



CELEBRATING 150 YEARS OF EXCELLENCE

ANNUAL REPORT  
2010-2011



South African  
Weather Service



# Table of Contents

## Part 1

Message from the Minister of Water and Environmental Affairs	2
Message from the Deputy Minister of Water and Environmental Affairs	4
Review by Chairperson of the South African Weather Service Board	6
Overview by the Chief Executive Officer	8
Vision, Mission and Shared Values and Quality Policy Statement	10
Board Members	12
Executive Management	13
Senior Management	14
Performance Against Targets - Year ended March 2011	16

## Part 2

Corporate Governance	44
Meteorological Authority	49
SAWS Management Team	50
Organisational Structure	52
Operations	53
Corporate Affairs	67
Executive Projects	74
Human Capital Management	75

## Part 3

Report of the Audit and Risk Committee	82
Report of the Auditor-General	84
Statement of Responsibility by the Board	86
Report of the Accounting Authority	87
Statement of Financial Position	94
Statement of Financial Performance	95
Statement of Changes in Net Assets	96
Cash Flow Statement	97
Notes to the Annual Financial Statements	98
List of Acronyms	130



For a complete list of acronyms please see page 130.

# PART

# 1

Message from the Minister of Water and Environmental Affairs	2
Message from the Deputy Minister of Water and Environmental Affairs	4
Review by Chairperson of the South African Weather Service Board	6
Overview by the Chief Executive Officer	8
Vision, Mission and Shared Values and Quality Policy Statement	10
Board Members	12
Executive Management	13
Senior Management	14
Performance Against Targets - Year ended March 2011	16



## Message from the Minister of Water and Environmental Affairs

I am honoured to report on the significant contribution that the South African Weather Service (SAWS) has yet again registered during the period under review. The overwhelming achievements for the year 2010/11 were attributed both on national and international levels. The role that SAWS played as a service delivery agent of government was communicated throughout the year, when the organisation marked 150 years of meteorology in South Africa. Not many organisations can claim such a wealth of data and information. This information comes in handy at a crucial time and era, when the country and the rest of the world are faced with challenges on climate change adaptation and mitigation.

SAWS' role and activities on climate services informed policy on climate change. The work conducted by SAWS' Global Atmospheric Watch station, which is more than 30 years old, had new relevance, especially because South Africa maintained one of the longest carbon dioxide (CO<sub>2</sub>) measurement records in the Southern Hemisphere. Records of these trace and greenhouse gases would assist the Department of Environmental Affairs, responsible for reporting on "Environmental assets and natural resources that are well protected and continually enhanced" (outcome 10) by monitoring "... Greenhouse Gas emissions, mitigate climate change impacts and improve air/atmospheric quality" (output 2).

The commendable progress made in the 2010/11 financial year is recognised. Continued efforts in addressing the challenges of severe weather events were highly acknowledged. Such efforts included the Early Warning System and the South African Flash Flood Guidance System, which give prior warning of severe weather events and flash floods to the country's disaster

management structures. The reviewed Early Warning System became more user-friendly and was enhanced to include warnings related to flash floods for the benefit of all South Africans to understand the warnings in order to take advised precautionary measures.

I was pleased to witness how the organisation disseminated weather information in collaboration with my Department of Water Affairs and other government institutions during the floods that affected most communities in December 2010 and January 2011. If the country could have such a dedicated workforce throughout all industries, we would definitely make South Africa a better place for all.

SAWS is one of the main stakeholders in the 'Adopt a Buoy Programme' for learners at schools (wherein a school adopts a drifting weather buoy by naming that buoy and tracking its path on a daily basis). The focus is on the schools from mainly previously disadvantaged communities who can share information/knowledge with educators and learners with regards to oceans and their behaviour. These efforts will go a long way in promoting weather and climate awareness and generating learner interest in future weather-related careers.

Important to note is also the first meeting of African Ministers responsible for meteorology, which aimed to put issues of meteorology, in the light of challenges relating to climate change, on the agenda.

Lastly, let me take this opportunity to extend my condolences to the community members who suffered losses in lives and property during the summer rainfall season in December 2010 and January 2011. As government, we will always strive to integrate our

services in making sure that our communities are safe and ready to respond to severe weather occurrences.

I would like to extend words of gratitude and appreciation to my predecessor, former Minister Buyelwa Sonjica, for the foundation she laid during her tenure as well as my colleague, Deputy Minister Rejoice Mabudafhasi, for her support, commitment and dedication in 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; and SAWS Management and staff for their efforts and a job well done.



**MS B E E MOLEWA, MP**

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS



## Message from the Deputy Minister of Water and Environmental Affairs

The calendar year 2010 was a significant one for the South African Weather Service (SAWS). The role played by the organisation during the FIFA 2010 Soccer World Cup did not go unnoticed. SAWS issued weather information and advisories to the organising committee, stakeholders and the public for the duration of the tournament, in order for them to prepare appropriately for each game.

In support of the country's social development programmes and King III's stakeholder and social responsibility programmes by organisations, SAWS contributed towards an upgrade of a school in Mthatha, Highbury Primary School. The school and community provide a secure site for the RADAR system that is located in their area. Our gratitude goes to SSI and the ESKOM Foundation who provided school furniture and offered to complete the rest of the school upgrade project.

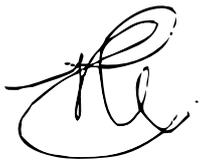
Seeing that South Africa is facing a water crisis in the near future, SAWS has embarked on a water harvesting project with the University of Pretoria and meteorology students at the university. This project was piloted in Venda at Tshanowa and Tshiava primary schools and I am privileged to have launched these projects. Thanks again go to the Water Research Commission, who sponsored the expansion of the project to an amount of R2.5m. Other interested sponsors are hereby challenged to join this good cause and respond to our Constitution in making sure that we provide basic services for human rights. All these projects respond to SAWS Corporate Social Investment and Sponsorship programmes with the main focus on education.

On 23 March 2010, SAWS and the Department of Environmental Affairs launched the South African Air Quality Information System. SAWS is therefore charged with collecting air pollution data and making it available for policy decision. One of my environmental projects is to ensure that communities, especially in the disadvantaged areas, learn the new techniques ("Basa nje ngo magogo") of making fire so as to reduce air pollution. With this data, communities are challenged to embark on such projects so as to contribute towards cleaner air and help reduce respiratory diseases.

One thing that pleases me the most is the way in which SAWS took the lead in issues of the Southern African Development Countries. The Meteorological Association of Southern Africa, which was established in 2009, progressed tremendously. The Association now has a Board that ensures that it delivers its agreed programmes as per the strategy that was developed and adopted in the year under review. The phase I project that was funded by the Finnish government was also completed in the year under review.

The year under review was marked with a significant number of severe and extreme weather events, ranging from severe cold weather during the winter season, to severe floods and lightning during the summer season. These events caused damage to property and loss of lives. It is with deepest sympathy that I extend my condolences to those affected. The Department of Environmental Affairs, together with SAWS, strives to ensure that severe weather information is sent timeously to affected communities, by using its dissemination methods, in order for communities to respond in time to these kinds of events.

I would like to 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 a service characterised by excellence. Lastly, I acknowledge with appreciation the support given to SAWS by my colleague, Minister Edna Molewa and her predecessor, former Minister Buyelwa Sonjica during her tenure.



**Ms Rejoice Mabudafhasi, MP**

Deputy Minister: Water and Environmental Affairs



## Review by the Chairperson of the South African Weather Service Board

Once again, I am proud to celebrate the achievements of SAWS during the financial year under review. It was exciting to be part of the celebrations of 150 years of meteorological service to South Africans. The celebrations highlighted how far we have come as a country and as an organisation in terms of science evolution, especially in the field of meteorology. SAWS has demonstrated the role it plays not only in the field of meteorology, but also in the economic and social development of the country.

Over the past 150 years, SAWS has built up a reputation as a trusted provider of weather and climate information. Giant leaps in advancement of weather-related technology have been made as well – to an extent that our neighbouring countries have also benefitted. This led to us being internationally recognised, especially for our reputable and skilled scientific staff in the fields of meteorology and climatology.

On the regional front, SAWS played a pivotal role in promoting the development of meteorology in the Southern African Development Community (SADC). In addition to hosting the MASA Secretariat, SAWS provided the initial draft of the MASA strategy plan, focusing on infrastructure development, capacity building and socio-economic applications of meteorological information. SAWS also hosted the Finnish government's Southern African Meteorological Development Project, which is geared towards the enhancement of meteorology in the region.

The Board acknowledges the excellent implementation of the SAWS strategy by Management and all staff members in their respective areas of operation. The link and alignment of the SAWS strategy and

government priorities were high on the agenda in the implementation of the 2010/11 Business Plan. SAWS' quest and commitment towards adherence to corporate governance best practices were also high on the agenda, resulting in the organisation achieving yet again an unqualified audit report from the Auditor-General.

SAWS received recognition in a number of areas, with some of the achievements worth noting being:

- The accreditation by SETA as a service provider for the National Certificate in Weather Observation- an NQF level 5 qualification, which officially recognises SAWS as national trainer in weather observation science and provides a guarantee to all users that SAWS complies with learning standards and assessment services.
- The provision of up-to-the-minute weather for the 2010 FIFA World Cup tournament, with SAWS' Port Elizabeth team winning an award from the Nelson Mandela Municipality, endorsed by FIFA, for the safeguarding of lives and property.
- The expansion of the Lightning Detection Network.
- The roll-out of the new Radar System Network.
- The award of SAWS as winner of the TOPCO Top Gender Empowered Parastatal award.
- Our CEO's achievement of being elected as individual finalist in the TOPCO Top Gender Empowered Parastatal awards, as well as the Metropolitan Oliver Top Empowered Government Parastatal awards.

SAWS continued to play a significant role on issues relating to climate change adaptation and mitigation. Among others, a series of workshops and engagements were held with various key stakeholders and experts with a view to develop a climate change programme

aimed at ensuring service delivery to all stakeholders and the general public and supporting them in adapting to climate change and variability at regional, local and sectoral levels. Subsequently, a forum on Climate Change was established on 26 October 2010 focusing on key sectors such as health, water and agriculture, with a view to enhance weather-related applications relevant to those sectors.

I would like to take this opportunity to thank the Shareholder for its continued support throughout the year, members of the Board for their strategic interventions and the Management and staff for their commitment to realise the SAWS vision.



**Ms Khungeka Njobe**  
Chairperson: SAWS Board



## Overview by the Chief Executive Officer

As the authoritative voice in the field of weather and climate, SAWS has played an integral role in assisting government to minimise the impact of weather-related natural disasters in the year under review. This is in line with our strategic goal number one, which is to ensure the continued relevance of meteorological products and services in compliance with applicable regulatory framework. In addressing climate change adaptation, we have yet again delivered weather and climate products to communities and industries which are sensitive and vulnerable to climate variations. The most successful effort was the prediction of the La Niña season, which produced a lot of floods that have affected some parts of the country in the year under review, thus impacting on the socio-economy of the country. Industries mostly affected were the agricultural, financial and the insurance sector and thus a lot of properties needed to be compensated. Our food security was also highly affected and that will result in food price increase.

Timeous and accurate weather and climate information is critical to various sectors. In developing and implementing a comprehensive product and services programme, SAWS has provided real-time weather information in an effort to forewarn the South African community, including the population vulnerable to severe weather events that impact on their lives and daily activities. This was made possible by the new RADAR infrastructure that was launched by the Minister during the year under review.

Weather-related disaster risk applications contributing to reduced weather-related mortality and damage to property were enhanced. The review of severe weather warnings that was effected in October 2010, played a role in improving the understanding of weather

presentations by TV channels and other structures such as the National Disaster Management that form part of our weather information dissemination network. Other specialised warnings for aviation safety, fire hazards, lightning and severe cold spells were issued accurately and timeously during this reporting period.

Air quality information service was operationalised as one of the strategic objectives set by SAWS. SAWS played an important role in the year under review, by collecting and monitoring air quality information through the South African Air Quality Information System (SAAQIS) programme. The World Health Organisation estimates that 2.3 million people die every year from air pollution. The collection of this data is aimed at informing policy and programmes in order to address airborne diseases. Phase one of the SAAQIS was completed in the year under review, which included the setting up of the system, acquiring of ambient air quality monitoring stations and capacitating the Unit within SAWS to implement the project.

In support of its mission as well as its objective of the promotion of international relations and cooperation, SAWS has once again supported international programmes attached to the World Meteorological Organisation (WMO) and the Meteorological Association of Southern Africa (MASA). By the virtue of being the Permanent Representative of the country and an Executive Member of the WMO, SAWS has contributed towards the development of a strategic drive of the WMO in shaping and enhancing meteorological, hydro-meteorological and climate issues, for better coordination of the role of weather information and use in our respective countries.

