and Parliament of the Republic of South Africa.

## **Preparation and presentation of the Annual Financial Statements**

The financial statements have been prepared in accordance with the South African Statements of Generally Recognised Accounting Practices (GRAP) including any interpretations of such statements issued by the Accounting Standards Board.

In managing its financial affairs, the South African Weather Service complies with the Public Finance Management Act (PFMA), Treasury Regulations, Companies Act and the principles of Good Corporate Governance recommended by King III.

## **General Review of the State of Affairs**

The South African Weather Service (SAWS) is the primary provider of weather and climate-related information within South Africa, and this is derived from the SAWS Act. SAWS supplies weather-related information to the public at large as part of its Public Good mandate. The government grant is received to support this activity.

SAWS also provides weather-related information to the aviation industry for which it charges a tariff, based on the discussions with the commercial aviation industry players. The Aviation Regulating Committee plays a pivotal role in these discussions by ensuring that the recommended tariff is just and fair for all parties involved. Once the discussions have been concluded, the recommendations are sent for approval to the Minister of Water and Environmental Affairs for promulgation. Upon promulgation the set tariffs are published in the Government Gazette.

In addition to this, SAWS provides weather and climate-related information to various commercial clients in industries such as mining, insurance, tourism, telecommunication, municipalities, other international meteorological organisations etc. Despite the current adverse economic conditions, the revenue from this stream has been quite stable year-on-year.

## **Revenue**

Total revenue decreased by 9% (R26.40 m) from R279.75 million to R253.35 million year-on-year.

The following table shows the movement in revenue year-on-year:

	2013	2012	Increase/(Decrease)	
	R'000	R'000	R'000	%
Government grant- Operational income	144.69	137.93	6.76	5%
Government- Capital income	14.34	36.48	(22.14)	-61%
Aviation revenue	73.77	81.67	(7.90)	-10%
<b>Non-Regulated</b>	<b>13.91</b>	<b>15.49</b>	<b>(1.58)</b>	<b>-10%</b>
Aviation instruments maintenance income	0.82	0.57	0.25	43%
Information fees	8.60	6.95	1.65	24%
Letting aircraft	-	2.84	(2.84)	-100%
Lightning detection network sales	2.56	2.52	0.04	2%
Project/Automatic weather stations income	1.93	2.60	(0.67)	-26%
<b>Other income</b>	<b>6.63</b>	<b>8.19</b>	<b>(1.56)</b>	<b>-2%</b>
TETA-SETA Grant	0.67	0.42	0.25	59%
Training- RTC	0.25	0.09	(0.16)	-100%
Miscellaneous income	0.44	0.47	0.03	-6%
Proceeds from disposal of assets	0.02	0.46	(0.44)	-96%
Donations received	0.17	0.35	(0.18)	-51%
Interest received from receivables	0.30	0.48	(0.18)	-37%
Income from investments	4.78	5.93	(1.15)	-19%
	<b>253.35</b>	<b>279.76</b>	<b>(26.41)</b>	<b>-9%</b>

## Government Grant

Operational income from government in the form of the grant, increased by 5% based on the Medium Term Expenditure Funding (MTEF). Capital grant income decreased by 61% year-on-year due to completion of radar infrastructure. Included in the total government revenue is the SAAQIS grant, which increased by 1% from R12.181 million to R12.263 million year-on-year.

## Aviation Income

The income from the aviation industry for the period decreased from R81,67 million to R73,77 million year-on-year. This was due mainly to lower than expected volume numbers, provisional and actual liquidation of some airlines, resulting in loss of potential revenue. Total flights which is the major component of calculating the tariff amounted to 305 944 (budget: 330 661) while for the previous year total flights were at 324 837.

## Non-Regulated Commercial Income

Non-regulated commercial revenue decreased from R15,49 million to R13,91 million year-on-year. This is attributed mainly to lower sales in Automatic Weather Stations and Automatic Rain Stations which declined by 26% from R2,6 million to R1,9 million. There was also an unrealised revenue of R2,84 million as a result of the aircraft project not taking place in this financial period. Web sales from one of our key business partners, Weather Intelligence Systems (WIS) have increased by 24% to R4,4 million (FY 2012: R3,5 million).

## Other Income

Revenue from investments decreased by 19% from R5,93 million to R4,78 million year-on-year due to utilisation of surplus funds. Surplus cash funds from the current account have been allocated to interest bearing short-term investment and call accounts. Interest rates are negotiated with financial institutions on a monthly basis, or when the investment matures. Investments are placed according to the rules of the PFMA.

The relationship between externally generated revenue and internal revenue received as a grant from the DEA is as follows:

	2013	2012
External revenue as % of total revenue	37%	38%
Internal revenue as % of total revenue	63%	62%

## Expenses

Total expenses year-on-year have increased by 13% from R237,42 million to R268,22 million. Below is the breakdown of the expenses:

	2013	2012	Increase/(Decrease)	
	R'000	R'000	R'000	%
Administrative expenses	<b>12.97</b>	6.69	6.29	94%
Employee costs	<b>148.26</b>	140.29	7.96	6%
Amortisation	<b>2.76</b>	1.54	1.22	79%
Depreciation	<b>20.49</b>	15.78	4.70	30%
Other operating expenses	<b>84.64</b>	73.45	11.19	15%
	<b>269.12</b>	237.76	31.36	13%

## Administrative Expenses

Administrative expenses have increased by 94% from R6,69 million to R12,97 million year-on-year. This increase was mainly attributed to the following:

- Provision for doubtful and bad debts written off, increased from R0,140 million to R4,222 million year-on-year due to provisionally liquidated and liquidated debtors in the aviation industry. During the current financial year, SAWS wrote off the debts of 1Time and Velvet Sky, which were deemed by management to be irrecoverable.
- As a result of the fluctuating currency, SAWS realised a foreign exchange loss of R0,410 million for the year (FY 2012: R0,106 million).
- Legal fees increased from R0,995 million to R2,013 year-on-year, due mainly to the litigation for the Bloemfontein radar site and pending CCMA cases.
- Internal audit fees for the year increased by 49% to R 1,06 million. This increase was based on the approved audit plan by the Audit and Risk Committee.

## Employee Benefits

Employee costs have increased by 6% year-on-year to R148,26 million (FY 2012: R140,29 million) in line with CPI. Employee costs constituted 55% (FY 2012: 59%) of the total expenses of the SAWS.

## Depreciation

Depreciation increased by 30% from R15,78 million to R20,49 million year-on-year. The increase is as a result of utilising surplus funds for capital acquisition and the capitalisation of SAAQIS assets.

## Other Operating Expenses

Other operating expenses increased by 15% (R11.19 million) from R73.45 million to R84.64 million year-on-year.

The following were the major increases in operating expenses:

- Local and foreign travel increased by 22% from R9,9 million to R12,48 million year-on-year. This can be attributed to higher ticket costs, especially on international trips, caused by the volatile Rand relative to other foreign currencies.
- Equipment expensed items, consisting mainly of upper-air balloons, radiosondes, and gases for the GAW station were also negatively affected by the volatile currency as they increased from R4,75 million to R6,30 million mainly due to an unfavourable exchange rate and a delay in the procurement of radiosondes from an international supplier, due to the earthquake in Japan.
- In order to improve security around its offices, and the radar sites, SAWS's annual security and cleaning costs increased from R1,265 million to R1,949 million year-on-year.
- Spending on bursaries increased from R1,64 million to R1,90 million, while external audit fees were up by 63% from R1,557 million to R2,544 million.

## Ratio Analysis

Below are the major ratios for SAWS for the period:

	2013	2012
Debtors' days	46	41
Creditors' days	64	28
Current ratio	2.69	3.24
Employee costs in total expenditure	55%	59%
Expenditure variance to budget (above budget)	(2%)	1%

## Post-Retirement Medical Aid Benefit

SAWS has a defined benefit obligation for all staff employed before November 2008. This obligation has been funded by payments from the entity and its employees, taking into account the recommendations of the independent qualified actuaries.

Actuarial gains and losses are recognised as comprehensive income in accordance with GRAP 25.

During the previous financial period, based on the approval from the Board, an offer was made to all in-service members who qualified for the Post-Retirement Medical Aid Benefit in the form of a lump sum. Momentum was appointed by SAWS to oversee this process. At the time of making this offer, SAWS had a total of 243 qualifying employees and out of these, a total of 217 accepted the offer which amounted to R18,924 million.

This settlement resulted in the reduction of the liability from R30,976 million to R16,202 million. During the period ending 31 March 2013, a further two employees accepted the offer to have their PRMA settled by SAWS, and this amounted to R0,058 million.

As at 31 March 2013, the SAWS liability on the PRMA decreased from R16,2 million to R14,5 million.

This current liability represents a total of 60 employees (FY 2012: 62 employees), 36 (FY 2012: 36 employees) of those who are already retired while the remaining 24 (FY 2012: 26) are still in service.

In addition to the above, SAWS purchased a plan asset in a “Customised With-Profit Annuity” from Momentum at a cost of R3,26 million (FY 2012: R6 million).

## Services Rendered by the South African Weather Service

A list of services rendered by the SAWS, significant events that have taken place during the year, as well as major projects undertaken, are discussed in detail in the Annual Report under the report by the Chief Executive Officer and the report by the operations department.

## Tariff Policy

In terms of Section 28(b) of the SAWS Act, 2001 (Act No. 8 of 2001), the SAWS charges fees for the provision of aviation meteorological services to the operator of an aircraft, for a flight undertaken within any flight information region established by the Commission for Civil Aviation in terms of the Civil Aviation Regulations, 1997, as amended.

Aviation meteorological user charges have two categories:

### Category 1

With respect to an aircraft with a Maximum Certified Mass (MCM) of 2000 kg and above:

- Charge = Tariff x W x D
- Where Tariff =

Year 1 (1 April 2013 – 31 March 2014)	R 36.72
Year 2 (1 April 2014 – 31 March 2015)	R 38.75
Year 3 (1 April 2015 – 31 March 2016)	R 36.84
- W = Square root of (MCM in metric tonnes divided by 50)
- D = Distance of flight in the flight information region of South Africa in kilometres divided by 100

## Category 2

For aircraft with a published Certified Maximum Mass between 2000 and 4999 kg that operate under Visual Flight Rules (VFR) and aircrafts with a Maximum Certified Mass (MCM) of below 2000 kg, the tariff is set at zero.

No fees are payable for an aircraft engaged in search and rescue operations and coastal patrol flights of the South African Air Force.

## Capacity and Other Constraints

**Funding Sources** – SAWS's optimal productivity relies heavily on the availability of financial enablers to ensure that desired yields on the investment are attained. It is in this context that the diminishing grant allocation from the Shareholder poses a significant constraint when juxtaposed against the economic realities under which SAWS as a Public Entity has to operate.

- **Operational Capacity** - Global trends and developmental pressures have propelled organisations similar to ours to invest more heavily in capacity building through areas such as modern technology and human capital. The enhancement in capital injections and technology ensures that there are up-to-date enablers to assist in generating relevant applications, through research, that will assist government in planning and decision-making. It is highly desirable that South Africa takes a leading role in this process. This is hamstrung by the lack of funds to invest in advanced technology and human capital; a necessary resource to drive these processes.

The R240 million received previously for the Radar recapitalisation programme as well as the R50 million to be received in the next financial period (R20 million in 2013/2014 and R30 million in 2014/2015) show commitment from government and our shareholder to investing in the SAWS infrastructure for the benefit of the South African community.

- **Employees** – In as much as there has been marked progress in the attraction and retention of skills, as demonstrated by the steadily declining turnover figures in critical and scarce skills, there is also an equally demanding challenge to maintain the figures and give such employees a conducive environment within which to operate. Part of that responsibility is to respond by creating a greater pool of scientists and technologists with greater focus on the previously disadvantaged individuals. Without the necessary financial resources, it is a tall order to achieve these objectives, more so because these are part of the SAWS mandate as per the Act.

SAWS continues to spend on bursaries for external students who, at the end of their studies, are given opportunities to work at SAWS, either through internships and/or full-time employment. Most of the students on the scientific internships are subsequently employed on a full-time basis.

## Utilisation of Donor Funds

An amount of R2,19 million including interest was received during the year under review from donor funds. These funds were received with conditions, as agreed with the donors. The following are major projects with their closing balances:

Donor Funds	R'000
Water Reasearch Commission	0.494
UAE prize for excellence	1.563
NDMC flash flood system	0.569
Solar radiation project	3.5273

Detailed information on these projects is discussed under the Chief Executive Officer's report in the Annual Report 2013. The amounts received from donors are recorded as a liability against which expenses are charged. The balance available at year end was R6.382 million (FY 2012: R0,781 million).

## Capital Expenditure

During the financial year period ending 31 March 2013, R24,6 million was spent on capital expenditure items. Major assets acquired were computer equipment to the value of R5,33 million, meteorological equipment to the value of R12,79 million and computer software to the value of R5,28 million.

### SAAQIS Project

The South African Air Quality Information system (SAAQIS) is an electronic, web-based, information management and reporting system designed to meet all the air quality information-related requirements directed or implied by the Air Quality Act and the 2007 National Framework for Air Quality Management. The SAAQIS is operated by the Air Quality Information Unit (AQIU) at the South African Weather Service (SAWS).

The SAAQIS was transferred from the Department of Environmental Affairs (DEA) to the SAWS during the 2010/2011 financial year. The initial responsibility afforded to the AQIU was the management of the SAAQIS database which includes the historical data from a number of government-owned (national, provincial and municipal) ambient air quality monitoring networks. In February 2011 the responsibility for the management of the six ambient air quality monitoring stations in the Vaal Triangle Ambient Air Quality Monitoring Network (VTAAQMN) was transferred to the SAWS. The initial uptake of the duties of managing the network was slow and the monitoring network maintenance and operations were conducted by an external service provider between March 2011 and June 2011.

An amount of R12,263 million (FY 2012: R12,181 million) was received from DEA towards the SAAQIS project. For the current year, R17,896 million was utilised (FY 2012: R5,730). This has resulted in a net surplus of R14,846 million for the year.

The reason for the budget surplus in the AQIU is due to under-spending in the 2010/2011 and 2011/2012 financial years. During this time period, the AQIU was not fully staffed and was not able to ramp up the level of operation in such a way as to utilise the budget effectively. A slow start to the project, caused by delays in finalising the SAWS-DEA MOU and later the Business Case, contributed to the 2010/2011 and 2011/2012 roll-overs. It must be noted, that during the current financial period, expenditure on the SAAQIS project has improved significantly, due to the finalisation of the Business Case, which eased pressure on spending.