SAWS, a leader in the SADC region through MASA, contributes towards infrastructure development and capacity building related to meteorology and climate. We continued to provide severe weather warnings, including the Southern African Flash Flood warnings. We continued to be the Regional Telecommunications Hub, the Global Producing Centre for Long-Range Forecasts as well as the Regional Specialised Meteorological Centre. All these responsibilities positioned us as regional leader in providing meteorological services both in our country and the SADC.

South Africa, through SAWS, is responsible for a larger ocean area called METAREA VII. In the year under review, we have produced forecasts and warnings to the Marine Industry in respect of the Safety of Life at Sea (SOLAS) convention. All SOLAS coastal and deep sea forecasts were provided to stakeholders, with an availability of 98%. Marine warnings were provided to all spheres of the maritime industry and complied with all WMO and International Maritime Organisation (IMO) regulations.

To promote beneficial and enduring relationships with key stakeholders, SAWS has implemented recommendations from our previous stakeholder perception survey. A framework to engage stakeholders was developed as well as a programme to address various sectors' information needs. Media relations and engagements were enhanced, yielding in positive coverage in all media channels. We have celebrated the 150 years of meteorology in South Africa throughout the year, by communicating our meteorological evolution and achievements over all those years.

In addressing Human Capital Management programmes, we have managed to reduce turnover of critical and scarce skills to an average of 2.2% in the year under review. We were also awarded the TOPCO media Top Gender Empowered Parastatal award, and became a finalist in the Metropolitan Oliver Top Empowered Government Parastatal awards.

Lastly, let me relate our steady improvements in growing our revenue year-on-year as articulated in the financial statements, as well as sustaining our relations with industries that contribute to our financial sustainability in exchange of products and services we offer to them. Our utilisation of the government grant was within the regulatory framework and we have yet again obtained an unqualified audit, which is due to our sound corporate governance.

Let me take this opportunity to express my appreciation towards SAWS staff and Management for the beautiful work done during the year, their tireless commitment and passion for their jobs. We have enjoyed overwhelming support from our stakeholders during the 150 years celebrations of meteorology in South Africa. The support from the Shareholder and the Board is highly recognised. Let us understand climate through weather, as we strive to come up with policies and strategies for climate change.



**Dr. Linda Makuleni**  
Chief Executive Officer

# Vision, Mission and 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.

## SAWS 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;
- Reviewing our Quality Management Policy and our Quality Policy Statement to ensure its ongoing suitability.

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

I hereby confirm that the Quality Policy Statement, as stated above, reflects the commitment of the South African Weather Service (SAWS) to the development, implementation and the continuous improvement of its Quality Management System. This Quality Policy Statement also provides the management of SAWS, together with all members of staff, the strategic intent and overall guidance upon which all aspects of its Quality Management System will be based as well as the business orientation of SAWS in relation to its customers and suppliers.



**Dr. Linda Makuleni**  
Chief Executive Officer  
10 March 2011

# Board Members

**Ms. Khungeka Njobe**  
Chairperson



**Dr. Linda Makuleni**  
Chief Executive Officer



**Mr. Slingsby Mda**  
Chief Financial Officer



**Rev. Lulamile Mbete**



**Ms. Medi Mokuena**



**Mr. Welcome Msomi**



**Dr. Thembakazi Mali**



**Mr. Lance Williams**



**Prof. Lindisizwe Magi**



**Mr. Siyabonga Makhaye**



**Prof. Harald Winkler**



**Ms. Joanne Yawitch**



# Executive Management

**Dr. Linda Makuleni**

Chief Executive Officer



**Mr. Gerhard Schulze**

General Manager:  
Executive Projects



**Ms. Modjadji Makoela**

General Manager:  
Corporate Affairs



**Mr. Lindani Gcwensa**

General Manager:  
Human Capital Management



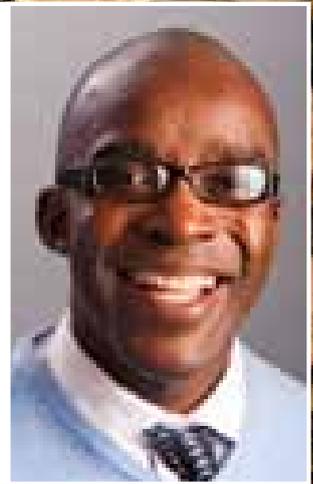
**Mr. Mnikeli Ndabambi**

Acting General Manager:  
Operations



**Mr. Slingsby Mda**

Chief Financial Officer



**Ms Gaborekwe Khambule**

Acting General Manager:  
Operations



# Senior Management

**Ms. Zandile Nene**  
Company Secretary



**Mr. Mnikeli Ndobambi**  
Senior Manager:  
Forecasting



**Ms. Sihle Mashabane**  
Senior Manager:  
Supply Chain Management



**Dr. Deon Terblanche**  
Senior Manager:  
Research



**Ms. Gaborekwe Khambule**  
Senior Manager:  
Aviation



**Prof. Themba Dube**  
Senior Manager:  
Climate Services



**Mr. Nish Devanunthan**  
Senior Manager:  
Technical Services



**Mr. Lulama Gumenge**  
Senior Manager:  
Finance



**Mr. Mbuyiselo Xhamvu**  
Senior Manager:  
Occupational Health and Safety



**Mr. Olusegun Ajigini**

Senior Manager: Information & Communication Technology



**Mr. Thabiso Dekeda**

Senior Manager: Employee Relations



**Mr. Daniel Letsoalo**

Legal Manager



**Ms. Trish Persad**

Senior Manager: Human Capital Development



**Ms. Munyadziwa Rabambi**

Senior Manager: Stakeholder Management and Public Relations



**Mr. Mike Edwards**

Special Adviser



**Mr. Mark Majodina**

Senior Manager: International Relations



# Performance Against Targets for the year ended March 2011

**Strategic Goal 1:** To ensure the continued relevance of meteorological products and services in compliance with all applicable regulatory frameworks

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To ensure compliance with all applicable national and international regulatory frameworks.	Sound corporate governance in all relevant spheres nationally and internationally.	Review Framework of Accountability. Strengthen and manage internal controls.	Review, update and implement rolling out of 3 year internal audit plan. Review, update and implement rolling out of risk management plan. Review, update and implement external audit plan. All audit findings addressed or corrected.	Quarterly report on implementation of milestones in 3 year internal audit plan. Quarterly report on implementation of milestones in risk management plan. Quarterly report on implementation of milestones in external audit plan. All audit findings corrected and addressed. Approved Annual Financial Statements.	Unqualified audit report for SAWS.	Implementation of milestones in 3 year internal audit plan. Implementation of milestones in risk management plan. Implementation of milestones in external audit plan. All audit findings corrected and addressed. Approved Annual Financial Statements.	Achieved. Achieved. Achieved. Partially achieved as per the follow up reviews by the internal auditor. Achieved.
		Implementation of compliance schedule as per compliance diary.	Implement Compliance Schedule.	Quarterly report produced on implementation of compliance schedule.		Quarterly report produced on implementation of compliance schedule.	Achieved.
			Departmental support to CFO.	All relevant findings for Department are corrected or addressed. Full compliance to schedule and inputs to Quarterly reports and compliance report. Streamlined departmental processes and procedures in place.		Enhanced compliance by departments.	Achieved.
		Enhance internal governance structures.	EXCO, MANCO, Adjudication Committees fully functional.	A developed and implemented annual corporate calendar.	New Indicator.	A developed and implemented annual corporate calendar.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
			Review and evaluation of performance of Board structures.	An effective and efficient functioning Board.	Approved Board Evaluation Framework.	Board Governance structures reviewed by Quarter 1.	Achieved.
	Compliance to all international (i.e. WMO, ICAO) obligations as well as recommended regulations and standards.	A fully functional MET Authority.	A fully functional MET Authority.	Percentage of inspection reports completed on schedule. Review of relevant documentation and timely introduction of changes. Annual report in line with international best practice.	90% of inspection reports completed on schedule. All relevant documentation reviewed and timeous introduction of changes. Annual report in line with international best practice.	100% planned inspection reports completed on schedule. All relevant documentation reviewed and timeous introduction of changes. Annual report in line with international best practice.	Achieved.



# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		A fully functional Marine unit.	A fully functional Marine unit.	Review of relevant WMO and JCOMM. Reports and documentation and timeous introduction of changes. Percentage availability of routine SOLAS forecasts. Evidence through reports of participation in National and International related Marine activities.	New Indicator.	All relevant WMO and JCOMM. Reports and documentation reviewed and timeous introduction of changes. 98% availability of routine SOLAS forecast. Report on National and International participation.	Partially achieved functional unit not yet established, however SAWS has been able to meet its international and national obligation in terms of marine weather forecasting and monitoring Metarea 7.
		Regional Tele-communications Hub.	Regional Tele-communications Hub.	Annual RTH / WIS performance report reflecting daily collection and dissemination of data submitted to WMO timeously.	Annual RTH performance report reflecting daily collection and dissemination of data.	Annual RTH / WIS performance report reflecting daily collection and dissemination of data submitted to WMO timeously.	Achieved.
			Maintain an OPMET database.	Quarterly report to Exco on the availability of the OPMET database.		Quarterly report to Exco on the availability of the OPMET database.	Achieved.
			Full compliance to Watch Office obligations regarding the issuance of SIGMETS and AIRMETS.	Monthly report on SIGMETS and AIRMETS issued.	Nil - New indicator.	Monthly report on SIGMETS and AIRMETS issued.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 / 11	Results
		Custodian of national climate data.	<p>QualiMet fully functional. Data homogenisation fully functional. Continuous data QC. Integrate data from external sources (e.g. ARC, DWA). Integrate data from different databases within SAWS. Document archiving.</p>	<p>Monthly data availability reports on climate data. Integrated data from external sources. Monthly data quality reports on climate data.</p>	<p>Monthly data availability reports on national climate data.</p>	<p>Monthly data availability reports on climate data. Data integrated from one external source. Monthly data quality reports on climate data.</p>	Achieved.
			<p>Checking, compiling and submission of CLIMAT and CLIMAT TEMP reports by the 5th of each month.</p>	<p>Date of submission of CLIMAT and CLIMAT TEMP reports - by 5th of each month.</p>	<p>Publishing of CLIMAT and CLIMAT TEMP reports within stipulated timeframe.</p>	<p>Fulfil compliance to international obligations.</p>	Achieved.
To effectively address climate change, adaptation and mitigation.	Enhanced severe weather prediction capability.	Research and development of nowcasting and very short range forecasting tools.	<p>Collaborate with Bureau of Meteorology, Australia with regards to QPE radar rainfall estimation. Collaborate with NOAA/ NESDIS / EUMETSAT / UK MetOffice with regards to possible improvements / refinements in hydroestimator. Local development, testing and implementation of QPE improvements.</p>	<p>Collaboration with BoM established, SAWS researcher capacitated and local development testing and implementation completed and reported on. Collaboration with EUMETSAT / DLR established, SAWS researcher capacitated and local development and testing completed and reported on.</p>	<p>One very short range forecasting tool for convective probability developed and implemented.</p>	<p>All research, development and documentation of operational Combined Instability Index tool concluded. A new QPE Nowcasting tool. Potential for a tool for the early detection and tracking of convection investigated and tested.</p>	Achieved.

# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		Research and development of short and medium range forecasting tools.	Implementation of multi-model system. Precipitation probability Maps.	Research Outputs (A report / Colloquium) on Case Studies and Verifications statistics.	Kalman filter Max and Min Temperature forecast for <48 hr.	Operational Multi-model short-range ensemble prediction system.	Achieved.
	Implemented LRF products enhancing decision making and planning in key socio-economic sectors.	Continued research and development of LRF and climate variability products as per user requirements.	Identify models to be used/run to produce base data for downscaling to Southern African region on beyond seasonal time scales. Development of project plan including resource requirements.	Progress reports with regards to suitable models to be used/run and their availability. Detail project plan developed and implemented.	Multi-model seasonal forecasting system developed.	Suitable models/ model output identified and access established for use in research and feasibility testing. Research milestones achieved as per project plan agreed with WRC. Research milestones achieved as per WRC project plan	Not Achieved: A study to research the best models and model configuration setup is underway with the CSIR and IRI. Progress on WRC project, legal documents submitted for approval. A report (literature study) for creating a decadal forecasting system was established. Further enhancements to the report in progress.
			LRF products developed and implemented as per user requirements.	Number of LRF products developed and implemented as per user requirements.	Multi-model LRF system for temperature and rainfall developed.	Needs analysis and baseline for LRF products determined.	Not Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	Weather related disaster risk applications contributing to reduced weather related mortality and damage to property.	Development of weather related disaster risk applications.	Rollout of SAFFG systems to relevant Regional Offices and NFC forecasters. Training workshops with disaster managers of relevant regions. Operational implementation of SAFFG.	Operational functioning of flash flood warning system.	SAFFG system developed and ready for implementation of Operational Severe Weather Warning System for South Africa. Reviewed Severe Weather Warning System for South Africa.	Rollout of SAFFG system to designated South African regions. Review and enhance Severe Weather Warning system for South Africa. Implement the reviewed Severe Weather Warning System for South Africa.	Achieved.



INDIGENOUS KNOWLEDGE BOOK LAUNCH: 22 OCTOBER 2010

# Performance Against Targets

for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 / 11	Results
			RSMC daily issues guidance forecasts to SADC NMSs. RSCM and NMS submit quarterly reports. RSMC organise 2-week training workshop for SADC NMSs. RSMC participation in development of SARFFG.	Guidance forecasts issued daily and on time. Quarterly reports submitted on time.		Guidance forecasts issued daily and on time. Quarterly reports submitted on time.	Achieved.
			Coordinate with NDMC in public awareness campaign. Collaborate with NDMC on enhancement of warning dissemination systems.	Report on proposed improvements of warning dissemination systems.		Collaborate in public awareness campaign conducted with NDMC on MHEWS. Implementation plan developed for improvement of dissemination systems.	Partially Achieved: National Disaster Management Centre (NDMC) postponed the campaign due to internal re-organisation.
Adaptation to climate change.	Adaptation to climate change.	Establish climate change, adaptation and mitigation programme bridging the gap between climate science and services.	Adaptation to climate change.	SAWS position statement on climate change, mitigation and adaptability developed. Functional and operational climate change, adaptation and mitigation programme developed.	The role of SAWS in climate change defined. SAWS position statement on climate change approved.	Review and update position paper on climate change, mitigation and adaptability. Established climate change, adaptation and mitigation programme bridging the gap between climate science and services.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	Air quality related health risk management information available.	Air quality information service operationalised.	Liaise with data providers. Attend to stakeholder's data request and data queries. Continuous flagging of collected AQ data. Write monthly reports on data quality and collection efficiency. Improve SAAQIS functionality/ applications.	Monthly reports on data quality and availability.	Functional SAAQIS database.	Monthly reports on data quality and availability.	Achieved.
			Conduct research activities on model evaluation and validation based on case studies- refinement of the model input streams (UM model and inventories) and operational procedures.	Research outputs with at least two scientific reports.		A fully developed and operational AQMS.	Not Achieved: Not yet completed, still in progress due to the emissions inventory that still needs to be developed by SAAQIS.
	Availability of long term Trace Gas records.	Trace Gas monitoring and submission of reports according to International Standards.	Conduct research and monitoring of the trace gases and Green House Gases. Perform maintenance and calibration of the instruments. Data quality assurance and control.	Research outputs with at least two scientific reports (e.g. Internal scientific report based on GAW's contribution to the State of the Environment report).	Trace Gas data reports and State of the Environment report produced.	A report on the data sets submitted to the WDCs - A report on GAW's input to the State of the Environment report. Develop a case study to Province for optimising and commercialising the utilisation of this data (use Western Cape as pilot project).	Achieved.

# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To develop and implement a comprehensive product / service programme.	An effective product suite and effective service delivery.	Enhance the forecasting and Warning Service offering.	Analysis and processing of NWP data making reference to observed data to forecast 24 hour Maximum Temperature. Daily processing of meteorological data to compile weather forecasting that will be disseminated to the public daily as per schedule. Provide weather forecast information aligned to user needs.	71% accuracy of Maximum Temperature forecast that is within 2 degrees of the observed maximum temperature value. 99% daily forecast availability as per schedule. Contribute to 84.4% timely availability of SAWS data.	70% accuracy for Maximum Temperature and 24hour forecast within 2 degrees. Forecast availability as per schedule at 99%. Customer Satisfaction Survey conducted: 81.6% Accuracy of data 82.9% Reliability of data 84.4% Timeliness availability of data.	71% accuracy of Maximum Temperature forecast that is within 2 degrees of the observed maximum temperature value. Forecast availability as per schedule should be 99%.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
			Analysis of weather related data for the provision of severe weather warnings. Analysis of aerodrome related data for the provision of aerodrome warnings.	Number of and accuracy %of Severe Weather warnings issued. Number of and accuracy %of Aerodrome warnings issued.	N/A - new indicator.  N/A - new indicator.	Report on and accuracy of number of severe weather warnings issued. Report on and accuracy of number of aerodrome warnings issued.	Achieved.



# Performance Against Targets

## for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		Deliver and enhance the regulated Aviation Service.	Quality of service.	% accuracy of Aerodrome forecasts (TAF). Landing forecast (TREND). Monthly reports on High level en route weather (SIGMET); and Low-level en-route (AIRMETS). % availability of TAF. TREND Routine reports (METAR). Meeting all requirements of International aviation (10 airports). Meeting requirements of domestic aviation. (10 airports). Meeting requirements of domestic aviation. (10 airports).	85%. 85%. Nil – new indicator. Nil – new indicator 98%. 98%. ICAO Compliance (10 Airports). Meeting domestic aviation requirements (10 airports). Local requirements reviewed. Customer Satisfaction Survey conducted: 80% Accuracy of data 81% Reliability of data 79% Meaningful Information.	87% accuracy for TAF. 85% accuracy for TREND. TREND and TAF availability as per schedule at 98%. Service at 10 International and National airports meeting requirements.	Achieved (90.4%). Achieved (99.1%). Achieved: (99.7% TREND and 99.1% TAF). Achieved: With the exception of Aerodrome warnings and wind shear warnings at Lanseria International Airport all ICAO requirements were met at International and National airports.
		Develop and enhance the Marine services offering.	Develop and enhance the Marine services offering.	Status of progress in Marine Business Plan implementation.	Submission of draft Marine Business Plan for approval by EXCO.	Implementation of Phase 1 of Marine Business Plan evidenced.	Achieved.

## Strategic Goal 2: To ensure the effective management of stakeholder, partner and key client relations

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To promote beneficial and enduring relationships with key stakeholders.	Beneficial relationships with key stakeholder groups.	Enhanced relationship management programme with priority stakeholders.	Implement key programme in collaboration with stakeholders. Prioritise the programmes according to SAWS business priorities and in line with Government priorities. Enhance profiling of SAWS as key strategic partner to government department. Identify opportunities and develop programmes to partner for business development. Develop and implement programmes that address 2009 perception survey recommendations.	Findings of 2009 Perception Survey available - define gaps and opportunities for enhancement. Implementation of programmes addressing 2009 perception survey recommendations (Media Relations, Collaborations, Stakeholder Communication to support commercial benefit). Annual Impact assessment results on key programmes on Media Relations, Collaborations, Stakeholder Communication - maintain and improve on perception survey results.	Stakeholder Relations Framework Established and programme developed. Perception Survey - 2009/10 conducted - results as per BMI reports.	Development and implementation of programmes addressing perception survey recommendations (Media Relations, Collaborations, Stakeholder Communication) Annual Impact assessment results on key programmes (Media Relations, Collaborations, Stakeholder Communication) - reflect an improvement on perception survey results.	Achieved.
			Develop and implement stakeholder relations framework, reporting format and database of forums (current and new).	Status implementation of stakeholder relations framework (SAWS departments). Use of reporting format and reporting. Records of meetings and programmes according to forums established.		Populate stakeholder relations framework, reporting format and forums database and programmes. Integrated stakeholder relations engagements programme and optimal use of skills and resources.	Achieved.

# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
			Relevant SAWS forums established and enhanced.	Relevant SAWS forums established and enhanced.		Relevant SAWS forums established and enhanced.	Achieved.
			Minutes of meetings reflecting resolutions taken and target dates for implementation.	Minutes of meetings reflecting resolutions taken and target dates for implementation.		Minutes of meetings reflecting resolutions taken and target dates for implementation.	
			Summary report submitted quarterly.	Summary report submitted quarterly.			
To ensure effective internal and external communication.	Effective internal and external communication.	Implement internal communication interventions.	Develop programmes to enhance feedback and internal communication process.	Programmes to enhance feedback and internal communication process implemented.	Communication policy implemented.	Full implementation of 2008/9 - 2010/11 Communication strategy.	Achieved.
		Implement SAWS communication strategy.	Review communication strategy and develop 3 year strategy.	Approved 2011/13 Communication strategy.	Internal and external communication audit report results actioned.	Impact assessment on 2008/9 - 2010/11 Communication strategy.	
		Conduct impact assessment on SAWS communication strategy.	Developing communication programmes to enhance business developments.	Impact assessment report on progress made on programmes which address the gaps as identified in the perception survey report.	Phase 1 & 2 of communication strategy implemented.	Develop 2011/12 - 2013/14 Communication strategy.	
			Develop tools to assess impact internally and externally.		Customer Satisfaction Survey conducted, results reflect:	Develop implementation plan for 2011/12.	
		Develop and implement communication programmes that address the gaps as identified in the 2009 perception survey report.			86% satisfied with visual appeal. 82% score on organisational image. 79.4% perception of customer liaison / relationship. 74.1% perception of regular contact. 78.6% perception of strategic partnerships. 57.7% satisfaction with communication around tariffs.		

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		Enhanced participation of stakeholders in SAWS programmes and projects.	Quarterly report on stakeholder participation and engagements.	Quarterly report on stakeholder participation and engagements.	New Indicator.	Quarterly report on stakeholder participation and engagements.	Achieved.
To promote International Relations and Cooperation.	Enhanced international positioning of SAWS.	Enhance international positioning of SAWS.	SAWS International Programme developed and implemented; aligned to DIRCO and relevant ICAO guidelines. International Relations Framework developed and implemented. Identify and promote opportunities for Marketing SAWS products internationally.	Status in the implementation of SAWS International Programme. International Relations Framework developed and implemented. Evidence of opportunities for Marketing SAWS products internationally.	Implementation of the International Relations Framework. Determine international positioning baseline.	SAWS International Programme developed and implemented; aligned to DIRCO and relevant ICAO guidelines. International Relations Framework developed and implemented. Evidence of opportunities for Marketing SAWS products internationally.	Achieved.



# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	Enhanced Meteorological infrastructure in the SADC Region.	Participation in the full implementation of Phase 1-SADC Regional Meteorological Development Project.	Facilitation of the MASA Strategy Plan and implementation of MASA Programmes in the enhancement of meteorological observations, data communications and capacity building-SADC Regional Meteorological Development Project.	Fully functional MASA Secretariat. MASA Strategy implemented. Progress Report on the Regional Meteorological Development Project.	MASA secretariat established. +MASA Constitution signed.	Fully functional MASA Secretariat, MASA Strategic Plan. MASA Capacity Building sessions; Implementation Plan of the SADC Regional Met Dev Programme.	Achieved.

## Strategic Goal 3: To address fully the short-term viability and long-term sustainability of SAWS revenue and other resourcing requirements

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To mobilise financial resources to ensure sustainability.	Sufficient income generated to ensure the viability and sustainability of SAWS.	Generation of aviation revenue according to approved tariffs.	Review and update the costing model (ABC).	Tariffs recommendations submitted to the Regulator.	R48m income as baseline.	Reviewed tariffs according to the ABC model submitted to the Regulator within stipulated time frames. An improved costing model.	Achieved.
			Effective use of the model and scientific approach for budgeting.	Comparison of actual revenue received to the budgeted amount. Zero under-recovery.		Growth in aviation revenue by 27%. Zero under-recovery.	Achieved: Aviation revenue year on year grew by 44% to R70.63m (2010: R49.03 m).
	Apply the ABC model to inform the funding requirements of the public good mandate.		Funding model updated with ABC results.	Reviewed Funding Model based on ABC results.	New Indicator.	Reviewed Funding Model based on ABC results.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		Externally funded research.	Annual percentage increase in funding from baseline.	Annual report on collaborations reflecting increase in research funding by 10% (R 3 million baseline).	R3.3 million research funding (10% increase).	R3.3 million research funding (10% increase).	Not Achieved: R2 101 695.00 raised.
		Non-regulated commercial revenue generation.	Developed and implemented commercial strategy (including pricing schedule).	Increase alternative commercial revenue by 10% on previous year baseline (R12.83 million).	R 12.83 Million alternative commercial revenue (decreased - negative percentage).	Increase alternative commercial revenue by 10% on previous year baseline (R12.83 million).	Achieved: Other commercial income has increased to R14.61m.
			Developed and implemented commercial strategy.	Annual commercial strategy implemented- marketing plans per product implemented.		Annual commercial strategy developed- marketing plans per product implemented.	Not Achieved: Commercial strategy workshop held in March 2011, however, the strategy will be finalised in 2011/12 financial year.
			Develop web with pay portal.	Successful web with revenue generating pay portal.		Fully functional web for all products.	Achieved.
To enhance fiscal discipline and the effective management of resources to ensure a positive return of investment.	Resources effectively utilised.	Annual Report tabled Annually in August.	Updating the annual financial statements.	Annual Report tabled Annually in August.	Annual Report tabled Annually in August.	Annual Report completed within prescribed deadlines.	Achieved.
	Effective utilisation of available funds - spending of budgets.		Review of expenses and CAPEX to ensure that they do not exceed budget. Monthly management accounts identifying overspending of budgets. Reallocation of budgets.	Accurate financial transaction support for departments, internal controls, recording processes, reconciliations, misallocation, funds requests and surrenders. Audit support and sundries payments reported upon quarterly.	Variance within 10% of total budget.	Accurate financial transaction support for departments, internal controls, recording processes, reconciliations, misallocation, funds requests and surrenders. Audit support and sundries payments reported upon quarterly.	Achieved.