The Table below depicts the income and expenditure since the inception of the project in 2009/2010:

	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13
Opening balance	-	2,000,000	12,577,564	<b>19,738,428</b>
Grant received	2,000,000	11,221,000	12,181,000	<b>12,243,000</b>
Interest capitalised	-	182,714	709,687	<b>740,544</b>
Expenditure	-	(826,150)	(5,729,822)	<b>(17,895,865)</b>
<b>Closing balance</b>	<b>2,000,000</b>	<b>12,577,564</b>	<b>19,738,428</b>	<b>14,826,108</b>

## Corporate Governance Arrangements

The SAWS is committed to the objectives and principles of transparency, accountability and integrity explained in the King III Report on Corporate Governance. A detailed discussion of the application and results of Corporate Governance in the organisation is provided under Corporate Governance in the Annual Report.

Full disclosure of risk items and policies is discussed under note 20 in the Annual Financial Statements. Disclosure of all conflict of interests and contracts with related parties is done in note 23 in the Annual Financial Statements.

Disclosure of remuneration to members of the Accounting Authority and executive management is done under note 28 in the Annual Financial Statements.

The strategic plan was amended and improved to include clear and precise direction for the organisation for the coming three years with the focus on the increase in commercial revenue. Internal controls were strictly monitored.

The Audit Committee meets on a regular basis and ensures that management adheres to internal controls and accounting policies and procedures. SizweNtsalubaGobodo was appointed in the financial period ending 31 March 2012 as internal auditors to SAWS. Their contract came to an end on 31 March 2013 and PricewaterhouseCoopers has since been appointed as SAWS's internal auditors for the next three years. This is an on-going process that aims to ensure the effective implementation of internal audit and control procedures and adherence of management.

The Audit and Risk Committee has adopted formal terms of reference and this committee is satisfied that it covered all responsibilities for the year in compliance with its Terms of Reference. (Refer to Report of the Audit and Risk Committee in the Annual Report).

## Performance Information

Performance targets are set on an annual basis. Full disclosure of these targets and performance against them are disclosed in the Annual Report. Quarterly performance reports are prepared by the South African Weather Service and submitted to the Department of Environmental Affairs, stating achievements during the previous year and assessing results against targets set.

## Scopa Resolutions

There were no resolutions taken by the Standing Committee on Public Accounts (SCOPA) for the year under review.

**Registered Office:** South African Weather Service, 442 Rigel Avenue South, Erasmusrand, Pretoria, 0181

**Postal Address:** Private Bag X097, Pretoria, 0001

## Auditors

SAWS is a Public Entity audited by the Auditor-General.

## Approval

The Annual Financial Statements set out on pages 80 to 125 have been approved by the Accounting Authority.



**Prof L Magi**

Chairperson of the Board

Date: 30 July 2013

# STATEMENT OF FINANCIAL POSITION

as at 31 March 2013

	Notes	2013 R	2012 R
<b>ASSETS</b>			Restated
<b>Non-current assets</b>		<b>370 254 993</b>	364 910 932
Property, plant and equipment	7	<b>319 152 676</b>	316 518 169
Intangible assets	8	<b>6 572 317</b>	3 862 763
Investment property	9	<b>44 530 000</b>	44 530 000
<b>Current assets</b>		<b>117 393 760</b>	140 067 625
Inventory	10	<b>4 324 850</b>	4 567 938
Trade and other receivables from exchange transactions	11	<b>19 454 603</b>	15 700 289
Cash and cash equivalents	12	<b>93 614 307</b>	119 799 398
<b>Total assets</b>		<b>487 648 753</b>	504 978 557
<b>LIABILITIES</b>			
<b>Non-current liabilities</b>		<b>15 422 894</b>	21 368 488
Deferred rental obligations	13	<b>472 243</b>	4 749 546
Retirement benefit obligations	14	<b>14 500 678</b>	16 202 000
Provisions - non-current	16	<b>449 973</b>	416 942
<b>Current liabilities</b>		<b>43 702 174</b>	43 337 146
Trade and other payables	15	<b>25 963 946</b>	28 457 672
Provisions - current	16	<b>11 218 347</b>	13 800 000
Donor funding	17	<b>6 382 862</b>	781 143
Radar recapitalisation project	17	<b>137 019</b>	298 331
<b>TOTAL LIABILITIES</b>		<b>59 125 068</b>	64 705 634
<b>Reserves</b>		<b>428 523 685</b>	440 272 923
Non-distributable reserves		<b>57 977 777</b>	57 984 042
Accumulated surplus		<b>370 545 908</b>	382 288 881
<b>TOTAL RESERVES AND LIABILITIES</b>		<b>487 648 753</b>	504 978 557
<b>Total net reserves</b>		<b>428 523 685</b>	440 272 923

# STATEMENT OF FINANCIAL PERFORMANCE

for the year ended 31 March 2013

	Notes	2013 R	2012 R
<b>Revenue</b>			Restated
Revenue from non-exchange transactions - opex grant		<b>144 690 832</b>	137 928 044
Revenue from non exchange transactions - capex grant		<b>14 342 870</b>	36 479 040
Revenue from exchange transactions		<b>87 682 213</b>	97 162 344
Other revenue		<b>6 634 200</b>	8 190 134
<b>Total revenue</b>	18	<b>253 350 115</b>	279 759 562
<b>Expenses</b>			
Administrative expenses	19	<b>(12 973 244)</b>	(6 686 440)
Employee costs	20	<b>(148 256 340)</b>	(140 294 404)
Amortisation	8	<b>(2 760 477)</b>	(1 544 412)
Depreciation	7	<b>(20 486 122)</b>	(15 782 887)
Other operating expenses	21	<b>(84 643 940)</b>	(73 453 051)
<b>Total expenses</b>		<b>(269 120 123)</b>	(237 761 194)
<b>Operating (deficit)/surplus for the period</b>		<b>(15 770 008)</b>	41 998 368
Loss from revaluation of property, plant and equipment	7	-	(538 318)
Actuarial gain/(loss) on defined benefit pension plan	14	<b>22 000</b>	(6 598 000)
<b>(Deficit)/surplus for the period</b>	22	<b>(15 748 008)</b>	34 862 050

# STATEMENT OF CHANGES IN NET ASSETS

for the year ended 31 March 2013

	Notes	Non-distributable Reserves R	Accumulated Surplus/(Deficit) R	Total R
<b>Restated balance at 31 March 2011</b>		<b>57 184 730</b>	<b>335 674 775</b>	<b>392 859 505</b>
Surplus or deficit for the year		-	25 248 434	25 248 434
Property revaluation/(impairment)		80 000	-	80 000
Aircraft revaluation/(impairment)		232 347	-	232 347
Prior period adjustment		476 516	(2 183 287)	(1 706 771)
<b>Balance at 31 March 2012</b>		<b>57 973 593</b>	<b>358 739 922</b>	<b>416 713 515</b>
Prior period adjustment - SAAQIS 2011		-	12 577 564	12 577 564
Prior period adjustment - donor fund projects		-	(90 033)	(90 033)
Prior period adjustment - other	33	10 449	9 703 650	9 714 099
Prior period adjustment - change in accounting policy and estimate		-	1 357 778	1 357 778
<b>Restated balance at 31 March 2012</b>		<b>57 984 042</b>	<b>382 288 881</b>	<b>440 272 923</b>
Prior year adjustment - depreciation		(161 744)	4 005 035	3 843 291
Increase in revaluation of property	7	216 250	-	216 250
Decrease in revaluation of aircraft	7	(60 771)	-	(60 771)
Deficit for the year		-	(15 748 008)	(15 748 008)
<b>Balance at 31 March 2013</b>		<b>57 977 777</b>	<b>370 545 908</b>	<b>428 523 685</b>

# STATEMENT OF COMPARISON BETWEEN BUDGET AND ACTUAL

	Actual 2013 R	Approved Budget 2013 R	Final Budget 2013 R	Variance (Actual - Final Budget) 2013 R	Variance (Approved Budget - Final Budget) 2013 R
<b>Revenue</b>					
Revenue from non-exchange transactions - opex grant	144 690 832	138 318 000	143 470 685	1 220 147	(5 152 685)
Revenue from non-exchange transactions - capex grant	14 342 870	-	15 942 929	(1 600 059)	(15 942 929)
Revenue from exchange transactions	87 682 213	98 731 920	99 011 924	(11 329 711)	(280 004)
Other revenue	6 634 200	6 000 000	5 719 996	914 204	280 004
<b>Total revenue</b>	<b>253 350 115</b>	<b>243 049 920</b>	<b>264 145 534</b>	<b>(10 795 419)</b>	<b>(21 095 614)</b>
<b>Expenses</b>					
Administrative expenses	(12 973 244)	(7 249 683)	(7 748 628)	(5 224 616)	498 945
Employee costs	(148 256 340)	(131 713 030)	(148 689 143)	432 803	16 976 113
Amortisation	(2 760 477)	(1 667 868)	(1 667 862)	(1 092 615)	(6)
Depreciation	(20 486 122)	(15 870 984)	(15 870 987)	(4 615 135)	3
Other operating expenses	(84 643 940)	(86 548 355)	(90 168 914)	5 524 974	3 620 559
<b>Total expenses</b>	<b>(269 120 123)</b>	<b>(243 049 920)</b>	<b>(264 145 534)</b>	<b>(4 974 589)</b>	<b>21 095 614</b>
<b>Operating surplus for the period</b>	<b>(15 770 008)</b>	<b>-</b>	<b>-</b>	<b>(15 770 008)</b>	<b>-</b>
Loss from revaluation of property, plant and equipment	-	-	-	-	-
Actuarial loss on defined benefit pension plan	22 000	-	-	22 000	-
<b>Deficit for the period</b>	<b>(15 748 008)</b>	<b>-</b>	<b>-</b>	<b>(15 748 008)</b>	<b>-</b>

Refer to Note 31 for the variance analysis.

# CASHFLOW STATEMENT

for the year ended 31 March 2013

	Notes	2013 R	2012 R
<b>CASHFLOW FROM OPERATING ACTIVITIES</b>			Restated
<b>Receipts</b>		<b>249 578 876</b>	276 208 724
Government grant		<b>159 033 702</b>	174 407 084
Commercial and other income		<b>85 763 799</b>	95 875 030
Income from investments		<b>4 781 375</b>	5 926 610
<b>Payments</b>		<b>(245 221 337)</b>	(245 637 960)
Employee costs		<b>(148 256 340)</b>	(140 294 404)
Suppliers		<b>(96 964 997)</b>	(105 343 556)
<b>Net cashflow from/(used in) operating activities</b>	23	<b>4 357 539</b>	30 570 764
<b>CASHFLOW FROM INVESTING ACTIVITIES</b>			
Proceeds on disposal of property, plant and equipment and intangible assets		<b>16 924</b>	210 019
Acquisition of property, plant and equipment and intangible assets		<b>(24 604 505)</b>	(36 479 040)
<b>Net cashflow from/(used in) investing activities</b>		<b>(24 587 581)</b>	(36 269 021)
<b>CASHFLOW FROM FINANCING ACTIVITIES</b>			
Decrease in long-term liabilities		<b>(5 955 049)</b>	(16 217 169)
<b>Net cashflow from/(used in) financing activities</b>		<b>(5 955 049)</b>	(16 217 169)
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>(26 185 091)</b>	(21 915 426)
Cash and cash equivalents at beginning of period		<b>119 799 398</b>	141 714 824
<b>Cash and cash equivalents at end of period</b>	12	<b>93 614 307</b>	119 799 398

# NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2013

## 1. BASIS OF PREPARATION

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The annual financial statements were prepared in accordance with the effective Standards of Generally Recognised Accounting Practices (GRAP), including any interpretations, guidelines and directives issued by the Accounting Standards Board.

The financial statements are presented in South African Rands, since that is the functional currency in which the majority of the South African Weather Service's transactions are denominated. The annual financial statements were prepared on a going concern basis. All accounting policies were consistently applied to all the periods presented, except for the change in accounting policy as discussed in Note 6.

The amounts in the annual financial statements were rounded to the nearest rand.  
The annual financial statements are prepared on a historical basis, unless otherwise stated.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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The preparation of financial statements, in conformity with GRAP, requires the use of some critical financial statements accounting estimates. It also requires management to exercise its judgement in the process of applying the entity's accounting policies.

### 2.1 Revenue recognition

Revenue is recognised when it is probable that future economic benefits or service potential would flow to the entity and these benefits could be measured reliably. Revenue is measured at fair value of the consideration received or receivable and represents the amounts receivable for services provided in the normal course of business.

#### ***Revenue from exchange transactions***

An exchange transaction is a transaction in which the entity receives assets or services, or has liabilities extinguished and directly gives approximate equal value, primarily in the form of goods, services or use of assets or services to the other party, in exchange. Revenue from exchange transactions comprises regulated and non-regulated commercial revenue. This is revenue for fees levied for the supply of weather-related information to the aviation industry, as well as other users. Revenue from information fees levied is recognised when the information is supplied to the customer.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the interest rate applicable. Other income, mainly the letting of aircraft, is recognised when the service is rendered to the customer.

Project income received is recognised together with the respective expenses in the statement of financial performance.

#### ***Revenue from non exchange transactions***

Revenue from non-exchange transactions comprises government grants. Conditions on transferred assets are stipulations specifying that the future economic benefits or service potential, embodied in the asset, are required to be consumed by the recipient as specified, or future economic benefits or service potential must be returned to the transferor.

Restrictions on transferred assets are stipulations that limit or direct the purposes for which a transferred asset may be used, but do not specify that future economic benefits or service potential is required to be returned to the transferor if not deployed as specified.

Stipulations on transferred assets are in terms of law or regulations, or a binding arrangement imposed upon the use of a transferred asset by entities external to the reporting entity.

#### ***Recognition***

An inflow of resources from a non-exchange transaction, recognised as an asset, is recognised as revenue, except to the extent that a liability is also recognised in respect of the same inflow.

As the entity satisfies a present obligation, recognised as a liability in respect of an inflow of resources from a non-exchange transaction recognised as an asset, it reduces the carrying amount of the liability recognised and recognises an amount of revenue equal to that reduction.

Revenue received from conditional grants, donations and funding is recognised as revenue to the extent that the entity has complied with any of the criteria, conditions or obligations embodied in the agreement. To the extent that the criteria, conditions or obligations were not met, a liability is recognised.

#### ***Measurement***

Revenue from a non-exchange transaction is measured at the amount of the increase in net assets recognised by the entity. When, as a result of a non-exchange transaction, the entity recognises an asset, it also recognises revenue equivalent to the amount of the asset, measured at its fair value as at the date of acquisition, unless it is also required to recognise a liability. Where a liability is required to be recognised, it will be measured as the best estimate of the amount required to settle the obligation at the reporting date, and the amount of the increase in net assets, if any, recognised as revenue. When a liability is subsequently reduced because the event occurs or a condition is satisfied, the amount of the reduction in the liability is recognised as revenue.

## 2.2 Leases

A lease is an agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time.

A lease is classified as a finance lease if it substantially transfers all the risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not substantially transfer all the risks and rewards incidental to ownership.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor, are classified as operating leases.

Lease payments under an operating lease are recognised as an expense in the statement of financial performance, on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern of the user's benefit, even if payments are not on that basis. The difference between the amounts recognised as an expense and the contractual payments is recognised as an operating lease asset.

Assets held under finance leases are recognised as assets at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset. Lease payments are apportioned between finance charges and a reduction of the lease obligation, so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to the statement of financial performance.

Any contingent rents are expensed in the period that they are incurred.

## 2.3 Foreign currencies

Foreign currency transactions are recorded, on initial recognition in the functional currency (rands), by applying, to the foreign currency amount, the spot exchange rate between the functional currency and the foreign currency at the date of transaction.

At each reporting date:

- foreign currency monetary items are translated, using the closing rate;
- non-monetary items that are measured in terms of historical cost in a foreign currency are translated, using the exchange rate at the date of the transaction; and
- non-monetary items that are measured at fair value in foreign currency are translated, using the exchange rate at the date when the fair value was determined.

Exchange differences, arising on the settlement of monetary items or on translating monetary items at rates different from those that were translated on initial recognition during the period or on previous financial statements, are recognised in surplus or deficit in the period in which they arise.

SAWS did not enter into forward contracts and options in order to hedge its exposure to foreign exchange risks during the financial period under review.

## 2.4 Property, plant and equipment

### **Measurement and recognition**

Property, plant and equipment are initially recognised at cost.

Land and buildings and aircraft are shown at fair value, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The fair value of the items of land and buildings and aircraft is determined from market-based evidence by appraisal that is undertaken by professionally qualified valuers.

If an asset's carrying amount is increased as a result of revaluation, the increase is credited directly to the revaluation surplus. However, the increase is recognised in the surplus or deficit to the extent that it reverses the revaluation decrease of the same asset previously recognised in the surplus or deficit.

If an asset's carrying amount is decreased as a result of a revaluation, the decrease is recognised in the surplus or deficit. However, the decrease is debited directly in net assets to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease, recognised directly in net assets, reduces the amount accumulated in net assets under the revaluation heading surplus.

The revaluation surplus included in net assets in respect of an item of land and buildings and aircraft will be transferred directly to accumulated surpluses or deficits when the asset is derecognised.

The non-distributable reserve is released as the buildings and aircraft are depreciated.

All other items of property, plant and equipment are stated at historical cost, less any accumulated depreciation and any accumulated impairment losses.

	<b>YEARS</b>
Buildings - lease improvements	10
Fence	10
Houses	50
Aircraft - Airframes	20
Aircraft - Engines	5400 hrs.
Aircraft - Propellers	5
Motor vehicles	5
Meteorological instruments - Other	10
Meteorological instruments - Radar	25
Office equipment	15
Computer equipment	5
Computer software and website development	5
Library books and equipment	10
Furniture and fittings	15
Tools and other equipment	10

The residual value and the useful life of assets are reviewed at least at each reporting date and, if expectations differ from the previous estimates, the change(s) is/are accounted for as a change in accounting estimate in accordance with the Standards of GRAP on Accounting Policies, Changes in Accounting Estimates and Errors.

Depreciation of an asset begins when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation of an asset ceases when the asset is derecognised.

**Derecognition**

The carrying amount of an item of property, plant and equipment is derecognised on disposal, or when no future economic benefits or service potential is expected from its use or disposal.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in the surplus or deficit when the item is derecognised. Gains are not classified as revenue. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

**2.5 Intangible assets**

**Measurement and recognition**

An intangible asset is recognised when:

- it is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the entity; and
- the cost or fair value of the asset can be measured reliably.

The entity assesses the probability of expected future economic benefits or service potential, using reasonable and supportable assumptions that represent management’s best estimate of the set of economic conditions that will exist over the useful life of the asset.

Intangible assets are initially recognised at cost. After initial recognition, an intangible asset is carried at its cost, less any accumulated amortisation and any accumulated impairment losses.

The intangible asset is amortised when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. The depreciable amount of an asset is allocated on a systematic basis, using the straight-line method over its useful life on the following basis:

	YEARS
Computer software	5

The residual value and the useful life of an asset are reviewed at least at each reporting date and, if expectations differ from the previous estimates, the change(s) is/are accounted for as a change in accounting estimate in accordance with the Standards of GRAP on Accounting Policies, Changes in Accounting Estimates and Errors.

**Derecognition**

The intangible asset is derecognised on disposal, or when no future economic benefits or service potential are expected from its use or disposal.

The gain or loss arising from the derecognition of an intangible asset is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the asset. It is recognised in the surplus or deficit when the asset is derecognised.

## 2.6 Investment property

### ***Measurement and recognition***

Investment property is recognised as an asset when, and only when it is probable that the future economic benefits and service potential that are associated with the investment property will flow to the entity and the cost or fair value of the investment property can be measured reliably.

After initial recognition, investment property is measured at fair value. A gain or loss arising from a change in the fair value of investment property is included in the surplus or deficit for the period in which it arises. The fair value of investment property reflects market conditions at the reporting date.

### ***Derecognition***

Investment property is derecognised on disposal or when the investment property is permanently withdrawn from use and no future economic benefits or service potential are expected from its disposal.

Gains or losses arising from the retirement or disposal of investment property are determined as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognised in the surplus or deficit in the period of the retirement or disposal.

## 2.7 Inventories

Inventories are initially measured at cost except where inventories are acquired at no cost or for nominal consideration; then their costs constitute their fair value as at the date of acquisition.

Inventories are stated at the lower of cost and net realisable value or current replacement cost. Net realisable value represents the estimated selling price, less all estimated costs to completion and costs to be incurred in marketing, selling and distribution. Inventory comprises consumable goods and goods held for resale. Current replacement cost represents the cost to replace the inventory at the reporting date.

Cost is determined on the following basis:

- Consumable goods are valued, using the weighted average cost basis.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. If there is no related revenue, the expenses are recognised when the goods are distributed or related services rendered. The amount of any writedown of inventories to net realisable value or current replacement cost, and all losses of inventories are recognised as an expense in the period that the writedown or loss occurs. The amount of any reversal of any writedown of inventories, arising from an increase in net realisable value or current replacement cost, is recognised as a reduction in the amount of inventories recognised, as an expense in the period in which the reversal occurs.

Redundant and slow-moving inventories are identified and written down with regard to their estimated economic or realisable values.

## 2.8 Impairment of cash-generating and non-cash-generating assets

Cash-generating assets are those assets held by the entity with the primary objective of generating a commercial return.

An asset generates a commercial return when it is deployed in a manner consistent with that adopted by a profit-oriented entity.

Conversely, an asset may be a non-cash-generating asset, even though it may be breaking even or generating a commercial return during a particular reporting period.

### **Identification**

When the carrying amount of a cash and non-cash-generating asset exceeds its recoverable amount, it is impaired.

At each reporting date, the entity assesses whether there is any indication that a cash and non-cash-generating asset or a non-cash-generating asset only may be impaired. If any such indication exists, the entity estimates the recoverable amount of the asset.

Irrespective of whether there is any indication of impairment, the entity also tests a cash-generating intangible asset with an indefinite useful life or a cash-generating intangible asset not yet available for use for impairment annually, by comparing its carrying amount with its recoverable amount. This impairment test is performed at the same time every year. If an intangible asset was initially recognised during the current reporting period, that intangible asset had been tested for impairment before the end of the current reporting period.

### **Value in use**

Value in use of a cash-generating-asset is the present value of the estimated future cashflows expected to be derived from the continuing use of an asset and from its disposal at the end of its useful life.

When estimating the value in use of an asset, the entity estimates the future cash inflow and outflow to be derived from the continuing use of the asset and from its ultimate disposal, and the entity applies the appropriate discount rate to that future cashflow.

Value in use of a non-cash-generating asset is determined by the calculation of the depreciated replacement cost value of the asset.

### **Discount rate**

The discount rate is a pre-tax rate that reflects current market assessments of the time value of money, represented by the current risk-free rate of interest and the risks specific to the asset, for which future cashflow estimates have not been adjusted.

### **Recognition and measurement (individual asset)**

If the recoverable amount of a cash and non-cash-generating asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. This reduction is an impairment loss. An impairment loss is recognised immediately in the surplus or deficit. After the recognition of an impairment loss, the depreciation (amortisation) charge for the cash-generating asset is adjusted in future periods to allocate the cash-generating asset's revised carrying amount, less its residual value (if any), on a systematic basis during its remaining useful life.

If there is any indication that an asset may be impaired, the recoverable amount is estimated. If it is not possible to estimate the recoverable amount of the individual asset, the entity determines the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).

If an active market exists for the output produced by an asset or group of assets, that asset or group of assets is identified as a cash-generating unit, even if some or all of the output is used internally. If the cash inflow generated by any asset or cash-generating unit is affected by internal transfer pricing, the entity uses management's best estimate of a future price(s) that could be achieved at arm's length transactions in estimating:

- the future cash inflow used to determine the asset's or cash-generating unit's value in use; and
- the future cash outflow used to determine the value in use of any other assets or cash-generating units that are affected by the internal transfer pricing.

Cash-generating units are identified consistently for the same asset or types of assets from period to period, unless a change is justified.

The carrying amount of a non-cash-generating unit is determined on a basis consistent with the way the recoverable amount of the cash-generating unit is determined.

An impairment loss is recognised for a cash-generating unit and non-cash generating unit if the recoverable amount of the unit is less than the carrying amount of the unit. The impairment is allocated to reduce the carrying amount of the unit's cash-generating assets on a pro rata basis, based on the carrying amount of each asset in the unit. These reductions in carrying amounts are treated as impairment losses on individual assets.

In allocating an impairment loss, the entity does not reduce the carrying amount of an asset below the highest of:

- its fair value less costs to sell (if determinable);
- its value in use (if determinable); and
- zero.

The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other cash-generating assets of the unit.

Where a non-cash-generating asset contributes to a cash-generating unit, a proportion of the carrying amount of that non-cash-generating asset is allocated to the carrying amount of the cash-generating unit, prior to estimation of the recoverable amount of the cash-generating unit.

### ***Reversal of impairment loss***

The entity assesses whether there is any indication that an impairment loss, recognised in prior periods, for a cash and non-cash generating asset, may no longer exist or may have decreased. If any such indication exists, the entity estimates the recoverable amount of that asset.

An impairment loss, recognised in prior periods, for a cash and non-cash generating asset is reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The carrying amount of the asset is increased to its recoverable amount. The increase is a reversal of an impairment loss. The increased carrying amount of an asset, attributable to a reversal of an impairment loss, does not exceed the carrying amount that would have been determined (net of depreciation or amortisation) had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss for a cash and non-cash-generating asset is recognised immediately in the surplus or deficit.

After a reversal of an impairment loss has been recognised, the depreciation (amortisation) charge for the cash and non-cash-generating asset is adjusted in future periods to allocate the non-cash-generating asset's revised carrying amount, less its residual value (if any), on a systematic basis during its remaining useful life.

A reversal of an impairment loss for a cash-generating and non-cash-generating unit is allocated to the cash-generating assets or non-cash generating units of the unit, pro rata with the carrying amounts of those assets. These increases in carrying amounts are treated as reversals of impairment losses for individual assets.

In allocating a reversal of an impairment loss for a cash-generating unit and non-cash generating assets, the carrying amount of an asset is not increased above the lower of:

- its recoverable amount (if determinable); and
- the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior periods.

The amount of the reversal of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit.

#### **Redesignation**

The redesignation of assets from a cash-generating asset to a non-cash-generating asset, or from a non-cash-generating asset to a cash-generating asset only occurs when there is clear evidence that such a redesignation is appropriate.

## **2.9 Financial instruments**

#### **Recognition**

Financial assets and liabilities are recognised on the entity's statement of financial position when the entity becomes a party to the contractual provisions of the instrument. All "regular way" purchases and sales of financial assets are initially recognised, using trade date accounting.

#### **Measurement**

Financial instruments are initially measured at fair value. Transaction costs will be included on initial recognition for financial instruments at amortised cost and at cost. Subsequent to initial recognition, these instruments are measured as set out below.

#### **Financial assets**

The entity's principal financial assets are trade and other receivables and cash and cash equivalents.

- **Trade and other receivables (financial asset at amortised cost)**

Trade and other receivables are recognised initially at fair value and subsequently measured, providing for the time value of money and the impairment of receivables.

Short-term receivables are not discounted to present values if the original credit period granted is in line with the public sector credit period.

#### *Writing off of debts*

Prior to writing off debts, management assesses the recoverability of the debt. If it is determined that the debt is irrecoverable, the debt is written off if management is convinced that the recovery of the debt would be uneconomical, or that the recovery would cause undue hardship to the debtor or his or her dependants, or it would be to the advantage of the state to effect a settlement of its claim or to waive the claim.

#### *Impairment of receivables*

Impairment of receivables is recognised when SAWS assesses the certainty that the outstanding debtors are likely to be irrecoverable and have been long overdue.

- **Cash and cash equivalents (financial asset at amortised cost)**

Cash and cash equivalents include cash in hand, deposits held on call with banks and other short-term highly liquid investments. Cash and cash equivalents are initially measured at fair value and subsequently measured at amortised cost.

#### **Financial liabilities**

The entity's principal financial liabilities are trade and other payables. Trade and other payables are initially measured at fair value, less any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost, using the effective interest rate method. Interest expenses on these items are recognised in the surplus or deficit and they are included in "finance costs".

The entity's accrual amount represents goods and services that were delivered, and an invoice has been received from the supplier, but remains unpaid as at year-end.