# Performance Against Targets

for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
				Demand plans aligned with budget, priorities and Business Plans.		Demand plans aligned with budget, priorities and Business Plans.	Achieved.
				Acquisition plans aligned with demand plans. Effective payments management process implemented. Sound vendor and contract management processes. Annual asset management plan developed and implemented. Sound inventory and stores management processes. Updated and accurate asset register maintained reflecting the management and life cycling of department assets.		Acquisition plans aligned with demand plans. Effective payments management process implemented. Sound vendor and contract management processes. Annual asset management plan developed and implemented. Sound inventory and stores management processes. Updated and accurate asset register maintained reflecting the management and life cycling of department assets.	Not Achieved: For 2011/12, acquisition plans to be finalised once CAPEX plans have been prioritised. Achieved. Achieved: Contact framework has been adopted. Not Achieved: The plan was delayed by the process of updating the asset register and resolving queries that were raised by auditors. Achieved: Goods receiving, goods issuing and verification of processes are loaded on the E-QMS. Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
				Effective expenditure control support - Monthly technical reports on actuals generated by CFO for Programme Managers. Bi-Monthly interrogation session by the CFO with units held to unpack the technical reports (e.g. bilateral).		Effective expenditure control support - Monthly technical reports on actuals generated by CFO for Programme Managers. Bi-Monthly interrogation session by the CFO with units held to unpack the technical reports (e.g. bilateral).	Achieved.
				Quarterly report on risk profile of departments.		Quarterly report on risk profile of departments.	Achieved.



# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
				Monitor value for money in accordance with specified outcomes.		Monitor value for money in accordance with specified outcomes.	Achieved.
		Effective utilisation of available resources.	Legal support and advice on litigation and contract management. Managing Intellectual Property. Reducing legal risk.	Quarterly litigation report. Quarterly contract management report.	New Indicator.	Quarterly litigation reports. Quarterly contract management report.	Achieved.

## Strategic Goal 4: To ensure optimised business integration and the organisational effectiveness of SAWS

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To enhance the business integration and organisational effectiveness programme.	ISO certification and operational efficiency enhanced.	Total Quality Management programme enhanced.	Quality Management System (QMS) - Systems Evaluation. QMS Internal Audit. QMS Planning. QMS Management Review. Establish Quality Objectives.	System Established - 100% compliance. QMS Audit Completed - 80% effectiveness. QMS Plan - Approved. Establish Quality Objectives - for all major products and services. QMS Management Review - Executive Management approval rating of 80%.	QMS internal audit team established. QMS reviewed and implemented. Approved QMS audit report.	A fully operational Quality Management System that is Certified.	Partially Achieved: Quality Management System is fully functional, however, SAWS will be ISO certified by end second quarter of financial year 2011/12 instead of March financial year 2010/11.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	Integrated product development and service provision in SAWS.	Establishment of cross functional project teams. Develop and implement integrated product development and service provision plan.	Establishment of cross functional project teams. Develop and implement integrated product development and service provision plan.	Report on implementation and monitoring of agreed targets in the integration plan for the year.	Approved integration plan setting out annual targets for 2010 – 2013.	Report on implementation and monitoring of agreed targets in the integration plan for the year.	Achieved.
	Integrated Research and Development Framework.	Enhanced Research Management Methodology.	Enhanced Research Management Methodology.	Integrated Research and Development Framework developed and implemented.	Operational Research Management Framework.	Integrated Research and Development Framework developed and implemented.	Not Achieved: Research Strategy Workshop was conducted and the document is still under development. The Research Management Framework is part of the strategy process.
	Integrated process and system environment.	Develop and implement ICT Master Plan.	Outstanding projects to be reprioritised and priorities targeted to be completed in this period. List as per ICT Strategy. “End of Life” systems replaced by more than 50%.	% of all priority projects completed or in the process.	ICT Master Plan priority areas identified and implementation plan developed.	All ICT Strategy priorities actioned and or completed. Risk plan on End of Life (EoL) Systems and actions to be taken.	Achieved.
	Business continuity ensured.	Maintain and test Business Continuity Plan compliance.	ICT: Ensure BCP processes for all Critical identified systems and processes. Especially ensuring high availability of data and products to clients.	All critical systems and networks have full redundancy in place.	BCP Plan implemented.	BCP Systems and networks in place for all critical systems and networks.	Achieved.

# Performance Against Targets

for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	To provide business intelligence and support to executive planning and decision making processes.	Development and implementation of a Knowledge Management Strategy and Management Information policy, procedures and systems.	Development and implementation of a Knowledge Management Strategy and Management Information policy, procedures and systems.	Status in the development and implementation of a Knowledge Management Strategy and Management Information policy, procedures and systems.	Ad-hoc implementation. Preparatory work and development of draft Knowledge Management Strategy.	Develop business case and project implementation plan for implementation of a Knowledge Management Strategy and Management Information policy, procedures and systems.	Achieved.
To ensure an optimal observation network and dissemination platform.	An effective and sustainable observational network.	Modernisation of the observation network.	Modernisation of the observation network.	Annually reviewed Modernisation plan by April. Quarterly reports on milestones achieved in the modernisation plan.	Modernisation plan and Preventative Maintenance Plan developed.	Annually reviewed Modernisation plan by April. Quarterly reports on milestones achieved in the modernisation plan.	Achieved.
		Enhance the Marine observation network.	Modernisation and maintenance of the Marine observation network.	Quarterly reports on amount of VOS recruited for observations. Quarterly reports on amount of drifting weather buoys deployed.	New Indicator.	Recruit two Voluntary Observation Ships (VOS). Deploy 30 drifting Weather Buoys	Achieved.
		Integrated Preventative planned maintenance program.	Preventative planned maintenance program.	Annually reviewed integrated preventative maintenance plan. Quarterly reports on milestones achieved in the preventative maintenance plan.	New Indicator.	Review Preventative Maintenance plan by April. Quarterly reports on milestones achieved in the PMP plan.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		To increase the percentage of available data on the databank.	Maintenance and inspection of observational network to support the targeted data availability.	Percentage of available data.	2 working days' turnaround time.  AWS = 95%. Monthly Rainfall = 85%. Quarterly Rainfall = 95%. Upper Air = 93%. LDN = 97%.	Increase availability by 1% per year until an acceptable level is achieved.  AWS = 96%. Monthly Rainfall = 86%. Quarterly Rainfall = 96%. Upper Air = 94%. LDN = 98%.	Achieved.



# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To ensure an optimal organisational design which supports the organisational strategy.	Operational efficiency and cost effective resource utilisation.	Realignment of SAWS services. Redefining roles within SAWS to address future needs.	Realignment of SAWS services. Redefining roles within SAWS to use resources to address future needs	Status in the development of the implementation re-alignment plan.	New Indicator.	Feasibility study on the potential re-alignment of SAWS services conducted and report produced. Multi-phase implementation plan for SAWS re-alignment developed.	Achieved.

## Strategic Goal 5: To create strategy-driven human capital capacity for SAWS' performance

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To ensure the availability of critical and scarce skills to ensure delivery of high quality projects.	Availability of requisite skills and competencies to achieve the Organisation's strategic intent. Retention of employees within the scarce and critical skills.	Develop and Implement an Annual Human Resources Development Strategy. Submission of Annual Workplace skills plan aligned to the strategy. Individual Personal Development Plans in place for all staff.	Develop and Implement an Annual Human Resources Development Strategy. Submission of Annual Workplace skills plan aligned to the strategy. Individual Personal Development Plans in place for all staff.	Critical and scarce skills availability against what is needed by the Organisation. Staff Turnover rate 6%.	Integrated talent management system in place. 78 employees in identified and critical scarce skills. 6% staff turn-over. 20% readiness of identified successors to take over positions.	Critical and scarce skills availability against what is needed by the Organisation (60%). 6% turnover rate in Critical and Scarce Skills. Achieved 2.2%.	116 (32%) Critical and scarce skills available in the Organisation. Achieved 2.2%.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
	An effective Bursary Scheme implemented.	To identify and support potential skills in the scientific and technological fields.	Monitoring and re-allocation of current bursaries. Advertising and awarding new bursaries. Source the money (DEAT, National Treasury, DST and Universities) to fund uptake of graduates.	Bursary Allocation. Report on Student Results and Action on non-performers. Report on Sourcing Activities and Funds secured - 5% Increase in alternate funding for bursary scheme.	Determine the baseline in all fields. 40 Bursary Recipients.  R1m Funds Secured.	5% Increase in Allocated Bursaries.  Availability of Funds or Financial Commitments from alternate Sources. 70% of graduates employed at SAWS.	Achieved: 44 bursaries were awarded. 10 interns were appointed.  Achieved: 82 % of the bursary recipients who successfully completed their studies were absorbed.
To instill a performance culture underpinned by an effective performance management system and best practice reward and incentive programme	An enhanced performance culture in the SAWS.	Review and implement an organisational performance management system.	Training of all Managers, Supervisors and Labour representatives on the PMS. Develop a performance Index Review. To assist line Managers on Poor Performance management.	Organisational performance rating percentage. Action taken on non- /poor performers.	Organisational performance rating of 76%.	Overall 76% Performance Rating.	87%

# Performance Against Targets for the year ended March 2011 (continued)

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
To instil a sense of professionalism and loyalty amongst staff.	Positive, healthy and productive employees.	Employee wellness programmes and retention strategies implemented. Compliance to the relevant Human Resource policy stipulations (Remuneration, Labour OHS etc). Management focus on entrenching the SAWS values - values evident in behaviour of staff.	Comprehensive wellness programme, Participate in national health activities i.e. Walk the Talk, Conduct wellness/health days for SAWS employees, Ensure participation in HIV/AIDS activities, Ensure employees have access to EAP. Employee Recognition programmes, implementation of career pathing and scarce and critical skills allowance. Annual review of policies. Educate employees on policies, Advise SAWS on labour laws. Encourage all employees to live SAWS values in their daily activities	Communication to employees around participating in wellness programmes. Leave management data (number of working days lost per 100 employees), Reduction in number of incidences and frequency of injuries per hours worked (quarterly report on OHS). Turnover rate. All Reviewed Policies approved by the board. Number of Policy awareness sessions conducted. 100% Compliance to legislations and regulations. 360 Degree review process to incorporate assessment on living SAWS values.	SAWS Comprehensive wellness programme. Voluntarily testing and counseling for HIV/AIDS. Recognition Awards. Scarce and critical skills allowance. Revamp policy deposit on internet. Living the values programme.	Communication to employees around participating in wellness programmes. Leave management data (percentage decrease in the number of working days lost per 100 employees). Reduction in number of incidences and frequency of injuries per hours worked (quarterly report on OHS). 6% Turnover rate in Scarce and Critical Skills. 90 %Reviewed Policies approved by the Board. Quarterly Policy awareness sessions conducted. 100% Compliance to legislations and regulations. 360 Degree review process to incorporate assessment on living SAWS values.	Achieved.

Strategic Objective	Outcome / Measurable Objective	Programme Activity	Sub-activity (For 2010-2011)	Indicator	Baseline 2009 / 2010 Actual	Annual Target 2010 /11	Results
		Enhance the implementation of Performance Management.	Information session with all employees in order to acquaint them with the PMS. Performance agreements developed, agreed upon and signed. Monitoring and implementation of the new PMS.	100% compliance to PMS policy.	New Indicator.	All employees will be trained and assessed.	Achieved





For a complete list of acronyms please see page 130.