Short-term payables are not discounted to present values if the original credit period granted is in line with the public sector credit period.

#### **Gains and losses on subsequent measurement**

For financial assets and financial liabilities measured at amortised cost or cost, a gain or loss is recognised in the surplus or deficit when the financial asset or financial liability is derecognised or impaired, or via the amortisation process.

#### **Derecognition**

A financial asset or a portion thereof is derecognised when the entity realises the contractual rights to the benefits specified in the contract, the rights expire, the entity surrenders those rights or otherwise loses control of the contractual rights that comprise the financial asset. On derecognition, the difference between the carrying amount of the financial asset and the sum of the proceeds receivable as well as any prior adjustments that were reported to reflect the fair value of the asset in equity, is included in the net surplus or deficit for the period.

Financial liabilities are derecognised when the obligation is discharged, cancelled or expires.

#### **Fair value considerations**

The fair values at which financial instruments are carried at the statement of financial position date were determined by using available market values. Where market values were not available, fair values were calculated by discounting expected future cashflow at prevailing interest rates. The fair values were estimated, using available market information and appropriate valuation methodologies, but are not necessarily indicative of the amounts that the entity could realise in the normal course of business. The carrying amounts of financial

assets and financial liabilities, with a maturity of less than one year, are assumed to be amortised cost due to the short-term trading cycle of these items.

## 2.10 Provisions, contingent liabilities and contingent assets

Provisions are recognised when:

- the entity has a present obligation as a result of a past event;
- it is probable that an outflow of resources, embodying economic benefits or service potential, would be required to settle the obligation; and
- a reliable estimate of the obligation can be made.

The amount of a provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date.

Where the effect of time value of money is material, the amount of a provision is the present value of the expenditure expected to be required to settle the obligation. The discount rate is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognised when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement is treated as a separate asset. The amount recognised for the reimbursement does not exceed the amount of the provision.

Provisions are reviewed at each reporting date and adjusted to reflect the current best estimate. Provisions are reversed if it is no longer probable that an outflow of resources, embodying economic benefits or service potential, will be required to settle the obligation.

Where discounting is used, the carrying amount of a provision increases in each period, so as to reflect the passage of time.

This increase is recognised as an interest expense.

Provisions are not recognised for future operating deficits.

If the entity has a contract that is onerous, the present obligation (net of recoveries) in terms of the contract is recognised and measured as a provision.

A constructive obligation to restructure arises only when the entity:

- 1) has a detailed, formal plan for the restructuring, identifying at least:
  - the activity/operating unit or part of a activity/operating unit concerned;
  - the principal locations affected;
  - the location, function and approximate number of employees who will be compensated for services being terminated;
  - the expenditures that will be undertaken; and
  - when the plan will be implemented.

2) has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

A restructuring provision includes only the direct expenditure arising from the restructuring, which is both:

- necessarily entailed by the restructuring; and
- not associated with the ongoing activities of the entity.

#### ***Contingent asset***

A contingent asset is a possible asset that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events that are not wholly in the control of the entity.

#### ***Contingent liability***

A possible obligation that arises from past events and of which the existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events that are not wholly within the control of the entity.

A present obligation that arises from past events, but is not recognised because

- it is not probable that an outflow of resources, embodying economic benefits or service potential, would be required to settle the obligation; or
- the amount of the obligation cannot be measured with sufficient reliability.

Contingent assets and contingent liabilities are not recognised.

## **2.11 Employee benefits**

#### ***Post-retirement medical aid benefit***

The entity has a defined benefit obligation. The obligation is generally funded by payments from the entity and employees, taking into account the recommendations of independent qualified actuaries. For a defined benefit obligation, the related current service cost and, where applicable, the past service cost, are determined by using the projected unit credit method.

A defined benefit obligation is an obligation that defines an amount of benefit to be provided, usually as a function of one or more factors, such as inflation, discounting and demographic factors - both before and after retirement.

Actuarial gains and losses are recognised as income or expense in the statement of financial performance. The entity contributions to defined benefit obligations are charged to the statement of financial performance in the year to which they relate. Once the contributions have been paid, the entity has no further payment obligations.

#### ***Short-term employee benefits***

The cost of all short-term employee benefits is recognised during the period in which the employee renders the related service. Accruals for employee entitlements to salaries, performance incentives and annual leave, represent the amounts which the entity has a present obligation to pay as a result of employees' services provided to the reporting date. The accruals were calculated at undiscounted amounts on current salary rates. The expected cost of incentives payments is recognised as an expense when there is a legal or constructive obligation to make such payments as a result of past performance.

## 2.12 Comparative figures

The annual financial statements are prepared on a comparative basis and where necessary, comparative figures were adjusted to conform to changes in the presentation during the current period.

## 2.13 Taxation

No provision was made for taxation, as the entity is exempt from income tax in terms of Section 10 of the Income Tax Act, 1962 (Act No. 58 of 1962).

## 2.14 Value added taxation (VAT)

The Revenue Laws Amendment Act, 2003 (Act No. 45 of 2003), commenced on 22 December 2003. Previously, the definition of enterprise had placed SAWS as listed in Schedule 3A within the scope of VAT. The Amendment Act, however amended this definition of enterprise and effectively places the entity outside the scope of VAT. The amended definition of enterprise came into operation on 1 April 2005.

## 2.15 Related parties

All transactions and balances with national Government departments and state-controlled entities are regarded as related party transactions and are disclosed separately in the Notes to the financial statements (refer to Note 25).

Parties are considered to be related if one party has the ability to control the other party or to exercise significant influence or joint control over the other party in making financial and operational decisions.

A related party transaction is a transfer of resources, services or obligations between related parties, regardless of whether a price is being charged.

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity directly or indirectly.

Only transactions that are not at arm's length or not in the ordinary course of business are disclosed.

## 2.16 Fruitless, wasteful and unauthorised, irregular expenditure

Irregular expenditure refers to expenditure incurred in contravention of, or not in accordance with, a requirement of the Public Audit Act, 2004 (Act No. 25 of 2004). Unauthorised expenditure is an overspending of the budget or expenditure which is not in accordance with the purpose of the budget. Fruitless and wasteful expenditure refers to expenditure incurred in vain and could have been avoided, had reasonable care been exercised. All unauthorised, irregular, fruitless or wasteful expenditure is charged against profit and loss in the period it was incurred.

## **2.17 Commitments**

Commitments represent the orders issued to the suppliers that were approved, but where no delivery has taken place as at year-end.

Commitments are not recognised in the statement of financial position as a liability and assets, but are included in the disclosure notes.

## **2.18 Budget information**

Budget information, in accordance with GRAP 1 and 24, was provided in the annual financial statements and in the Notes to the annual financial statements.

## **3. SIGNIFICANT ACCOUNTING JUDGEMENTS**

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In preparing the annual financial statements, management is required to do estimates and make assumptions that affect the amounts represented in the annual financial statements and related disclosures. Use of available information and the application of judgement are inherent in the formation of estimates. Actual results of the future could differ from these estimates, which may be material to the annual financial statements.

### **3.1 Useful lives of property, plant and equipment**

For the financial period under review, management applied judgement in determining the extended useful lives of fixed assets in terms of GRAP 17: Property, Plant and Equipment, and the result was that the useful lives had not changed from the previous financial year.

### **3.2 Impairment of cash and non-cash-generating assets**

Refer to Note 2.8 for the estimates in determining the fair value, less cost to sell, and the value in use.

### **3.3 Impairment of receivables**

Due to the complexity and economic challenges facing the aviation industry, management continued to apply the 120 days outstanding period as a determining factor to write-off irrecoverable debtors.

### **3.4 Provisions**

Provisions were raised and management determined an estimate based on the information available. Additional disclosures of these estimates of provisions are included in the annual financial statements.

#### 4. GOING CONCERN

The annual financial statements were prepared on a going concern basis. Nothing has come to the attention of the Accounting Officer, Executive Management and the Board to indicate that the organisation would not remain a going concern for the foreseeable future, based on forecasts and its liquidity. These financial statements support the viability of SAWS.

#### 5. GRAP, AMENDMENTS AND INTERPRETATIONS OF STANDARDS ISSUED BUT NOT YET EFFECTIVE OR ADOPTED

GRAP 3, namely Accounting Policies, Changes in Accounting Estimates and Errors, requires disclosures in respect of new GRAP standards, amendments and interpretations that are, or will be applicable after the reporting period. There is a number of GRAP standards, amendments and interpretations that was issued by the Accounting Standards Board and will be effective for financial statements after this reporting period.

The following are the standards of GRAP applicable to SAWS which were approved, and their effective date as determined by the Minister of Finance is 1 April 2013.

GRAP 25	Employee benefits
GRAP 31	Intangibles assets (replaces GRAP 102)

##### Improvements to GRAP as applicable to SAWS

IGRAP 1	Applying the probability test upon initial recognition of revenue.
IGRAP 1	Applying the probability test upon initial recognition of exchange revenue.
IGRAP 3	Determining whether an arrangement contains a lease.
IGRAP 7	The limit on a defined benefit asset, minimum funding requirements and their interaction.
IGRAP 8	Agreements from exchange transactions for the construction of assets.
IGRAP 9	Distributions of non-cash assets to owners.
IGRAP 10	Assets received from customers.
IGRAP 13	Operating leases - incentives.
IGRAP 14	Evaluating the substance of transactions involving the legal form of a lease.
IGRAP 15	Revenue - barter transactions involving advertising services.
IGRAP 16	Intangible assets - website costs.

##### The following GRAP standards were approved but their effective date has not yet been determined by the Minister of Finance:

GRAP 20	Related party disclosures.
GRAP 105	Transfers of functions between entities under common control.
GRAP 106	Transfers of functions between entities not under common control.
GRAP 107	Mergers.

The entity opted to continue applying IAS 19 instead of GRAP 25, which is consistent with the previous application of the Standard.

Management believes that the adoption of these standards in future periods would have no material impact on the SAWS financial statements, as most of them are not applicable, due to the nature of, and transactions by SAWS.

## 6. CHANGE IN ACCOUNTING POLICY

SAWS adopted the following GRAP Statements, which resulted in a change in accounting policies, as stated below.

### **Financial instruments**

The entity adopted the new GRAP 104: Financial Instruments, for the year ending 31 March 2013. The entity applied IFRS 7, IAS 32 and IAS 39 in the annual financial statements for the year ended 31 March 2012. GRAP 104 was applied retrospectively.

The major changes entailed the categories of financial assets and financial liabilities, which changed under GRAP 104.

### **Under IFRS the categories for financial assets were the following:**

- Financial assets at fair value through profit or loss (either as held for trading or designated).
- Available-for-sale financial assets.
- Loans and receivables.
- Held-to-maturity investments.

### **Under IFRS the categories for financial liabilities were as follows:**

- Financial liabilities at fair value through profit or loss (either as held for trading or designated).
- Other financial liabilities measured at amortised cost, using the effective interest method.

### **Under the new GRAP 104 the categories are as follows:**

- Financial instruments at fair value.
- Financial instruments at amortised cost.
- Financial instruments at cost.

The type of financial instruments that SAWS uses is the same for both GRAP 104 and IFRS in terms of recognition and measurement. Therefore, there was no financial impact on the annual financial statements.

Categories	GRAP 104	IFRS
Trade and other receivables	Financial asset at amortised cost	Financial asset at amortised cost
Cash and cash equivalents	Financial asset at amortised cost	Financial asset at amortised cost
Trade and other payables	Financial liability at amortised cost	Financial liability at amortised cost

In terms of IFRS, the short-term receivables and payables had to be discounted to their present value. GRAP 104 requires that, if upon initial recognition, the credit period granted falls outside the normal public sector, credit terms must be discounted back to present value.

Therefore, only short-term receivables and payables, which are outside initial credit terms, will be discounted. Short-term receivables and payables, which are within the normal public sector payment terms, do not require any discounting in terms of GRAP 104. In terms of the PFMA, the payment terms for payables are 30 days.

SAWS only has credit terms that are 30 days from the invoice date. SAWS invoices debtors with 30 days repayment terms. This is in line with PFMA requirements.

In the previous financial year, SAWS discounted the short-term receivables and payables. With the adoption of GRAP 104, in the current year no short-term receivables and payables will be discounted. The previous year's discounting was reversed in order to retrospectively apply the requirements of GRAP 104.

In terms of IFRS, the annual financial statements should include a sensitivity analysis, but in terms of GRAP 104 this is not a requirement.

The disclosure requirements in terms of GRAP 104 are therefore less onerous.

***Impairment on non-cash-generating assets and cash-generating assets***

The entity adopted the new GRAP 26: Impairment of cash-generating assets and GRAP 21: Impairment of non-cash generating assets for the year ending 31 March 2013. SAWS applied IAS 36 in the annual financial statements for the year ended 31 March 2012. GRAP 21 and GRAP 26 were applied retrospectively.

The major change relates to the categorisation of assets as cash-generating assets or non-cash-generating assets.

Assets held with the primary objective of generating a commercial return are classified as cash-generating assets.

Assets other than cash-generating assets, primarily held for service delivery purposes, are classified as non-cash-generating assets.

Both GRAP 21 and GRAP 26 require that assets should be impaired if the carrying amount exceeds the higher of the fair value, less cost to sell or value in use.

Fair value, less cost to sell determination, remained the same as in the previous year.

The value in use for non-cash-generating assets determination changed from the previous requirements.

Value in use was previously determined by present valuing of future cashflow, back to its present value.

In terms of the new requirements, there are three methods to determine the value in use for non-cash-generating assets, namely:

1. Depreciated replacement cost approach
2. Restoration cost approach
3. Service units approach

The requirement to only test for impairment when there are indicators of impairment remained unchanged.

The disclosure requirements remained unchanged with the adoption of GRAP 21 and GRAP 26.

SAWS performed an assessment of impairment and no indicators of impairment were identified in the current and previous year.

Therefore, with the adoption of GRAP 21 and GRAP 26, there is no financial effect as a result of the change in accounting policy.



7. PROPERTY, PLANT AND EQUIPMENT

2013	Total	Land & buildings						Aircraft		Motor vehicles	Meteorological instruments		Office equipment	Computer equipment	Library books & equipment	Furniture & fittings	Tools & equipment
		Leasehold improvements	Commercial property	Fence	Bethlehem houses	Irene property	Airframes	Engines	Propellers		Radars	Meteorological equipment					
<b>Cost or revaluation</b>																	
At 1 April 2012 - Restated	390 421 043	2 204 668	12 000 000	1 172 728	1 426 673	2 100 000	2 317 252	3 625 904	414 828	521 480	275 288 335	48 769 020	4 725 808	26 809 025	33 483	7 292 119	1 719 720
Additions	19 319 826	-	692 946	-	-	-	-	-	-	-	-	12 790 914	14 741	5 327 663	18 825	183 974	290 763
Revaluations	155 479	-	-	-	216 250	-	(88 353)	137 978	(110 396)	-	-	-	-	-	-	-	-
<b>At 31 March 2013</b>	<b>409 896 348</b>	<b>2 204 668</b>	<b>12 692 946</b>	<b>1 172 728</b>	<b>1 642 923</b>	<b>2 100 000</b>	<b>2 228 899</b>	<b>3 763 882</b>	<b>304 432</b>	<b>521 480</b>	<b>275 288 335</b>	<b>61 559 934</b>	<b>4 740 549</b>	<b>32 136 688</b>	<b>52 308</b>	<b>7 476 093</b>	<b>2 010 483</b>
<b>Accumulated depreciation</b>																	
At 1 April 2012 - Restated	70 257 550	1 834 133	-	442 011	(33 750)	-	83 468	-	-	99 850	20 770 876	21 527 817	1 308 101	20 122 730	3 738	3 171 149	927 427
Depreciation	20 486 122	219 092	-	117 236	34 604	-	110 534	-	-	95 589	9 635 733	4 959 164	337 603	4 175 692	3 652	612 517	184 706
<b>At 31 March 2013</b>	<b>90 743 672</b>	<b>2 053 225</b>	<b>-</b>	<b>559 247</b>	<b>854</b>	<b>-</b>	<b>194 002</b>	<b>-</b>	<b>-</b>	<b>195 439</b>	<b>30 406 609</b>	<b>26 486 981</b>	<b>1 645 704</b>	<b>24 298 422</b>	<b>7 390</b>	<b>3 783 666</b>	<b>1 112 133</b>
<b>Net book value</b>	<b>319 152 676</b>	<b>151 443</b>	<b>12 692 946</b>	<b>613 481</b>	<b>1 642 069</b>	<b>2 100 000</b>	<b>2 034 897</b>	<b>3 763 882</b>	<b>304 432</b>	<b>326 041</b>	<b>244 881 726</b>	<b>35 072 953</b>	<b>3 094 845</b>	<b>7 838 266</b>	<b>44 918</b>	<b>3 692 427</b>	<b>898 350</b>
<b>2012</b>																	
<b>Cost or revaluation</b>																	
At 1 April 2011 - Restated	364 837 709	2 177 522	12 000 000	1 172 728	1 416 338	2 100 000	2 421 026	4 686 862	352 515	138 062	245 154 658	45 449 649	1 840 809	30 026 304	20 624	7 328 047	8 546 540
Additions	35 584 041	-	-	-	-	-	-	-	-	383 418	29 197 629	4 330 749	8 198	977 506	12 263	140 827	533 451
Revaluations	(1 245 130)	-	-	-	46 585	-	(223 931)	(1 060 958)	(6 826)	-	-	-	-	-	-	-	-
Disposals	(6 101 332)	-	-	-	-	-	-	-	-	-	-	(1 218 465)	(26 577)	(4 472 234)	(46 277)	(337 779)	-
<b>At 31 March 2012</b>	<b>393 075 288</b>	<b>2 177 522</b>	<b>12 000 000</b>	<b>1 172 728</b>	<b>1 462 923</b>	<b>2 100 000</b>	<b>2 203 120</b>	<b>3 625 904</b>	<b>345 689</b>	<b>521 480</b>	<b>274 352 287</b>	<b>48 561 933</b>	<b>1 822 430</b>	<b>26 531 576</b>	<b>32 887</b>	<b>7 422 597</b>	<b>8 742 212</b>
<b>Accumulated depreciation</b>																	
At 1 April 2011	64 518 199	1 603 930	-	324 455	128 628	-	133 428	-	-	78 538	17 752 450	17 490 265	790 879	19 715 125	1 042	3 251 156	3 248 303
Depreciation	15 782 887	218 211	-	117 273	47 914	-	152 688	50 937	-	20 239	8 297 490	4 445 534	120 286	1 124 363	2 198	300 287	885 467
Disposals/impairments	(3 743 967)	-	-	-	(175 814)	-	(122 360)	(50 937)	-	-	-	1 301 455	(1 658 764)	(4 387 383)	-	368 841	980 995
<b>At 31 March 2012</b>	<b>76 557 119</b>	<b>1 822 141</b>	<b>-</b>	<b>441 728</b>	<b>728</b>	<b>-</b>	<b>163 756</b>	<b>-</b>	<b>-</b>	<b>98 777</b>	<b>26 049 940</b>	<b>23 237 254</b>	<b>(747 599)</b>	<b>16 452 105</b>	<b>3 240</b>	<b>3 920 284</b>	<b>5 114 765</b>
<b>Net book value</b>	<b>316 518 169</b>	<b>355 381</b>	<b>12 000 000</b>	<b>731 000</b>	<b>1 462 195</b>	<b>2 100 000</b>	<b>2 039 364</b>	<b>3 625 904</b>	<b>345 689</b>	<b>422 703</b>	<b>248 302 347</b>	<b>25 324 679</b>	<b>2 570 029</b>	<b>10 079 471</b>	<b>29 647</b>	<b>3 502 313</b>	<b>3 627 447</b>

## 7. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

2013  
R

2012  
R

### Reconciliation of revaluation surplus or loss recognised in the statement of changes in net assets:

#### Revaluation of PPE

##### Aircraft - Revaluation

Aircraft airframes	(88 353)	(223 931)
Aircraft engines	137 978	(1 060 958)
Aircraft propellers	(110 396)	(6 826)
	(60 771)	(1 291 715)
<b>Add: Property revaluation</b>	<b>216 250</b>	46 585
Bethlehem houses	216 250	46 585
Total revaluations for the year	155 479	(1 245 130)
<b>Adjustments to revaluation surplus account</b>	<b>147 021</b>	750 606
Bethlehem houses	(36 250)	(199 683)
Aircraft airframes	114 132	6 025
Aircraft engines	-	1 010 021
Aircraft propellers	69 139	(65 757)
<b>Net revaluations transferred directly to revaluation surplus account</b>	<b>302 500</b>	(494 524)

#### Aircraft

The entity's aircraft were revalued by independent valuers, Skycare Maintenance, at 31 March 2013. Valuations were made on the basis of open market value. The revaluation deficit was debited to the non-distributable reserve in the case where sufficient credits existed to offset the deficit. In cases where no credit existed, the deficit was expensed. If aircraft were stated on the historical cost basis, the amounts would be as follows:

Cost	9 811 735	9 811 735
Accumulated depreciation	(9 811 735)	(9 811 735)
Net book value	-	-

#### Bethlehem houses

The houses were revalued by an independent valuer, Johan Breytenbach, at 31 March 2013. Valuations were made on the basis of open market value. The revaluation surplus was credited to the non-distributable reserve. If the houses were stated on the historical cost basis, the amounts would be as follows:

Cost	600 000	600 000
Accumulated depreciation	(135 000)	(108 000)
Net book value	465 000	492 000

## 7. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

The property includes Erf 1997 and Erf 2064 in the town of Bethlehem. Erf 1997, also known as 8 Dr Clark Street, Bethlehem, covers an area of 1 997 square meters and includes a house and outbuildings. Erf 2064, also known as 19 Gordon Dreyer Street, Bethlehem, covers an area of 1 568 square meters and includes a house and outbuildings.

The title deed of the Bethlehem property was not registered in the name of SAWS at financial year-end. However, the Minister of Public Works passed on all the rights, obligations and liabilities of the properties to SAWS with the commencement of the SAWS Act, No. 8 of 2001.

### Irene property

The property consists of Portion 110 of the Farm Doornkloof 391 JR. Improvements on the property consist of two interconnected offices, a workshop, storage wings and some supporting outbuildings and carports. In accordance with the registration of ownership of the property, the property must only be used for scientific purposes and may not be transferred. Due to this restriction, the municipal value was used as the most accurate value of the property.

### Commercial property

The entity's commercial and investment properties were revalued by independent valuers, T.I. Lehobye Valuations, at 31 March 2013.

Valuations were made on the basis of open market value. The property was placed on the books for the first time in 2003 year-end. The valuation from independent valuers was accepted to also reflect the fair value for comparative purposes at 31 March 2002. If the property was stated on the historical cost basis, the amounts would be as follows:

Historical cost - commercial property 8 960 000

SAWS does not have assets pledged as security.

Capital commitments are disclosed in Note 28.

## 8. INTANGIBLE ASSETS

Intangible assets comprise computer software.

### At beginning of period

Additions

### At end of period

Reassessment adjustments

### Restated cost

### Accumulated amortisation

At beginning of period

Amortisation

### At end of period

Accumulated amortisation - adjustments

### Restated accumulated amortisation

### Net book value

	2013 R	2012 R
<b>At beginning of period</b>	<b>15 187 682</b>	14 292 683
Additions	<b>5 284 679</b>	894 999
<b>At end of period</b>	<b>20 472 361</b>	15 187 682
Reassessment adjustments	<b>862 738</b>	-
<b>Restated cost</b>	<b>21 335 099</b>	15 187 682
<b>Accumulated amortisation</b>		
At beginning of period	<b>11 324 919</b>	9 780 507
Amortisation	<b>2 760 477</b>	1 544 412
<b>At end of period</b>	<b>14 085 396</b>	11 324 919
Accumulated amortisation - adjustments	<b>677 386</b>	-
<b>Restated accumulated amortisation</b>	<b>14 762 782</b>	11 324 919
<b>Net book value</b>	<b>6 572 317</b>	3 862 763

## 9. INVESTMENT PROPERTY

	2013 R	2012 R
Fair value at beginning of period	44 530 000	44 530 000
<b>Fair value at end of period</b>	<b>44 530 000</b>	<b>44 530 000</b>

The property was valued by an independent valuator, T.I. Lehobye Valuations, at 31 March 2013. The valuator used the market data valuation approach, whereby similar properties' valuations are used as a motivation to value the property, which is an acceptable method of determining the value of this type of property.

The investment property includes portion 411, a portion of portion 412 and portion 423 (which are portions of the remaining extent of portion 264) of the farm Garsfontein 374, Registration Division JR, Gauteng. The property comprises 37,1116 ha and is located immediately west of the N1 National Freeway to Limpopo and immediately north of Rigel Avenue.

The remaining portion 424 of the farm Garsfontein 374, valued at R12 000 000, is classified as commercial property in the property, plant and equipment Note (refer to Note 7).

The fair value adjustment for the investment property was debited to the statement of financial performance. The property was brought onto the books for the first time at 2003 year-end. The valuation from independent valutors was accepted to also reflect the fair value at 31 March 2002. If the property was stated on the historical cost basis, the amounts would be as follows:

Historical cost - Investment property	26 890 000
Less historical cost of commercial property	(8 960 000)
<b>Net book value</b>	<b>17 930 000</b>

## 10. INVENTORY

	2013 R	2012 R
Bolepi	249 331	269 760
Irene	3 406 005	3 454 457
Irene work-in-progress	669 514	843 721
	<b>4 324 850</b>	<b>4 567 938</b>

An amount of R1 561 238 (2012: R1 089 604) was recognised as an expense in the statement of financial performance. An amount of R229 866 (2012: R121 634) was recognised as a reversal of a write down for inventory items. Inventory is stated at the lower of cost or net realisable value.

## 11. TRADE AND OTHER RECEIVABLES FROM EXCHANGE TRANSACTIONS

Trade receivables	16 711 968	21 157 112
Provision for impairment of receivables	(4 754 801)	(9 393 649)
Pre-payments	5 808 664	2 273 284
Sundry receivables and staff prepayments	1 688 772	1 663 542
	<b>19 454 603</b>	<b>15 700 289</b>

Interest is charged on any long outstanding trade receivables accounts. Trade and other receivables are stated at amortised cost, using the effective interest rate method less impairment of receivables.

### Trade and other receivables past due but not impaired

Trade and other receivables, which are less than four months past due, are not automatically considered to be impaired. Management judgement is used to impair amounts less than four months past due. At 31 March 2013: R3 753 949 (2012: R2 983 944) was past due but not impaired.

The ageing of amounts past due but not impaired, is as follows:

	Total	31-60 days	61-90 days	91-120 days	Over 120 days
Trade receivables - 2013	3 753 949	3 083 651	621 487	48 811	-
Trade receivables - 2012	2 983 944	2 891 580	92 364	-	-

### Reconciliation of provision for impairment of trade and other receivables

Opening balance	9 393 649	9 252 540
Provision raised	4 222 236	141 109
Provision utilised	(8 861 084)	-
<b>Closing balance</b>	<b>4 754 801</b>	<b>9 393 649</b>

The maximum exposure to credit risk at the reporting date is the carrying amount of each class of trade and other receivables mentioned above. The entity does not hold any collateral as security.

## 12. CASH AND CASH EQUIVALENTS

	2013 R	2012 R
Bank balances and cash	22 504 431	62 678 820
Short-term investment	71 109 876	57 120 578
	<b>93 614 307</b>	119 799 398

Cash and cash equivalents consist of cash and short-term investments. SAWS has no restriction on cash balances at year-end.

## 13. DEFERRED RENTAL OBLIGATIONS

### Operating leases

The following lease payments are related to the operating lease for computer equipment, furniture and fittings, the rental of premises, and motor vehicles.

SAWS leases 23 premises from various lessors. The rental agreements for the premises include escalations of between 8% and 11% per year. The duration of the rentals varies between two and ten years.

The major lease contract for Bolepi House expired in April 2013 and was renewed for a further five years, effective 01 May 2013.

There is no fixed escalation for the rental agreements relating to computer equipment, equipment, and furniture and fittings. The duration of the rentals varies between 18 months and three years.

SAWS entered into an operating lease agreement with Kempston Vehicle Leasing on 28 March 2011. The agreement includes a full maintenance plan. Ownership in and to all or any of the vehicles comprising the fleet, shall, at all times, during and after termination of the agreement, remain vested in Kempston Vehicle Leasing. This contract will expire on 31 March 2014.