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# PART 2

Corporate Governance	44
Meteorological Authority	49
SAWS Management Team	50
Organisational Structure	52
Operations	53
Corporate Affairs	67
Executive Projects	74
Human Capital Management	75

## Introduction

The Board is committed to the principles of good governance and adherence to the highest levels of ethical standards in the conduct of business. During the period under review, SAWS continued its quest of conducting its business in line with corporate governance best practices, with a view to building trust among its Shareholder as well as other Stakeholders.

## 1 Shareholding

The South African Government, represented by the Minister of Water and Environmental Affairs, (or her predecessor) is the sole Shareholder.

The Shareholder Compact is not a requirement for Public Entities such as SAWS (listed as Schedule 3A Entities in terms of the PFMA). However, the Minister and the Board have agreed on the need to formalise their working relationship; an activity that will be pursued in the 2011/12 financial year. In the meantime, the Minister and the Board have scheduled meetings at which issues of a strategic nature, as well as critical governance issues are discussed.

## 2 Mandate of the Board

The mandate of the Board, including its statutory duties and responsibilities, are derived from the South African Weather Service Act; augmented by the relevant provisions of the Public Finance Management Act No. 1 of 1999 (PFMA), as amended; 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 Report on Corporate Governance for South Africa, among others. With the release of King III, the Board also adopted an approach that it would to the extent possible; take the relevant recommendations of King III into consideration in the

conduct of its business. Over and above adherence to the relevant legislative and governance frameworks, the Board functioning is also guided by an approved Board Charter.

### **On an annual basis, the Board ensures that among others, the following happens:**

- The review of SAWS Strategy for approval by the Shareholder;
- The approval of the Business Plan and Budget;
- The approval of the audited Annual Financial Statements, and Annual Report;
- Approves the Internal and External Audit Plans;
- The review and approval of risk management policies and strategies, as well as other policies recommended by the relevant Committee(s);
- The evaluation of the performance and effectiveness of the Board, its Committees and individual Board members; and
- Records the facts and assumptions on which it relies to conclude that the service will continue as a going concern in the ensuing financial year.

## 3 Board Governance Structure

During the period under review, the composition of the Board was in compliance with corporate governance best practices, with the majority of members being the non-executive members. The Board had three Committees; namely, the Audit & Risk Committee, the Human Resource & Remuneration Committee, and the Strategic Programmes Committee.

The Board and Committee membership was as reflected in Table 1 below.

Table 1

Board Members	Board Committees		
	Audit & Risk	HR & Remuneration	Strategic Programmes
Ms Khungeka Njobe (Chairperson)		✓	
Rev. Lulamile Mbete (Deputy Chairperson)		Chairperson	
Ms Medi Mokuena	Chairperson	✓	
Mr Welcome Msomi			Chairperson
Dr Thembakazi Mali			✓
Mr Lance Williams	✓		✓
Prof. Harald Winkler			✓
Mr Siyabonga Makhaye	✓		
Prof. Lindisizwe Magi		✓	
Ms Joanne Yawitch*			✓
Dr Linda Makuleni (Chief Executive Officer)		✓	✓
Mr Slingsby Mda (Chief Financial Officer)**			
	Mr Melusi Ntumba***		

\* Department of Environmental Affairs' representative

\*\* Appointed as an ex-officio member of the Board in April 2010

\*\*\* An independent member of the Audit & Risk Committee

### 3.1 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. Whilst 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' expense should it be deemed necessary.

Board meetings were held on 27 May 2010, 29 July 2010, 25 November 2010, 10 February 2011 and a Special Meeting/Strategic Plan held on 23 August 2010. The membership of the Board, and the number of meetings held and attended were as reflected in Table 2 on the following page:

## 4 Board Meetings

Board meetings are held in accordance with the provisions of the Board Charter as well as an approved Board Calendar; and special meetings may also be held as and when the need arises.

Table 2

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Ms Khungeka Njobe (Chairperson)	4	4	1	-
Rev Lulamile Mbete (Deputy Chairperson)	4	3	1	-
Ms Medi Mokuena	4	2	1	-
Mr Welcome Msomi	4	4	1	-
Dr Thembakazi Mali	4	2	1	1
Mr Lance Williams	4	4	1	1
Professor Harald Winkler	4	-	1	1
Mr Siyabonga Makhaye	4	4	1	-
Professor Lindisizwe Magi	4	3	1	1
Ms Joanne Yawitch*	4	1	1	1
Dr Linda Makuleni (CEO)	4	3	1	1
Mr Slingsby Mda (CFO)	4	4	1	1

\* attended the meeting of 27/05/2010 and was represented by Mr Peter Lukey at the meeting of 29/11/2010

#### 4.1 Board Committees

The Charter makes provision for the Board to establish Committees with clear Terms of Reference, to assist the Board in the execution of its mandate. The Board may also, at its discretion, delegate other matters with the written authority to Board Committees and/or Management, while reserving specific powers to it. However, any such delegation does not absolve the Board from its responsibilities. Committee meetings are held in accordance with the provisions of their approved Terms of Reference as well as an approved Board Calendar. Special meetings may also be held as and when the need arises. The Board has the following three Committees, with clear Terms of Reference.

##### 4.1.1 Audit and Risk Committee

The Committee assists the Board in discharging its duties relating to among others, ensuring that SAWS has adequate review of financial reporting processes, the systems of internal controls and management of financial risks, the audit processes, and the Organisation's processes for monitoring compliance with applicable laws, regulations and governance

frameworks; and also to oversee 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, CFO of SAWS were invited to all Committee meetings; and the Committee Charter also allows the Committee to hold meetings with each of them separately should the need arise. An invitation to attend Committee meetings also gets extended to the CFO from the Department of Environmental Affairs.

Fully constituted Committee meetings were held on 28 July 2010, 15 November 2010 and a special meeting on 10 February 2010. The membership of the Committee, as well as the number of meetings held and attended were as reflected in Table 3:

Table 3

Members	No. of Ordinary Meetings			No. of Special Meetings	
	Meetings Held	Meetings Attended		Meetings Held	Meetings Attended
		With a Quorum	Without a Quorum		
Ms Medi Mokuena (Chairperson)	4	-	2	1	1
Mr Siyabonga Makhaye	4	2	1	1	1
Mr Lance Williams	4	2	1	1	1
Mr Melusi Ntumba*	4	2	-	1	-

\*An independent member of the Committee who is not necessarily the member of the Board.

Note: The Committee also convened on 17 May 2010 and 7 February 2011. However, in both instances the required quorum could not be met at the eleventh hour due to unforeseen circumstances; and urgent matters were subsequently considered in a round robin.

#### 4.1.2 Human Resource & Remuneration Committee

The Committee assists the Board in discharging its duties thereby ensuring that SAWS has adequate human resource-related policies and systems in

place, in compliance with all applicable legislation and governance frameworks. The Committee also assists the Board on issues relating to succession planning and making recommendations to the Board on Executive Management appointments and remuneration.

Committee meetings were held on 13 May 2010, 19 July 2010, and 27 January 2010. The membership of the Committee, as well as the number of meetings held and attended were as reflected in Table 4 below:

Table 4

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Rev. Lulamile Mbete (Chairperson)	3	3	-	-
Ms Khungeka Njobe	3	3	-	-
Ms Medi Mokuena	3	1	-	-
Prof Lindisizwe Magi	3	2	-	-
Dr Linda Makuleni (CEO)*	3	2	-	-

\*represented by the Acting CEO at the meeting of 27 January 2011

#### 4.1.3 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 ensuring that these are managed effectively and efficiently.

Committee meetings were held on 17 May 2010, 15 November 2010, and a special meeting held on 10 February 2011. The membership of the Committee, as well as the number of meetings held and attended were as reflected in Table 5 on the following page:

Table 5

Members	No. of Ordinary Meetings		No. of Special Meetings	
	Meetings Held	Meetings Attended	Meetings Held	Meetings Attended
Mr Welcome Msomi (Chairperson)	2	2	1	1
Mr Lance Williams	2	2	1	1
Prof. Harald Winkler	2	-	1	-
Dr Thembakazi Mali	2	-	1	1
Ms Joanne Yawitch*	2	-	1	-
Dr L Makuleni (CEO)	2	2	1	-

\* represented by Mr Peter Lukey at the meeting of 15 November 2010

#### 4.2 Board Remuneration

Board members are remunerated and/or re-imbursed for expenses incurred in the course of executing SAWS-related activities, in accordance with the remuneration framework determined by the Executive Authority annually.

#### 5 Risk Management

SAWS has adopted an Enterprise-Wide Risk Management (ERM) approach, not only for compliance purposes but also for strategic benefits as part of SAWS' culture. Part of the reason is that ERM supports the alignment of the strategy, process, people and technology. The risk management assessment gets conducted annually, the outcome of which allows the Organisation to identify, prioritise and effectively manage those risks considered critical; and also forms the basis for the development of an Internal Audit Plan.

#### 6 Audit

In line with corporate governance best practices and the PFMA requirements, SAWS has an internal audit function outsourced to an independent firm, SizweNtsaluba vsp; 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. This is achieved by means of an independent objective assessment of the risk management processes, internal controls and governance processes as well as by identifying corrective actions and interventions to enhance the internal controls and processes.

**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.

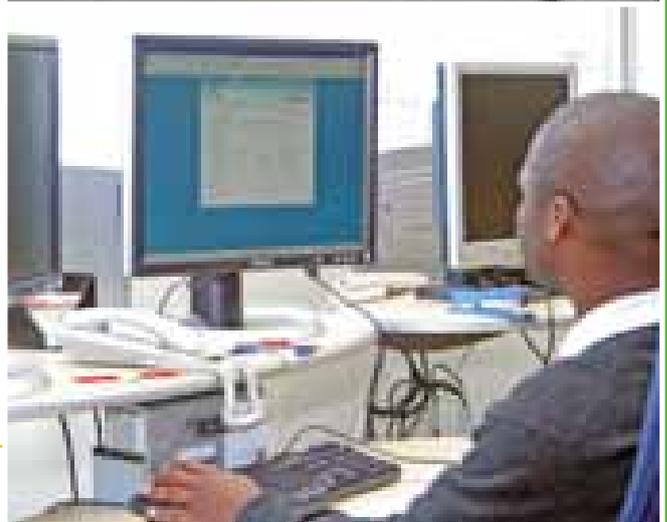
# Meteorological Authority

The second Meteorological (MET) Authority Annual Report was compiled. This was in line with international best practices and has also covered the aeronautical meteorological services and products provided by SAWS to international and national air navigation as required by International Civil Aviation Organisation (ICAO).

All planned Meteorological (MET) Authority inspections were carried out at 20 licensed aerodromes as per schedule, to ensure compliance with International Civil Aviation Organisation (ICAO) safety standards and South African Civil Aviation Authority (SACAA) regulations.

The Memorandum of Agreement (MoA) between SAWS and the Air Traffic & Navigation Services (ATNS) on the provision of meteorological services to ATNS for international and national air navigation was finalised in August 2010.

The document, describing the services provided by SAWS to the Aviation industry, was reviewed by the MET Authority and stakeholders during the Advisory Committee for Aeronautical Meteorological Services (ACAMS) quarterly meetings. The final document will be used to draft a Service Level Agreement (SLA) regarding the services provided by SAWS to the aviation industry. The MET Authority will be responsible for the SLA, since the section was delegated by SACAA to oversee the services and products provided by SAWS to the aviation industry.



# SAWS Management Team

## Operations



*From left to right:*  
Mr Johan Stander,  
Mr Siyabonga Mthethwa,  
Prof Themba Dube,  
Mr Mnikeli Ndabambi,  
Mr Rudzani Malala,  
Mr Olusegun Ajigini,  
Mr Tshepo Ngobeni,  
Mr Karel de Waal,  
Ms Gaborekwe Khambule,  
Mr Nico Kroese,  
Mr Francis Mosekho,  
Mr Nish Devanunthan.

## Corporate Affairs



*From left to right:*  
Ms Hannelee Doubell,  
Ms Modjadji Makoela,  
Mr Daniel Letsoalo,  
Mr Herman Pheiffer.

## CEO and Executives



*From left to right:*  
Mr Slingsby Mda,  
Mr Lindani Gcwensa,  
Dr Linda Makuleni,  
Ms Modjadji Makoela,  
Mr Mnikeli Ndabambi.

*From left to right:*  
Mr Lindani Gcwensa,  
Ms Trish Persad,  
Mr Mbuyiselo Xhamvu.



**Human Capital Management**

*From left to right:*  
Mr Slingsby Mda,  
Ms Sihle Mashabane,  
Mr Lulama Gumenge.