Rent commitment: 0 - 1 years	Equipment	Premises	Motor Vehicles	Total	
Minimum lease payments - 2014	40 063	9 988 040	3 091 477	13 119 580	
	40 063	9 988 040	3 091 477	13 119 580	
Rent commitment: 2 - 5 years	Minimum lease payments - 2015	4 309	8 870 174	-	8 874 483
Minimum lease payments - 2016	-	8 999 946	-	8 999 946	
Minimum lease payments - 2017	-	9 809 941	-	9 809 941	
Minimum lease payments - 2018	-	10 692 836	-	10 692 836	
	4 309	38 372 897	-	38 377 206	
Rent commitment: 5+ years	Minimum lease payments - 2019	-	897 243	-	897 243
	-	897 243	-	897 243	
Total commitment	<b>44 372</b>	<b>49 258 180</b>	<b>3 091 477</b>	<b>52 394 029</b>	

	2013 R	2012 R
Opening balance	4 749 546	7 001 299
Additional deferred rental	(4 277 303)	(2 251 753)
<b>Closing balance</b>	<b>472 243</b>	4 749 546

#### 14. RETIREMENT BENEFIT OBLIGATIONS

##### Amounts recognised in the statement of financial performance

###### Post-employment medical benefits:

	2013 R	2012 R
Current service costs	312 000	1 508 000
Interest costs	1 728 000	2 863 000
Expected return on plan assets	(420 000)	(128 000)
Net actuarial losses/(gains) recognised during the year	(22 000)	6 598 000
Total included in "employee benefits expense"	1 598 000	10 841 000
Actual return on plan assets	646 000	(1 449 000)

##### Amounts recognised in the statement of financial position

###### Post-employment medical benefits:

Present value of funded obligations	22 568 000	20 743 000
Fair value of plan assets	(8 067 322)	(4 541 000)
Net liability in the statement of financial position	14 500 678	16 202 000

##### Movements in the net liability in the statement of financial position:

###### Post-employment medical obligations:

Opening balance	16 202 000	30 975 505
Net expense recognised in the statement of financial performance	1 598 000	(8 773 505)
Contributions	(3 241 000)	(6 000 000)
<b>Closing balance</b>	<b>14 559 000</b>	<b>16 202 000</b>
Long-term provision	14 500 678	16 202 000

##### Movements in the liability in the statement of financial position:

###### Post-employment medical obligations:

Opening balance	20 743 000	30 976 000
Interest costs	1 728 000	2 863 000
Service costs	312 000	1 508 000
Settlement amounts	(58 000)	(18 924 000)
Benefits paid	(781 000)	(829 000)
Actuarial loss	624 000	5 149 000
<b>Closing balance</b>	<b>22 568 000</b>	<b>20 743 000</b>

##### Movements in the fair value of plan assets :

###### Post-employment medical plan assets:

Opening balance	4 541 000	-
Contributions paid	3 241 000	6 000 000
Expected return	420 000	128 000
Expected benefits payments	-	(138 000)
Benefits paid	(780 678)	-
Actuarial gain	646 000	(1 449 000)
	8 067 322	4 541 000

##### Principal actuarial assumptions at statement of financial position date:

Discount rate 31 March (%)	7.70%	8.50%
General increases in medical aid subsidy (%)	7.30%	8.00%
Proportion continuing membership at retirement (%)	100%	100%
Proportion of retiring members who are married (%)	90%	90%
Retirement age (years)	60	60

#### 14. RETIREMENT BENEFIT OBLIGATIONS (CONTINUED)

The projection of the results from 31 March 2013 to 31 March 2014, assuming that future events follow the assumptions exactly, is as follows:

	2013 R
<b>Accrued service liability at 31 March 2013</b>	
Net liability at start of year	22 729 000
Interest costs	1 739 000
Current service costs	315 000
Benefit payments	(834 000)
Projected accrued services liability at 31 March 2013	23 949 000

#### Sensitivity analyses

The results are dependent on the assumptions used. The table below indicates how the past service costs, as at 31 March 2013, would be impacted upon by changes to these assumptions:

In-service and continuation members	Accrued service liabilities as at 31 March 2013 (R million)	% Increase
<b>Assumptions as above</b>	<b>22.729</b>	
Discount rate - increases by 1% p.a.	19.786	-13%
Discount rate - decreases by 1% p.a.	26.409	16%
Medical inflation - increases by 1% p.a.	26.337	16%
Medical inflation - decreases by 1% p.a.	19.789	-13%
Retirement age - 55	25.090	10%

The tables below indicate how the current service costs and interest costs for the year to 31 March 2013 would be impacted upon by changes to the assumptions:

In-service members	Current service costs 2013/14 (R million)	% Increase
<b>Assumptions as above</b>	<b>0.315</b>	
Discount rate - increases by 1% p.a.	0.252	-20%
Discount rate - decreases by 1% p.a.	0.396	26%
Medical inflation - increases by 1% p.a.	0.395	26%
Medical inflation - decreases by 1% p.a.	0.251	-20%
Retirement age - 55	0.372	18%

Interest costs	Interest costs 2013/14 (R million)	% Increase
<b>Assumptions as above</b>	<b>1.739</b>	
Discount rate - increases by 1% p.a.	1.705	-2%
Discount rate - decreases by 1% p.a.	1.766	1%
Medical inflation - increases by 1% p.a.	2.024	16%
Medical inflation - decreases by 1% p.a.	1.509	-13%
Retirement age - 55	1.924	11%

<b>15. TRADE AND OTHER PAYABLES FROM EXCHANGE TRANSACTIONS</b>	<b>2013 R</b>	<b>2012 R</b>
Trade payables	<b>17 218 824</b>	9 555 754
Other payables	<b>8 745 122</b>	18 901 918
	<b>25 963 946</b>	28 457 672

Included in other payables are the following:

Accruals	<b>3 666 009</b>	5 867 137
Leave pay accrual	<b>2 995 197</b>	3 004 115
Payroll payables	<b>123 255</b>	1 775 068
Deferred income	-	7 232 555
Bursary students	<b>841 856</b>	427 425
Debtor: Staff S&T	<b>350 753</b>	310 711
Sundry payables	<b>768 052</b>	284 907
	<b>8 745 122</b>	18 901 918

The trade and other payables are subsequently carried at amortised cost. Unrealised foreign exchange gains and losses are calculated using the spot rate at year-end.

**Included in the trade payables are foreign creditors:**

	<b>2013 Foreign Currency</b>	<b>2012 Foreign Currency</b>	<b>2013 R</b>	<b>2012 R</b>
EUMETSYS	EUR 131 150	EUR 131 150	<b>1 548 501</b>	1 343 461
Ask Innovative	EUR 52 680	EUR 52 680	<b>621 994</b>	539 635
UK Met Office	GBP 138 997	-	<b>1 947 663</b>	-
Vaisala Inc.	USD 85 560	-	<b>789 302</b>	-
Vaisala Oyj	EUR 91 600	-	<b>1 081 530</b>	-
World Meteorological Organisation	CHF 598	-	<b>5 809</b>	-
CLS	-	EUR 18 126	-	185 677
Swedish Meteorological	EUR 935	-	<b>11 034</b>	-
Solar Light	-	USD 4 988	-	38 297
Scott Marrin	-	USD 766	-	5 881
			<b>6 005 833</b>	2 112 951

	<b>2013</b>	<b>2012</b>
<b>Spot rates at period-end</b>	<b>USD = R 9.225</b>	USD = R7.677
	<b>EUR = R 11.807</b>	EUR = R10.243
	<b>GBP = R 14.012</b>	
	<b>CHF = R 9.709</b>	

## 16. PROVISIONS

	2013			
	Opening Balance R	Additional Provision R	Utilised R	Closing Balance R
<b>Non-current provisions</b>				
Capped leave provision	416 942	56 851	(23 820)	449 973
<b>Current provisions</b>				
Bonus provision	10 000 000	11 000 000	(10 122 184)	10 877 816
Reward & remuneration provision	3 800 000	-	(3 459 469)	340 531
	<b>13 800 000</b>	<b>11 000 000</b>	<b>(13 581 653)</b>	<b>11 218 347</b>
<b>Non-current provisions</b>	<b>2012</b>			
Capped leave provision	453 286	31 363	(67 707)	416 942
<b>Current provisions</b>				
Bonus provision	7 410 207	11 277 276	(8 687 483)	10 000 000
Reward & remuneration provision	2 310 102	1 489 898	-	3 800 000
	<b>9 720 309</b>	<b>12 767 174</b>	<b>(8 687 483)</b>	<b>13 800 000</b>

### Capped leave provision

Capped leave provision was calculated, based on the working days due to each employee from the Persal system as at 15 July 2001. Adjustments to this provision relate to increases in salary rates, days claimed or paid out due to retirement or death, and employees resigning. It should be noted that employees resigning forfeit their claim.

Capped leave is carried at fair value through the adjustment of salary rates.

### Provision for reward and remuneration

This is the estimated cost of the implementation of the critical and scarce skills allowance, based on the attraction and retention strategy for addressing the high turnover of employees. The provision amount of R3,420 million was approved in the 2008 financial year. The project was finalised and payment of the salary adjustment portion was effective from July 2012 against the provision, on a monthly basis until fully utilised.

### Provision for performance bonus

This is a performance bonus based on the SAWS performance management policy. In order to establish a culture of high performance, the performance management process is a dynamic and meaningful process that extends far beyond the performance appraisal to the day-to-day experience of employees. The provision amount is approved by the Board, based on the combination of both SAWS and individual performance.

## 17. DONOR FUNDING

	2013 R	2012 R
Radar recapitalisation project	137 019	298 331
Asset and investment funds	-	(4 779 208)
Donor funding	6 382 862	5 560 351
	<b>6 382 862</b>	<b>781 143</b>

Assets and investment funds are key strategic projects that are financed through the rollover funds, as approved by the National Treasury.

Donor funds consist of funding received from various institutions. Memoranda of Understanding are entered into between SAWS and the donors, with the aim of utilising the SAWS expertise in meteorology.

## 18. REVENUE

	2013 R	2012 R
<b>Revenue from non-exchange transactions - operational expenditure</b>	<b>144 690 832</b>	137 928 004
Government grant - operational expenditure	<b>138 376 154</b>	126 024 000
Government grant - SAAQIS project	<b>5 152 685</b>	9 919 220
Funds rollover - operational expenditure	-	1 851 427
Donor funding - research projects	<b>1 161 993</b>	133 397
	<b>14 342 870</b>	36 479 040
Government grant - SAAQIS project capital expenditure	<b>7 110 315</b>	2 261 780
Government grant - capital expenditure	<b>7 232 555</b>	34 217 260
<b>Revenue from non-exchange transactions - government grant</b>	<b>159 033 702</b>	174 407 084
<b>Revenue from exchange transactions</b>	<b>87 682 213</b>	97 162 344
Aviation revenue	<b>73 771 350</b>	81 673 137
<b>Non-regulated commercial revenue</b>	<b>13 910 863</b>	15 489 207
Aviation Instruments maintenance income	<b>821 245</b>	574 830
Information fees	<b>8 599 677</b>	6 954 516
Letting of aircraft	-	2 840 339
Lightning detection network sales	<b>2 563 106</b>	2 521 052
Project/Automatic weather stations income	<b>1 926 835</b>	2 598 470
<b>Other revenue</b>	<b>6 634 200</b>	8 190 134
TETA-SETA grant	<b>665 945</b>	418 685
Training - RTC	<b>253 918</b>	85 000
Miscellaneous income	<b>444 590</b>	473 216
Proceeds from disposal of assets	<b>16 924</b>	464 350
Donations received	<b>170 047</b>	345 028
Interest received from receivables	<b>301 401</b>	477 251
Income from investments	<b>4 781 375</b>	5 926 604
	<b>253 350 115</b>	279 759 562

### Income from investments

The income from investments consists of interest received from banks.

## 19. ADMINISTRATIVE EXPENSES

Marketing and sales	<b>709 438</b>	619 670
Audit fees - Internal	<b>1 062 193</b>	711 156
Administrative fees	<b>803 732</b>	765 117
Bad debts	<b>4 222 236</b>	140 068
Bank charges	<b>191 830</b>	194 650
Board remuneration	<b>528 014</b>	303 605
Conference costs	<b>947 698</b>	442 103
Entertainment costs	<b>595 655</b>	516 987
Foreign exchange gains/(losses)	<b>410 300</b>	106 070
NBV of Assets scrapped	<b>22 071</b>	-
Legal fees	<b>2 013 258</b>	995 147
Printing and stationery	<b>748 739</b>	828 403
Training	<b>718 080</b>	1 063 464
	<b>12 973 244</b>	6 686 440

## 20. EMPLOYEE COSTS

	2013 R	2012 R
Salaries and wages	109 803 494	100 343 552
Medical aid contributions	8 072 953	7 796 726
Pension fund contributions	8 126 081	7 724 320
Overtime and shift allowance	9 363 785	8 505 182
Post-retirement medical aid	1 620 000	3 987 886
Leave pay and bonus performance	10 991 182	11 593 243
Compensation Commissioner	173 514	290 835
Bargaining Council and casual labour	105 331	52 660
	<b>148 256 340</b>	<b>140 294 404</b>

## 21. OTHER OPERATING EXPENSES

Cost of sales	454 131	526 662
Advertising: Vacancies	1 043 111	1 254 901
Aircraft expenses	1 036 935	1 516 294
Audit fees - external	2 543 538	1 556 694
Communication costs	11 013 917	10 565 482
Computer expenses	7 607 264	4 756 022
Electricity and power generator	2 697 037	2 344 062
Equipment expensed	6 301 316	4 745 175
Insurance	1 159 596	1 600 234
Key strategic projects	9 697 945	5 244 869
Leases and rentals	14 521 569	15 464 473
Levies and subscriptions	4 264 110	4 333 503
Motor expenses	1 486 318	1 380 110
Social responsibility	1 908 660	1 643 697
Repairs and maintenance	3 969 993	4 898 196
Cleaning and security services	1 949 278	1 264 850
Travel expenses - foreign and local	12 489 089	9 903 908
Professional and research fees	270 267	575 553
Stock adjustments	229 866	(121 634)
	<b>84 643 940</b>	<b>73 453 051</b>