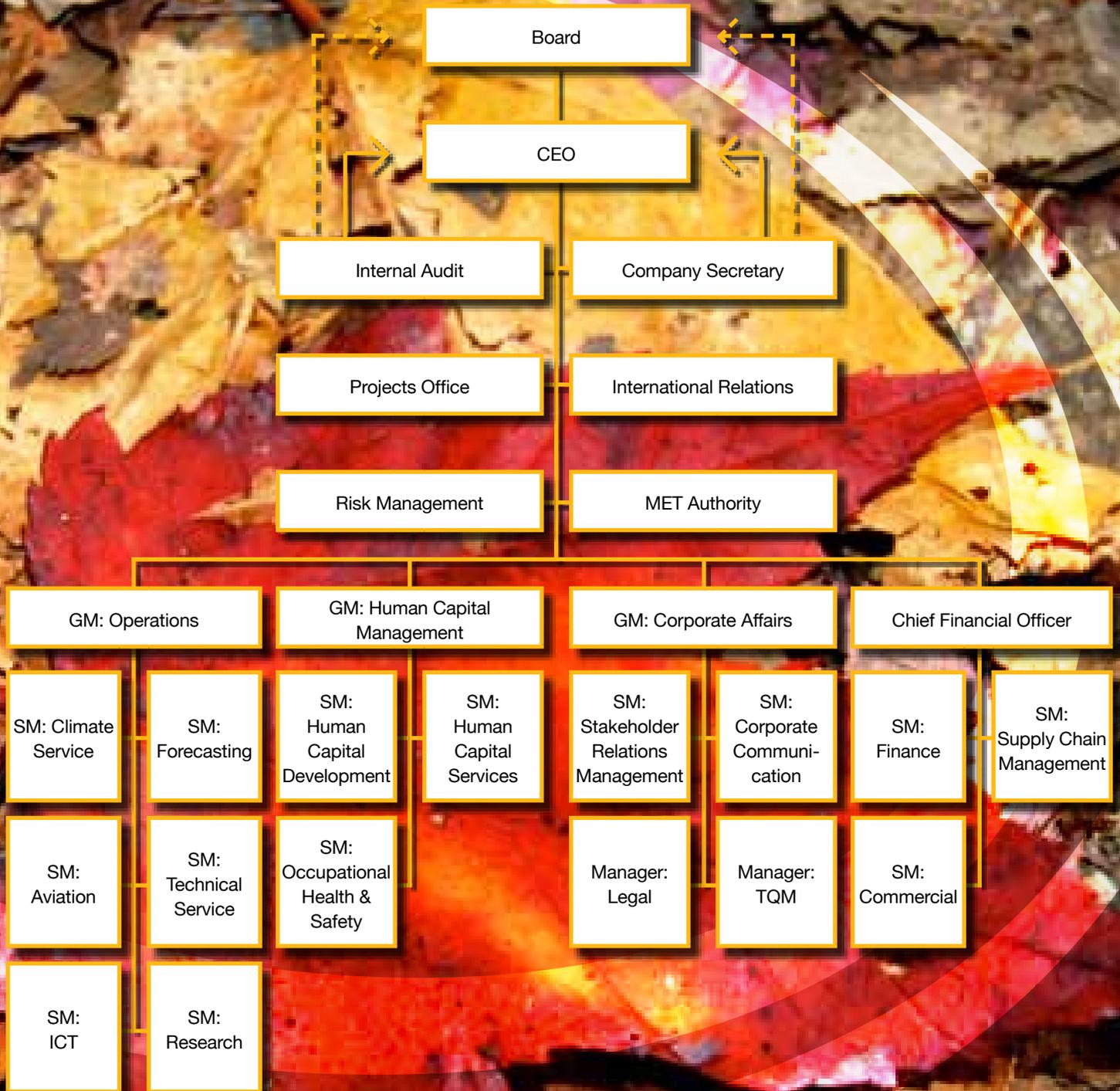
**Finance and Commercial**

*From left to right:*  
Ms Zandile Nene,  
Mr Mark Majodina,  
Ms Thandiwe Nkosi,  
Dr Linda Makuleni,  
Mr Georgie George,  
Mr Bheki Mkhize.



**CEO Office**

# Organisational Structure



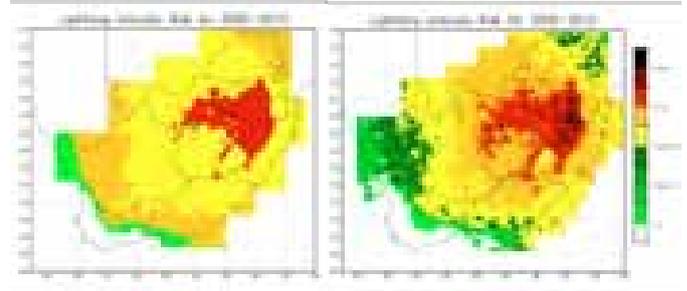
## 1. Research

Research and Development of weather and climate products is crucial in response to events related to extreme weather phenomena caused by climate change and weather variability. It further assists in improving the quality and accuracy of weather predictions, such as weather forecasts, seasonal predictions, warning of extreme weather events and understanding of the dynamic physical and chemical processes in the atmosphere and oceans. In the year under review, SAWS has developed and enhanced products and services to be applied in various industries and sectors. These products include:

### Nowcasting and Very-Short Range Forecasting Research

- Nowcasting and Very-Short Range Forecasting techniques focussed on the forecasting and monitoring of convective clouds (including severe weather) through the three phases, namely pre-convective, convective and mature.
- Operational Combined Instability Index Tool (CII).
- The refinement of the Hydro Estimator (HE) rainfall determination tool by blending the raw HE output with stratiform rainfall produced by the Unified Model. This refinement aimed to address the general overestimation/underestimation of rainfall that occurred along the coastal area and was of particular value to the SAFFG system. An international publication was completed on this work.
- Research aimed at exploiting the possibilities of the new multi-parameter radars in the SAWS radar network was also conducted on improved rainfall determination with the new S-band Doppler radar systems.
- The Lightning Climatology for South Africa for 2006 to 2010 was updated. Figure 1 shows the Lightning Intensity Risk for 2006 to 2010. Techniques utilising the climatology of South Africa were used to present a higher resolution map for Lightning Risk.

Figure 1



### Short and Medium Range Forecasting Research

- The upgrade of the Unified Model from Version 6.1 to 7.3 was completed, as well as the development of the operational multi-model short range (day 1-2) ensemble system. Apart from bias-corrected maximum and minimum temperature, the system also provides ensemble rainfall forecasts that include the probabilities that certain thresholds will be exceeded.

### Long Range Forecasting (LRF)

- A theoretical study on decadal forecasting was initiated, focusing on a preliminary literature review of the field. It is believed that this study would contribute to identifying the optimal process to be followed for the realisation of a decadal forecasting system at SAWS.
- Seasonal forecast products and those required by the World Meteorological Organisation (WMO) Global Producing Centre for Long-Range Forecasts were provided as per schedule.
- SAWS also cooperated with national and international partners to fulfil its commitment to the African Monitoring of Environment for Sustainable Development (AMESD) project. The group was involved in the AMESD project training activity, providing training on long range forecasting techniques (theory) as well as the interpretation of the products.
- A new Multi-Model System (MMS) product was developed for web portal users (specific GPS

locations). This product aims to inform the users on general weather conditions expected for three seasons ahead. Weather parameters include rainfall, minimum temperature and maximum temperature.

## 2. Climate Change adaptation and mitigation services

Today, climate change is seen as a major threat to sustainable development and even human survival. SAWS has, in the year under review, celebrated 150 years of meteorology in South Africa, which means that there is a wealth of climate information that amounts to 150 years for use by various industries and sectors within the country in planning, decision-making and risk management in relation to socio-economic and environmental management and protection activities.

### Long-term trace gas records (Global Atmosphere Watch (GAW))

Over the past 30 years SAWS has, through the GAW station at Cape Point, recorded Greenhouse Gases in the atmosphere. South Africa maintains one of the longest CO<sub>2</sub> measurement records in the Southern Hemisphere. This information aids in policy making and formulation of climate change mitigation strategies.

During the year under review, the following information was collected and submitted:

- GAW data was processed on a monthly basis and archived electronically.
- The expected annual submission to the World Data Centre for Greenhouse Gases was done.
- Carbon dioxide and methane data for 2009 were also prepared and submitted to the GlobalView\_CH4 & GlobalView\_CO2 initiatives.
- CPT data CO & Ozone for 2009 Hourly means; Daily means.
- Monthly means were submitted to the WDCGG, Tokyo.

- The submission of Dobson Spectrophotometer ozone data to the WMO World Ozone and Ultra Violet radiation data centre was successfully achieved.
- The Cape Point GAW researchers, together with ANSTO (Australia) researchers, successfully installed and commissioned a new radon analyser at the station.
- Two official WMO\_GAW audits were conducted; one for N<sub>2</sub>O and the measurement and quality procedures for CO, CO<sub>2</sub>, CH<sub>4</sub> and O<sub>3</sub> were addressed.

### Air Quality Information Service

In the year under review, the South African Air Quality Information System (SAAQIS) phase I project was completed. SAWS collected and updated data from various ambient air quality monitoring networks reporting to SAAQIS. There are now 42 stations reporting to SAAQIS on various parameters (SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, etc.). More stations are expected to be acquired, particularly from the private sector. There were improvements made to the SAAQIS web which included the creation of data provider profiles, and the Highveld- and Vaal- Priority Areas monthly air quality report uploads.

Site visits to audit the monitoring infrastructure of the Vaal Triangle Airshed Priority Area in preparation for takeover of the stations by SAWS was conducted in November 2010 by the project steering committee. In line with the Business Plan, SAAQIS Phase II, and the National Atmospheric Emission Inventory (NAEI) project are planned to run for two-and-half years from April 2011.

### Air Quality Modelling

The Air Quality Modelling System (AQMS) was developed on a modular structure, consisting of the emissions inventory module; the numerical weather prediction module and the atmospheric dispersion module. The emissions inventory module for South Africa is being developed by SAAQIS. Once this

comprehensive emissions inventory has been developed, several research activities are planned (e.g. evaluation and validation of dispersion model, etc) towards an operational air quality forecasting system. Plans are also under way to investigate a simpler air quality modelling system that is more attuned to the capacity currently within SAWS.

Studies on Model comparison were conducted and the report is being finalised. The objective of the model comparison studies is to build capacity on air quality modelling within SAWS. The Air Quality Modelling Procedure document has been developed and is being refined.

#### Climate Change

The SAWS Position Statement on Climate Change, which is in line with the identified broad areas of research interest dealing with adaptation and mitigation, was reviewed and updated. SAWS developed a climate change programme framework that will undertake initiatives in the key focal areas as contained in the document related to the “South African Weather Service (SAWS) Position Statement on Climate Change”. This will ensure service delivery to all stakeholders and the general public, supporting them in adapting to climate change and variability at regional, local and sectoral levels.

The role of SAWS in respect of Climate Change and Variability is not only limited to future climate scenarios. Historic data applications, real-time information and forecasting applications at all time scales are essential to effectively adapt to climate change, current climate variability and changes in the variability. Currently approximately 90% of all disasters in Southern Africa are weather-related: this is a clear indication of the need to increase resilience by improving services and applications, and requires the South African Weather Service to play a prominent coordination role.



SAWS formally established a climate sector expert forum, called the SAWS Weather and Climate Applications Forum with local experts on 26 October 2010. Priority areas, in which joint research is required, were identified. SAWS furthermore participated in the development of the Climate Change Green paper as it is regarded as a crucial component in South Africa's response to adaptation to Climate Change impacts.

### 3. Products and Services

#### 3.1 General Forecasting and Warning Services

##### The FIFA Soccer World Cup 2010

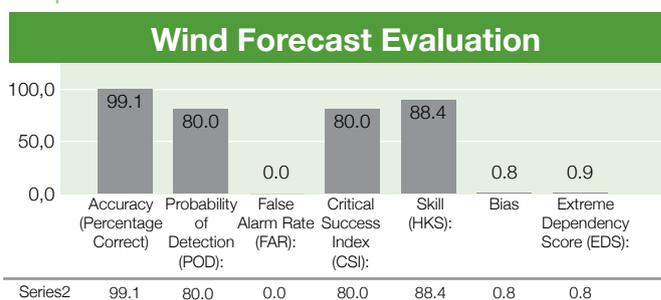
The FIFA Soccer World Cup 2010 (SWC) presented South Africa with an opportunity to showcase its excellence towards service delivery. SAWS provided extensive support before and during the event, which involved managers and forecasters at National and Regional levels. Close liaison occurred between forecasters at the regions and their associated Disaster Management structures as well as Local Joint Operations Centres (LOCJOCs). At times, when severe weather was imminent, dedicated forecasters were temporarily seconded to the LOCJOC to provide on-the-spot weather advice and guidance. This arrangement was operationally put to the test a number of times, especially in Port Elizabeth and Cape Town.