<b>22. DEFICIT/SURPLUS FOR THE PERIOD</b>	<b>2013 R</b>	<b>2012 R</b>
Net (deficit)/surplus was arrived at after taking into account:		
Foreign exchange realised/unrealised	<b>410 300</b>	106 070
Auditors' remuneration	<b>2 543 538</b>	1 556 694
Inventory expensed: Equipment expensed	<b>6 301 316</b>	4 745 175
Impairment losses or fair value adjustments	-	538 318
Legal fees	<b>2 013 258</b>	995 147
Impairment of debtors	<b>4 222 236</b>	140 068
Communication cost	<b>10 100 779</b>	9 552 818
Surplus on disposal of assets	<b>(16 924)</b>	(210 019)
Operating lease payments	<b>14 521 568</b>	15 464 474
Inventory adjustment	<b>229 866</b>	(121 634)
<b>Depreciation</b>		
Building lease improvements	<b>219 092</b>	218 211
Fence	<b>117 236</b>	117 273
Bethlehem houses	<b>34 604</b>	47 914
Aircraft airframes	<b>110 534</b>	152 688
Aircraft engines	-	50 937
Motor vehicles	<b>95 589</b>	20 239
Meteorological instruments - other	<b>4 959 165</b>	4 445 534
Meteorological instruments - radar	<b>9 635 733</b>	8 297 490
Office equipment	<b>337 603</b>	120 286
Computer equipment	<b>4 175 691</b>	1 124 363
Library books and equipment	<b>3 652</b>	2 198
Furniture and fittings	<b>612 517</b>	300 287
Tools and other equipment	<b>184 706</b>	885 467
	<b>20 486 122</b>	15 782 887
Amortisation: Intangible assets	<b>2 760 477</b>	1 544 412

### 23. NET CASHFLOW FROM/(USED IN) OPERATING ACTIVITIES

	2013 R	2012 R
<b>Surplus/(Deficit)</b>	<b>(15 748 008)</b>	34 862 050
<b>Non-cash movements</b>		
Depreciation	<b>20 486 122</b>	15 782 887
Amortisation	<b>2 760 477</b>	1 544 412
Impairment/Revaluation	<b>302 500</b>	(494 524)
Scrapped assets	<b>22 071</b>	(254 332)
Previous year's adjustments	<b>(319 425)</b>	(113 200)
Decrease/(Increase) in inventories	<b>243 088</b>	206 041
Decrease/(Increase) in receivables	<b>(3 754 314)</b>	(3 100 991)
Increase/(Decrease) in donor funding	<b>5 440 407</b>	(28 402 057)
Increase/(Decrease) in payables	<b>(2 493 726)</b>	6 697 082
Increase/(Decrease) in provisions	<b>(2 581 653)</b>	4 672 611
Increase/(Decrease) in current portion retirement obligations	-	(829 215)
	<b>4 357 539</b>	30 570 764

### 24. CONTINGENT LIABILITIES

- 24.1 In the prior financial year, SAWS reported a contingent liability for the guarantee of 59 housing loans from 11 financial institutions of which one was remaining with a balance of R11 000 as at 31 March 2012. All the loans were settled and SAWS has since been released of its obligation.
- 24.2 In the prior financial year, SAWS reported a contingent liability for the legal costs for legal action against 1Time Airlines for outstanding tariff fees. Legal costs have since been settled. 1 Time Airlines was placed under provisional liquidation in December 2012. In light of the liquidation, this matter has now been referred to the SAWS Board with regard to the way forward.
- 24.3 King vs. SAWS: In August 2012, the CCMA awarded Mr King the sum of R117 079 to be paid by SAWS. Mr King is currently reviewing the CCMA award at the Labour Court, whereby he is requesting retrospective reinstatement. In the event of Mr King being successful with the review, SAWS will be ordered to reinstate Mr King. The estimated legal costs relating to the case amount to R350 000.
- 24.4 SAWS and the Government Employee Pension Fund (GEPF): The GEPF submitted a claim to SAWS towards an additional liability as a result of one of the SAWS employees whose contract of employment had not been renewed at the end of its term. According to the letter received from the GEPF, an additional liability occurs when a member of the GEPF retires or is discharged from public service prior to normal retirement age. Due to the fact that said employee and his previous employer never supplied the GEPF with the necessary documentation upon his resignation, his employment at SAWS was treated as continuous employment, hence the additional liability. SAWS has since written to the GEPF, requesting a recalculation of the additional liability and to effectively stop all payments to the said employee, relating to the gratuity. The amount of the additional liability, as at 31 March 2013, amounted to R1 500 119.
- 24.5 In the 2012 financial period, SAWS reported a contingent liability relating to a dispute between the land owner of the Bloemfontein radar site and SAWS. This dispute was resolved in March 2013.

## 25. RISK MANAGEMENT

In the course of the entity's operations, it is exposed to interest rate, foreign exchange, credit and liquidity risks. The entity developed a comprehensive risk strategy, in terms of TR 28.1, in order to monitor and control these risks. The risk management process, relating to each of these risks, is discussed under the headings below.

The entity's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the entity's financial performance. The entity does not use derivative financial instruments to hedge risk exposure. Risk management is performed by management in terms of policies approved by the Executive Committee. Management identifies, evaluates and hedges financial risks in close cooperation with the entity's operating units.

### Liquidity risk

The entity's risk to liquidity is a result of the funds available to cover future commitments. The entity manages liquidity risk via an ongoing review of future commitments and credit facilities.

Cashflow forecasts are prepared and adequate utilised borrowing facilities are monitored.

Liquidity risk is the risk that the entity would not be able to meet its financial obligations as they fall due. The entity's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the entity's reputation. Management monitors monthly performance with regard to budgets (reviewing receipt of government grants, cash, and cash equivalents) on the basis of expected cashflow.

Prudent liquidity risk management implies maintaining sufficient cash and obtaining a continued commitment from the Department of Environmental Affairs with regard to the government grant and the collection of aviation income from respective airlines.

Due to the nature of the business, management maintains flexibility in funding by maintaining expenses below budget and continuously pursuing additional income via donor funding, information fees, letting of aircraft and the sale of lightning detection networks.

The table below analyses the entity's financial liabilities at the statement of financial position date.

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
<b>Period-end 31 March 2013</b>				
Trade and other payables	25 963 946	-	-	-
<b>Year-end 31 March 2012</b>				
Trade and other payables	28 457 672	-	-	-

## 25. RISK MANAGEMENT (CONTINUED)

### Interest rate risk

The entity's exposure to market risk (in the form of interest rates risk) arises primarily from the entity's investment in cash and cash equivalents, and from the obligations in respect of the entity's finance leases. The entity manages its interest rate risk by obtaining competitive rates from approved financial institutions on a monthly basis. The entity policy is to manage interest rate risk in such a way that fluctuations in variable rates do not have a material impact on the surplus/(deficit). The entity's exposure to interest rate risk and the effective interest rates on financial instruments at the statement of the financial position date are as follows:

YTD 31 March 2013	Floating rate		TOTAL R'000
	Amount R'000	Effective interest rate	
<b>Assets</b>			
Cash	93 614 307	5%	93 614 307
Accounts receivable	19 454 603	8.50%	19 454 603
<b>Total financial assets</b>	<b>113 068 910</b>	<b>5.00%</b>	<b>113 068 910</b>
Total financial assets	113 068 910	-	113 068 910
Total financial liabilities	(25 963 946)	-	(25 963 946)
	<b>87 104 964</b>	-	<b>87 104 964</b>

### Credit risk

Financial assets, which potentially subject the entity to the risk of non-performance by counter parties and thereby subjecting it to credit concentrations of credit risk, consist mainly of cash and cash equivalents, investments and accounts receivable.

Credit risk consists mainly of cash deposits, cash equivalents and trade receivables. The entity managed to limit its treasury counter-party exposure by only dealing with well-established financial institutions, approved by the National Treasury, via the approval of their investment policies in terms of Treasury Regulations. The entity's exposure is continuously monitored by the Accounting Authority.

The entity does not have any material exposure to any individual or counter-party. The entity's largest concentration of credit risk is mainly limited to the aviation industry. No events occurred in the industry during the financial year that may have an impact on the accounts receivable that have not been adequately provided for. Credit risk with regard to accounts receivable in the aviation industry is limited, as fees are charged in terms of legislation.

Due to the nature of the entity's financial instruments, it is highly unlikely that the entity will encounter any difficulty in raising funds to meet commitments associated with financial instruments.

### Foreign currency risk

The entity does not operate internationally, but undertakes some transactions denominated in foreign currencies, and is thus exposed to foreign exchange risk arising from fluctuations in foreign currencies. The entity does not hedge itself against exposure to foreign exchange risk.

Foreign currency exposure at financial year-end relates to trade payables and is disclosed under Note 15.

## 25. RISK MANAGEMENT (CONTINUED)

Summary:	2013 Foreign currency	2012 Foreign currency	2013 R	2012 R
Euro payables	EUR 276 364	EUR 201 956	3 263 059	2 068 774
USD payables	USD 85 560	USD 5 754	789 302	44 179
GBP payables	GBP 138 997	GBP 0	1 947 663	-
CHF payables	CHF 598	CHF 0	5 809	-

### Foreign currency sensitivity analysis

The entity is mainly exposed to the Euro, US dollar, British Pound and Swiss Franc currencies.

The following table details the entity's sensitivity to a 5% increase and decrease in the rand against the relevant foreign currencies. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at financial year-end for a 5% change in foreign currency rates. The positive number below indicates an increase in the surplus where the rand strengthens 5% against the relevant currency. For a 5% weakening of the rand against the relevant currency, there would be an equal and opposite impact on the surplus and the balances below would be negative.

	Euro Impact		USD Impact	
	2013 R	2012 R	2013 R	2012 R
Surplus/(deficit)	27 038	51 277	(672)	(71)

	GBP Impact		CHF Impact	
	2013 R	2012 R	2013 R	2012 R
Surplus/(deficit)	(12 914)	-	737	-

In management's opinion, the sensitivity analysis is unrepresentative of the inherent foreign exchange risk, as the period-end exposure does not reflect the exposure during the period as such.

## 26. RELATED PARTY TRANSACTIONS

### Relationships

In preparing its annual financial statements for the year ended 31 March 2013, SAWS identified related party relationships and made the necessary disclosures in the financial statements.

### Background

#### Entity structure

SAWS was established in terms of national legislation as one of the government's essential scientific institutions, providing information and services that have a direct impact on the lives of citizens and their properties, thus contributing greatly to sustainable development in South Africa.

## 26. RELATED PARTY TRANSACTIONS

SAWS reports functionally to the Department of Environmental Affairs and therefore the Minister of Environmental Affairs constitutes the executive authority.

SAWS is governed by the Board, as appointed by the Minister. The details of Board members are listed after the management structure table.

SAWS also receives donor funds from the Department of Science and Technology for the financing of some research projects.

### Transactions

SAWS provides weather and climate-related services to various entities at national, provincial and local government. This includes the provision of services and instruments to public entities.

SAWS also provides aviation services to the national carrier, which is controlled by national government.

These services are provided on a cost recovery basis. The transaction amounts are included either in the statement of financial performance as revenue from exchange transactions and related account balances in the statement of financial position as trade and other receivables from exchange transactions or in the respective Notes.

Apart from transactions listed in the previous paragraph, SAWS undertakes the following transactions with other entities in the public sector:

- Basic services, such as electricity, water and sanitation, by local municipalities.
- Air travel as supplied by the national carrier, which is controlled by the national government.
- Post-retirement benefits by the government pension fund for some SAWS employees.
- PAYE, UIF, SDL and other payroll taxes are collected by SAWS and remitted to the revenue authority on a monthly basis.
- The collection of aviation revenue and other related services by the entity, which are controlled by national government.

The transaction amounts for the above services are included either in the statement of financial performance as expenditure and related account balances in the statement of financial position as trade and other payables or the respective notes.

### Executive members' remuneration

#### Executive management 2013

Name	Status	Designation	Salary R	Perfor- mance Bonus R	Medical & UIF R	Pension R	Travel Allowance R	Cellphone Allowance R	Lump sum and Leave Pay R	Total R
Dr L Makuleni		CEO	1 864 958	530 451	48 402	187 144	120 000	33 816	-	2 784 772
Mr S Mda		CFO	1 098 557	279 283	65 518	17 073	-	36 000	-	1 496 431
Ms M Makoela	Resigned- 30/06/2012	GM: Corporate Affairs	223 792	-	9 695	9 316	-	9 000	3 358	255 161
Mr L Gcwensa		GM: Human Capital Management	973 908	238 736	3 282	41 807	-	36 000	-	1 293 733
Mr M Ndabambi		GM: Operations	894 749	243 529	35 442	170 609	114 000	36 000	-	1 494 329
Ms A Badimo*		Acting GM: Corporate Affairs	84 544	-	-	-	-	-	-	84 544
			5 140 509	1 292 000	162 339	425 949	234 000	150 816	3 358	7 408 970

\*Ms A Badimo was appointed Acting GM: Corporate Affairs on 1 July 2012 and only her acting allowance salary is disclosed in the schedule.

## 26. RELATED PARTY TRANSACTIONS (CONTINUED)

### Executive management 2012

Name	Status	Designation	Salary R	Performance Bonus R	Medical & UIF R	Pension R	Travel Allowance R	Cellphone Allowance R	Lump sum and Leave Pay R	Total R
Dr L Makuleni		CEO	1 715 561	519 971	9 017	85 833	120 000	20 812	-	2 471 194
Mr S Mda		CFO	1 014 878	235 128	32 615	7 904	-	36 000	-	1 326 525
Mr G Schulze	Retired- 30/04/2011	Executive Project Manager	59 323	219 917	2 365	6 326	7 589	3 000	141 467	439 987
Ms M Makoela*		GM: Corporate Affairs	792 067	211 724	18 891	18 632	-	36 000	-	1 077 314
Mr L Gcwensa		GM: Human Capital Management	912 247	240 268	1 497	19 826	-	36 000	-	1 209 838
Mr M Ndabambi	Appointed- 01/06/2011	GM: Operations	660 892	-	14 648	60 048	95 000	30 000	112 047	972 635
			5 154 968	1 427 008	79 033	198 569	222 589	161 812	253 514	7 497 493

\* Ms M Makoela, GM: Corporate Affairs, resigned on 30 June 2012.