Almost coincidental with the beginning of the South Western Cape event, on 14 June 2010, the value of timeous and accurate advance warnings of severe and/or adverse weather was highlighted by the anticipated arrival of an intense winter cold frontal system over the Cape provinces, combined with an upper-air cut-off low. The lead-time on this significantly severe event was about one week, with advisories being issued three days in advance.

#### General Forecasting and Marine

While SAWS has a record of verifying the accuracy of Aviation forecast parameters and temperature forecasts for certain weather stations, verification tools, including severe weather warnings, have been extended to include more forecasting parameters during this period.

Graph 1: Wind Forecast Evaluation



The South African Weather Service has also started with a Wind Forecast Evaluation programme during this financial year for the first time. It is encouraging to see such a high level of accuracy (99%) as seen in the Wind Forecast Evaluation in Graph 1 above.

The development of new evaluation tools continued during the year and assisted in the identification of forecast products that needed improvement in order to meet user needs, while contributing more meaningfully towards safety and security, including Disaster Risk Reduction.

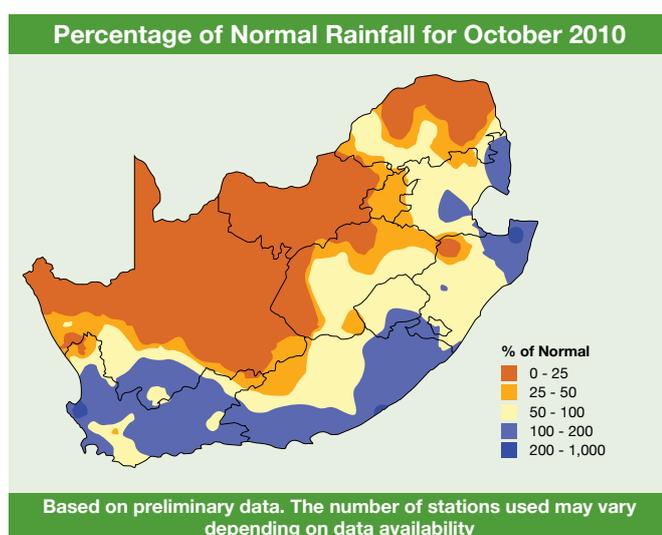
#### Overview of the most high impact events

During April 2010 heavy rains were experienced over the north-eastern provinces, leading to rainfall between 200 and 1000% above normal. Several warnings of heavy rains were issued. Towards the middle of June 2010, a well-developed cold front occurred, leaving behind bitterly cold conditions over most of the country. Heavy rains which resulted in flooding were recorded in the Western Cape, while the remainder of the country endured very cold conditions with snow over most of the southern and central high-lying areas.

On 10 July 2010, an intense cold front moved into the south-western parts of the country, reaching Gauteng late on the 11<sup>th</sup>, coinciding with the FIFA Soccer World Cup Final. This significant weather event was communicated in advance through advisories which were later upgraded to warnings on the morning of 10 July 2010 and were disseminated through the normal channels and the National Joint Operation Centre (NATJOC) of the 2010 FIFA Soccer World Cup. Some very long standing temperature records were broken during this period.

During late winter/ early spring, fewer than normal cold frontal and cut-off low pressure systems occurred and the beginning of the rainfall season for summer rainfall areas of South Africa did not start well for many areas, as indicated in the figure below. A large area over the central and north-western parts of the country initially received below normal rainfall, but the situation improved as the season progressed. These observations were in line with the Long Range Forecasts issued by SAWS during spring.

Figure 2: Percentage of normal rainfall for October 2010

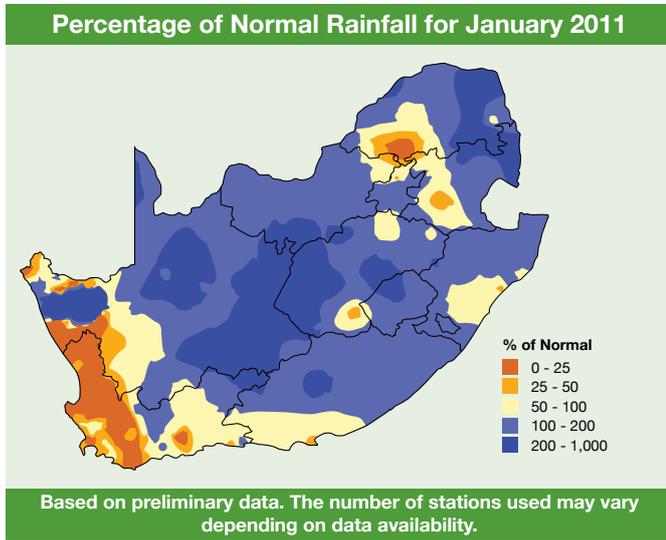


A noteworthy high-impact weather event, which was announced in advance through severe weather alerts and watches, occurred from 15 to 16 December when a rather un-seasonal cut-off low pressure system caused heavy rains over the eastern parts of the country. Most affected were Gauteng, the Free State and North-West provinces. In most cases, the significant factor was not the total accumulated rainfall but rather the rainfall intensity, as many places experienced a large amount of rain in a short period. Flash flood warnings, using the South African Flash Flood Guidance System (SAFFG) were sent to disaster management centres of affected areas.

As part of adaptation and mitigation, the KZN regional office formed part of an established Task Team to address the prevailing drought challenges in the region. To ensure SAWS representation and provisioning of best quality products, all regional managers participated in Provincial Disaster Management Advisory forums for effective participation in all weather related task teams while the SAWS head office participated in National Disaster Management forums.

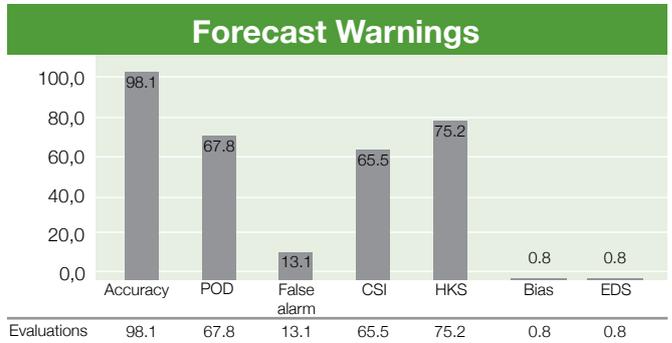
The period January to March 2011 was the peak of the rainfall season for summer rainfall areas of South Africa. Figure 3 overleaf shows the percentage above normal rainfall for January 2011. While many severe weather events occurred during this period, the foremost danger associated with this period was lightning. Media reports reflected many deaths caused by lightning and provinces most affected were KwaZulu-Natal and Eastern Cape. Representatives from SAWS attended what was experienced as a most sorrowful mass funeral organised by the Provincial Department of Corporate Governance and Traditional Affairs in Emhlahini, Bergville KZN on the 19<sup>th</sup> March, and distributed educational pamphlets on lightning dangers.

Figure 3: Percentage of normal rainfall for January 2011



Widespread flooding was also experienced in many provinces, especially during the month of January. This led to many people losing their lives and properties. The eastern half of the country experienced way above normal rainfall during the month of January.

Graph 2: Accuracy of forecast warnings



A total of 629 Severe Weather Warnings were issued during the year under review. As can be seen from Graph 2 above, the accuracy for the warnings is at **98.1 %** while the false alarm rate is at 13.1%. These warnings covered a wide range of extreme weather conditions as per the graph below.

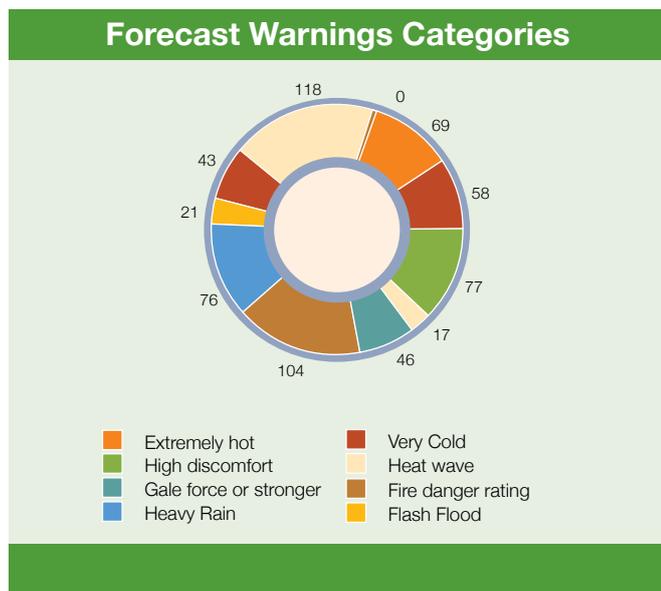
Graph 3 indicates the warnings issued per category with most warnings issued for **severe thunderstorms**, followed by **high fire danger ratings, high discomfort**

Table 6

Alert Level	No Alert	Advisory Be Aware!	Watch Be Prepared!	Warning Take Action!
Threat.	No hazardous weather expected in next few days.	Early warning of potential hazardous weather.	Weather conditions are likely to deteriorate to hazardous levels.	Hazard is already occurring somewhere or is about to occur with a very high confidence.
Risk.	No adverse weather is expected.	A risk that adverse weather conditions may occur.	Moderate risk that adverse weather conditions will occur.	Very high risk, about to happen, or already happening.
Impact.		A risk of damage to infrastructure and disruption, dangerous to people and communities.	Moderate risk of damage to infrastructure and disruption, dangerous to people and communities.	High risk of damage to infrastructure and disruption, dangerous to people and communities.
Advice.		Be alert and follow the latest weather forecasts.	Be vigilant and follow the latest weather forecasts.	Be extra vigilant of dangerous conditions and follow the advice given by authorities.
Timescale.		2 to 6 days period.	1 to 3 day period.	Within next 24 hours.

**index and then heavy rain.** This reflects the unusual wet seasons experienced and also the vulnerability of our country to severe weather events varying from run-away fires to floods in the provinces during which lives were lost and damage to property was experienced.

Graph 3: General Forecasting warnings issued



### The Severe Weather Warning System

The Severe Weather Warning System was reviewed in terms of standardisation and was implemented on 1 October 2010 to improve the warnings sent to disaster management structures and the general public. New alert classifications were introduced by the modification of the old two category alert system (advisories, warnings) to an international standard of three categories (advisories, watches, warnings), aimed to improve the alertness and understanding of the recipients of warnings. First indications from Disaster Management Structures were very positive about this change.

Table 6 on the previous page provides a summary of the new severe weather alert levels of the Severe Weather Warning System introduced on 1 October 2010.

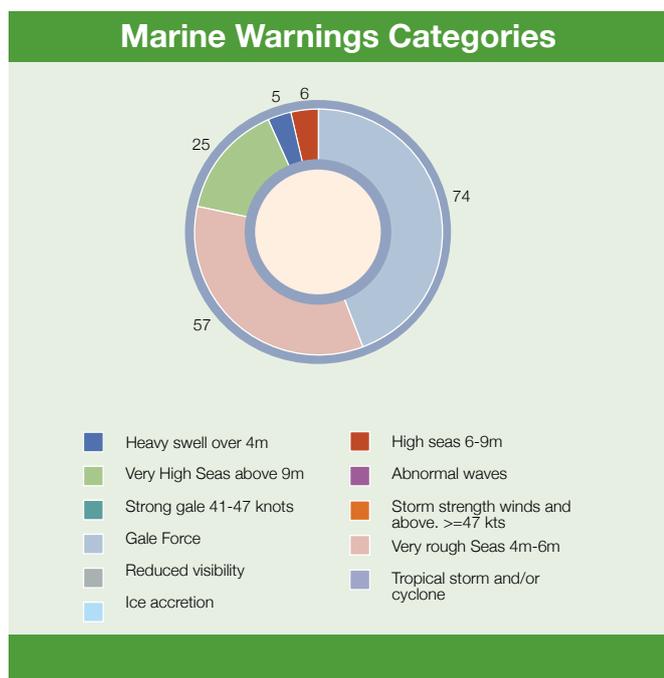


### Maritime Forecasting

All SOLAS coastal and deep sea forecasts were provided to stakeholders twice per day, with an availability of 99.3%. Special forecasts were provided to the research vessel SA Agulhas during her voyage to Gough Island, Antarctica and Marion Islands. The latter was especially important, as one of the trips involved the launch of the new base at Marion Island.

A total of 166 Marine related warnings, complying with WMO and IMO regulations, were provided. SAWS is responsible for the second biggest SOLAS area of the world. Graph 4 below shows the marine warning categories for which warnings and/or alerts were provided.