### Current Board members

Name	Status	Designation	2013			2012
			Fees R	Travel R	Total R	Total R
Prof L Magi*		Chairperson	76 358	6 068	82 426	57 567
Dr N Gwagwa		Deputy Chairperson	43 365	531	43 896	-
Mr S Makhaye*		Non-executive Member	54 228	2 932	57 160	61 191
Mr A Mvinjelwa		Non-executive Member	57 305	2 692	59 997	-
Mr J Tshipa		Non-executive Member	67 602	1 492	69 094	-
Prof E Mokotong		Non-executive Member	52 418	1 574	53 992	-
Mr R Nicholls		Non-executive Member	56 038	1 436	57 474	-
Ms N Mngomezulu		Non-executive Member	47 720	556	48 276	-
Dr S Moephuli		Non-executive Member	-	2 190	2 190	-
Mr Z Fihlani		Non-executive Member	34 704	1 510	36 214	-

### Previous Board members

Ms K Njobe		Chairperson	11 229	-	11 229	46 653
The Rev LW Mbete		Deputy Chairperson	-	-	-	46 080
Ms MM Mokuena		Non-executive Member	2 534	88	2 622	41 156
Dr TN Mali		Non-executive Member	-	1 011	1 011	2 440
Mr TW Msomi		Non-executive Member	7 232	272	7 504	68 816
Mr LR Williams	Retired- 31/05/2011	Member	-	-	-	17 746
Mr MC Ntumba		Member	5 784	348	6 132	23 345
			516 517	22 700	539 217	364 994

\* This Board member served on the previous Board.

#### Note:

The old Board's term of office ended on 30 May 2012. A new Board was appointed effective from 1 June 2012.

## 27. MATERIAL LOSSES

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No material losses due to criminal conduct; nor any irregular, unauthorised, fruitless and wasteful expenditure were incurred during the year ended at 31 March 2013.

## 28. CAPITAL COMMITMENTS

---

Capital commitments for the period ending 31 March 2013, refer to goods ordered for an amount of R116 238 but not delivered at the end of the financial period.

## 29. IRREGULAR EXPENDITURE

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During the period under review, management did not detect any irregular expenditure.

## 30. EVENTS FOLLOWING THE REPORTING PERIOD

---

Management is not aware of any matter or circumstance arising since the end of the financial period.

## 31. BUDGET INFORMATION

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The budget was prepared on an accrual basis, in line with the preparation of the annual financial statements. The budget period runs from 1 April 2012 to 31 March 2013.

### **VARIANCE ANALYSIS OF MATERIAL DIFFERENCES BETWEEN ACTUAL, APPROVED BUDGET AND FINAL BUDGET**

#### **Variance between approved and final budget**

##### ***The effect of SAAQIS***

The grant received from SAAQIS was classified as a conditional grant in previous financial years, and at the time of budget preparation. After seeking a technical accounting opinion, the grant was reclassified as any unconditional grant, retrospectively. Please refer to Note 33 (prior period adjustments, SAAQIS grant) for further discussion on the SAAQIS grant treatment.

As a result of this treatment, the SAAQIS budget had to be incorporated into the overall SAWS budget. This adjustment resulted in an increase of R5 152 685 and R15 942 929 in the operational and capital grant budgets respectively.

Previously, all expenses related to the SAAQIS grant were offset against grant income, which was recognised as a liability in the statement of financial position. In line with the treatment of revenue as an unconditional grant, all SAAQIS budgeted expenses were included in the SAWS budget.

As a result of this, the budget for the following line expenses increased:

- Administrative expenses
- Other operating expenses
- Employee costs

### 31. BUDGET INFORMATION (CONTINUED)

#### **Employee costs**

Employee costs for the 2012/13 financial year were under-budgeted for and that resulted in a deficit of R5 500 000. A request to utilise surplus funds was approved by DEA and R5 500 000 was allocated to employee costs to cover the over-expenditure.

This resulted in an overall increase in the total expenditure budget of R21 095 614, comprising R15 595 614 for SAAQIS and R5 500 000 for employee costs.

#### **Variance between actual and final budget**

##### **Revenue**

Total revenue for the period was below the final budget of R264 145 534 by R10 795 419 (actual: R253 350 115).

Revenue from exchange transactions was below budget by R11 329 711 due to a deficit of R5 588 066 in non-regulated commercial revenue and R5 741 646 in aviation revenue.

The negative variance on commercial revenue was mainly due to the lease of commercial aircraft, which did not take place in this financial year. The lower than expected aviation revenue was mainly attributed to lower aircraft volume numbers. Air traffic volumes for 2012/13 were 305 944 (budget: 330 161) and lower than prior year of 324 837.

##### **Expenses**

Total expenses for the year were R4 974 589 above the budget of R264 145 534 (actual: R269 120 123). However, there was over-expenditure of R5 224 616 on administrative expenses, which could be attributed to the provision for doubtful debts, foreign exchange losses and legal fees. The favourable variance of R5 524 974 in operating expenses was mainly due to under-expenditure on early warning.

Please refer to the accounting authority report for a detailed analysis on revenue and expenses.

### 32. CHANGES IN ACCOUNTING ESTIMATE

Based on experience gained in practice, SAWS reassessed the useful lives of furniture and fittings and office equipment. The new reassessed useful lives is believed to represent the consumption of economic benefits embodied in the assets more fairly. The effect on the depreciation charge for the current and future periods is as follows:

#### **Statement of financial performance**

Increase in depreciation

**2013**

**179 500**

### 33. PRIOR PERIOD ADJUSTMENTS

#### Provisions and trade and other payables

During the current financial year, in accordance with GRAP 19, the leave liability has been reclassified as an accrual as opposed to the previous treatment of provision. The reclassification affects only the prior year disclosure.

#### Effect of the above correction in statement of financial position is as follows:

	2012 R
Provision - current	(3 004 115)
Trade and other payables	3 004 115

#### Property, plant and equipment

##### *Reassessment of assets' useful lives*

During the financial year, management reassessed the useful lives of assets that were fully depreciated but still in use. The reassessment of the useful lives had an impact on the depreciation charge for the year ended at 31 March 2012 and on the accumulated depreciation balance for the same period.

The effect of the adjustment, as a result of this reassessment of the useful lives, was a decrease in the depreciation charge by R930 523 for 2012.

##### *Fixed assets received at no cost in the previous years*

During the transfer of SAWS from DEA in 2002, there were assets received at no cost - mostly furniture and fittings, and office equipment. These assets were incorrectly accounted for at no cost instead of accounting for fair value at the date of receipt, including all subsequent periods. The fair value of the assets received should have been recognised as revenue from non-exchange, on the date of receipt, in terms of GRAP 17 and GRAP 23. GRAP 17 and Directive 7 state that the deemed cost of assets received at no cost is determined by establishing the fair value of the assets.

Property, plant and equipment were therefore understated by R1 154 142 in the previous year. The opening retained earnings were understated by R1 305 445. In the statement of financial performance, the donation received was understated by R123 868 and depreciation was also understated by R275 172.

The allocation of a deemed cost to all these assets had an effect on the opening net book value and the opening retained earnings, as well as depreciation charge for the year.

##### *Revaluation of aircraft*

The accumulated depreciation after revaluation of property, plant and equipment, was not properly accounted for in previous years.

Property, plant and equipment were therefore overstated by R706 974 in the prior year. The opening retained earnings were overstated by R529 338 and the revaluation surplus was understated by R610 167. In the statement of financial performance, the depreciation was understated by R644 317 while impairment was understated by R143 486.

### 33. PRIOR PERIOD ADJUSTMENTS (CONTINUED)

#### SAAQIS grant

The grant received from SAAQIS was classified as a conditional grant in prior years. With the review of the contract, it was noted that there was no condition (as defined in GRAP 23: Revenue from non-exchange transactions) attached to this grant. As a result of this, revenue should have been recognised in full for the grant received, as soon as the grant became receivable. SAWS had accounted for the grant as a liability in previous years.

SAWS adjusted the liability together with all the expenses incurred, instead of recognising the expenses. Revenue was also not recognised in the statement of financial performance, but in the statement of financial position as a liability.

The interest earned on the cash balance was capitalised against the liability and not recognised as revenue in the statement of financial performance.

SAWS adjusted the above errors in the current and previous years by correctly recognising the revenue from the grant received, interest received from banks and expenses paid, in the statement of financial performance.

All other items of property, plant and equipment and intangible assets were also recognised as non-current assets and included in the fixed assets register. Depreciation relating to such assets was recognised in the statement of financial performance.

### 33. PRIOR PERIOD ADJUSTMENTS

The cumulative effect of all the above had the following impact on the annual financial statements:

	2012 R
<b>Statement of financial position</b>	
Change in accounting policy	21 194
Increase in opening retained earnings - SAAQIS	12 577 564
Increase in retained earnings	9 703 650
Increase in non-distributable reserves	10 449
Increase in non-current assets	1 357 778
Decrease in donor funding	(19 648 395)
	<b>4 022 240</b>
<b>Statement of financial performance</b>	
Increase in donations received	123 868
Increase in commercial revenue	1 255 693
Increase in depreciation	(441 861)
Increase in administrative and other operating expenses	(9 703 650)
Increase in other revenue	709 687
Increase in other operating expenditure and in other revenue - donor fund	90 033
Increase in revenue from non-exchange transactions - capex grant	12 181 000
	<b>4 214 770</b>

Abbreviation	Description
ACSA	Airports Company South Africa
AFCON	African Cup of Nations
AFI	Africa Indian Ocean Region
AMARA	Avusa Media Annual Recruitment Awards
AMCOMET	African Ministers Conference on Meteorology
APPA	Air Pollution Prevention Act
AQIU	Air Quality Information Unit
AR5	Fifth Assessment Report
ARS	Automatic Rainfall Station
AVE	Advertising Value Equivalent
AWC	Aviation Weather Centre
AWS	Automatic Weather Station
CDMS	Climate Data Management System
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CLIVAR	Climate Variability and Predictability
CMIP5	Coupled Model Intercomparison Project Phase 5
COP17	17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC)
CSIR	Council for Scientific and Industrial Research
DAFF	Department of Agriculture, Forestry and Fisheries
DBCP	Data Buoy Cooperation Panel
DEA	Department of Environmental Affairs
DoE	Department of Energy
DRD	Durban Roodepoort Deep
DST	Department of Science and Technology
EASAF	Eastern and Southern African
ERM	Enterprise-Wide Risk Management
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
FCO	United Kingdom Foreign and Commonwealth Office
FDR	Fire Danger Rating
GAW	Global Atmosphere Watch
GFCS	Global Framework for Climate Services
GIB	Geocentric Information Briefing
GPS	Global Positioning System
GRAP	Generally Recognised Accounting Practices
GTS	Global Telecommunication System
GTSSOCK	Global Telecommunication System Socket
HMA	Hail Mass Aloft system
ICAO	International Civil Aviation Organisation
ICT	Information and Communication Technologies
IMO	International Maritime Organisation
IPCC	Intergovernmental Panel on Climate Change
IPWG	International Precipitation Working Group
JCOMM	Joint Commission on Marine Meteorology
MASA	Meteorological Association of Southern Africa
MASCA	Mamelodi Society for Care of the Aged
MCM	Maximum Certified Mass
METAR	Meteorological routine reports
MINMEC	Minister and Members of Executive Council

MOU	Memorandum of Understanding
MSG	Meteosat Second Generation
MTEF	Medium Term Expenditure Funding
MWOs	Meteorological Watch Offices
NAAQMN	National Ambient Air Quality Monitoring Network
NAEIS	National Atmospheric Emission Inventory System
NATJOC	National Joint Committee
NDMC	National Disaster Management Centre
NOAA	National Oceanic and Atmospheric Administration
NSDS III	National Skills Development Strategy
OEI	Organisational Effectiveness Inventory
OHSA	Occupational Health and Safety Act
OPMET	Operational Meteorological
PAA	Public Audit Act of South Africa
PCWEA	Parliamentary Portfolio Committee on Water and Environmental Affairs
PFMA	Public Finance Management Act
PRMA	Post-Retirement Medical Aid Benefit
ProvJOC	Provincial Joint Committee
QPE	Quantitative Precipitation Estimation
RCP	Representative Concentration Pathway
RSMC	Regional Specialised Meteorological Center (RSMC)
RTC	Regional Training Centre
RTH	Regional Telecommunications Hub
SAAQIS	South African Air Quality Information System
SADC	South African Development Community
SANAP	South African National Antarctic Programme
SANEDI	South African National Energy Development Institute
SARFFG	Southern Africa Region Flash Flood Guidance
SAWS	South African Weather Service
SCOPA	Standing Committee on Public Accounts
SDP	Skills Development Plan
SETA	Sector Education and Training Authority
SIGMET	Significant Meteorological Information
SOLAS	Safety of Life at Sea
SWFDP	Severe Weather Forecasting Demonstration Project
SWGGS	Severe Weather Guidance System
TAF	Terminal Aerodrome Forecast
TETA	Transport Education and Training Authority
TORs	Terms of Reference
TREND	A trend type forecast (TTF), also known simply as a Trend
UKMO	United Kingdom Meteorological Office
VFR	Visual Flight Rules
VOS	Voluntary Observing Ships
VTAAAQMN	Vaal Triangle Airshed Ambient Air Quality Monitoring Network
WCRP	World Climate Research Programme
WDC	World Data Centres
WGII	Working Group II
WIS	Weather Intelligence Systems
WMO	World Meteorological Organisation
WRC	Water Research Commission
WSP	Workplace Skills Plan
XBT	High Density Expendable Bathythermograph

## **Regional Offices**

### **Bloemfontein Weather Office**

Maselspoort Road  
Bram Fischer International Airport  
Private Bag X20562  
Bloemfontein  
9300  
Contact number: 051 433 3281

### **Cape Town International Weather Office**

ATNS Tower, Tower Street  
Cape Town International Airport  
P.O. Box 21  
Cape Town International Airport  
7525  
Contact number: 021 934 0749/0831

### **King Shaka International Weather Office**

Ground Floor: ATNS Building: King Shaka International Airport  
P.O. Box 57733  
King Shaka International Airport  
4407  
Contact number: 032 436 3820/3813

### **Nelspruit (Kruger-Mpumalanga International) Weather Office**

Room T9/002, 1<sup>st</sup> Floor  
Kruger-Mpumalanga International Airport  
P.O. Box 3187  
White River  
1240  
Contact number: 013 751 3805

### **OR Tambo International Aviation Weather Centre**

Room NL61, 3<sup>rd</sup> Floor  
OR Tambo International Airport  
P.O. Box 1194  
Kempton Park  
1627  
Contact number: 011 390 9329/9330

### **Port Elizabeth Weather Office**

Roof Top, Departures Hall  
Port Elizabeth Airport  
Private Bag X5991  
Walmer, Port Elizabeth  
6065  
Contact number: 041 581 0403/8587



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