Graph 4: Marine Warning Categories



### Maritime Observations, Antarctica and Islands

SAWS forms part of a process that deploys instruments from ships into the ocean to make 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). SAWS is frequently requested to

participate and assist NOAA with the High Density run and took part in 3 trips this year.

Inputs were provided with regard to the Implementation Plan for the Evolution of Global Observing Systems (EGOS-IP) with regard to Marine observations through JCOMM, as well as DBCP and JTA annual reports. SAWS was recognised for its efforts with regard to Marine services when it was elected as vice chair to the Executive Board of the DBCP and re-elected to the Executive Committee of the JTA.

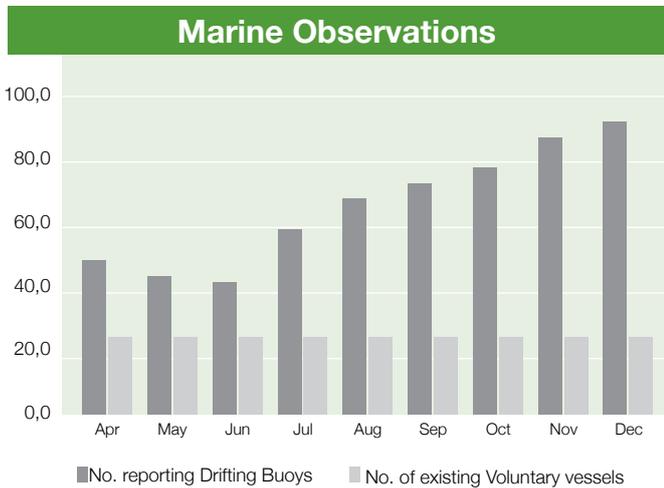
National inputs into WMO annual reports were provided in respect of National Ships Observations Team (SOT), Voluntary Observing Ships (VOS), Automated Shipboard Aerological Programme (ASAP), Ships of Opportunity Programme (SOOP) and Voluntary Observations Ships Climate (VOSCLim).

The Congolese weather service visited the Cape Town weather office in September to observe SAWS' equipment in use, gain insight into SAWS' forecast systems and types of forecasting reports and to establish sustainable technical co-operation between the Congolese weather service and SAWS, especially with regards to Marine services.

The first ever IOC/WMO Data Buoy Cooperation Panel In-Region Western Indian Ocean Capacity Building Workshop was held in Cape Town, with the theme: *Implementation and Operations of Indian Ocean Data Buoy Networks and their Applications for Enhancing Regional Predictive Capability*. Sixty participants, mostly from Africa, attended.

The Marine observation platform was expanded. Graph 5 overleaf indicates the number of drifting weather buoys and observing vessels from which SAWS currently receives data.

Graph 5: Marine Observations: Drifting buoys and voluntary vessels



Apart from maritime lectures and presentations provided to the maritime industry, SAWS facilitated sessions to develop an early warning system for storm surges at a National Storm Surge workshop held in Knysna in February 2011.

The partnership with the Department was further strengthened by its provision of meteorological instruments and in-situ communication on moored buoys, provided by Oceans and Coast, ensuring in-situ data communication with regards to marine weather elements. This will assist forecasters with the timeous provision of marine and coastal weather related warnings.

SAWS remains part of the Nensen Tutu Centre for Marine Environmental Research, which enables SAWS to use in-situ marine, meteorology and oceanography data for marine warning/forecasting purposes. Under the leadership of SAWS (the National Focal Point for Joint Commission for Oceanography and Marine Meteorology (JCOMM)), an SA JCOMM committee, involving all Marine Meteorologists and Oceanographers with SAWS as chair, was established. This was well received by the oceanography sector, which has representation from various Government Departments, parastatals and tertiary institutions.

SAWS is part of the Global Learning and Observation to Benefit the Environment (GLOBE) - Africa programme, enhancing our marine service for Southern Africa. The “Adopt a Drifting Weather Buoy” programme enables learners from mainly previously disadvantaged communities to track buoy drifts and data on the internet, share information and conduct ocean behaviour research.

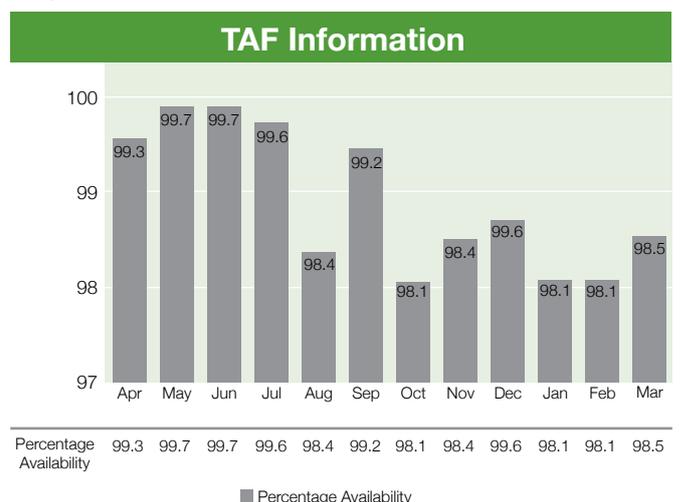
### 3.2 Aviation Service

Aviation services were rendered nationally with minimal disruptions. The role of the Aviation weather service during the FIFA World Cup significantly contributed towards the efficiency and safety of the aviation industry. Aerodrome warnings were sent out to all relevant users at airports based on ICAO recommendations.

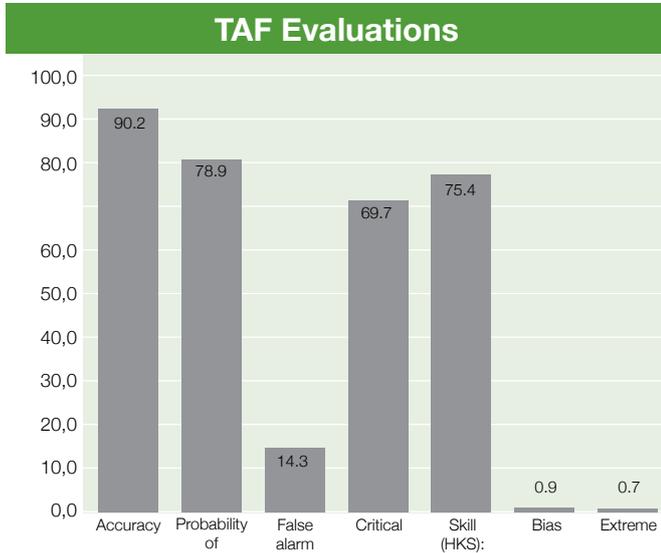
In order to enhance planning and ensure safety of aviation operations, the Aviation Weather Centre (AWC) and regional offices continued to issue Terminal Aerodrome Forecasts (TAFs) as well as Landing Forecasts (TRENDS). Nationally a total of 21 929 TAFs and 138 980 TRENDS were issued by ORT, Cape Town, Port Elizabeth, Bloemfontein, Durban and Nelspruit airports.

The percentage availability as well as the accuracy of the aviation reports is depicted in Graphs 6 - 8 below:

Graph 6: TAF information

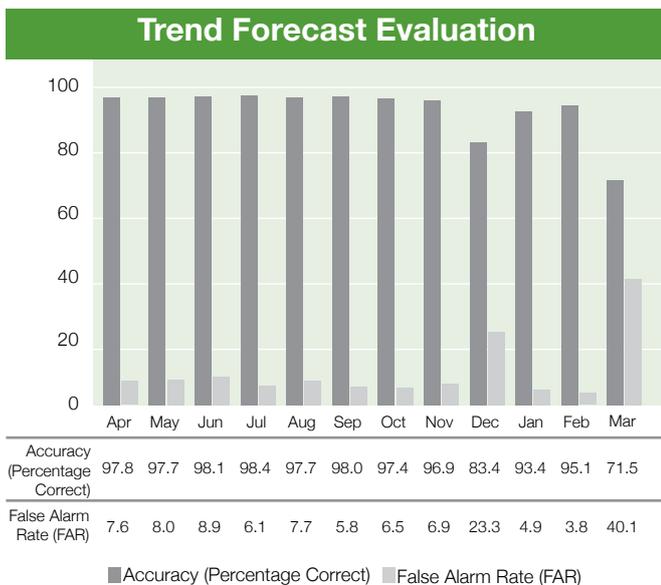


Graph 7: TAF Evaluations



78.3 % probability of detection is worth noting and low false alarm rate of 14.9%. These statistics clearly indicate that SAWS is keeping abreast of the targets as depicted in the business plan.

Graph 8: Trend Forecast Evaluation



High level and low level en-route weather (SIGMET and AIRMET)

In total 4 484 Significant Meteorological Information (SIGMET) and 10 390 Airmen’s Meteorological Information (AIRMET) messages were issued during this period.

SAWS continued to contribute towards safety in the air transport industry by means of rendering forecast products that are industry specific and made available on the SAWS aviation web. In compliance to the International Civil Aviation Organisation (ICAO) requirements, three ad-hoc SIGMET tests were scheduled by the ICAO Regional Offices during October 2010 and the test report was submitted to the ICAO regional office. The analysis of the reports would inform Regional Advisory Test Centres within the AFI region. Three ICAO-State letters were received and responded to, while 48 aircraft accident reports were compiled for the Civil Aviation Authority.

Continuous monitoring of the services on the web, availability of the real time aerodrome reports, Aircraft Meteorological Data Relay (AMDAR) and webcams was conducted. An Aviation web section for the “Visual Flight Rule” (VFR) and Sports Pilots, developed on the SAWS main web, was upgraded to cater for this sector of the general aviation market. The web was closed to public access and is accessible to paying clients only.

SAWS also participated in safety meetings of the Airlines Association. Aviation products issued were monitored and evaluated to ensure quality service to clients. The outcome of these evaluations was used by SAWS for continuous product improvements.

SIGWX chart procedure

A procedure to track the availability of SIGWX chart was developed and is being implemented. This indicated 100% availability of SIGWX charts, with a total of 2 190 charts issued.

Regulated services at International and National aerodromes

Services meeting ICAO Standards and Recommended Practices (SARPs) were delivered at ten international aerodromes. The requirement for Domestic Aviation was reviewed. Five ACAMS meetings were successfully held. During these meetings existing requirements provided

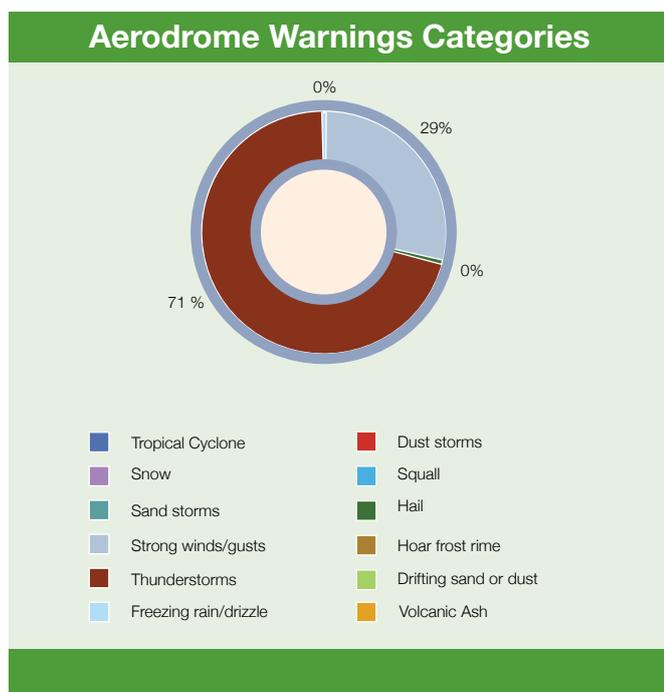


by SAWS were presented. Furthermore, a meeting was also held with Aero Club South Africa representatives to determine their requirements for glider pilots and micro lights.

### Aerodrome warnings

A total of 516 aerodrome warnings were issued for the period April 2010 to March 2011. As shown in Graph 9 below, 73% of the warnings were issued for thunderstorms, and 27% for strong winds.

Graph 9: Aerodrome warning categories



### Climate Data and Information Service

#### Climate data: Custodian of national climate data

A new web-based Station Application (STASAPP), which is vital for the implementation of SAWS' Qualimet data management programme, was developed. 766 249 rainfall data corrections, 513 252 temperature data corrections and 247 320 wind data corrections were made.

An update of the 2004 publication on temperature and rainfall trends from the National Climatology Database was completed. The Department of Water Affairs and



SAWS began sharing hourly rainfall and stream flow data in August 2010 in accordance with the SAWS-ARC-DWA MoU. The average availability of hourly data in the National Climate Database reached 96% during the reporting period.

#### Climate information service

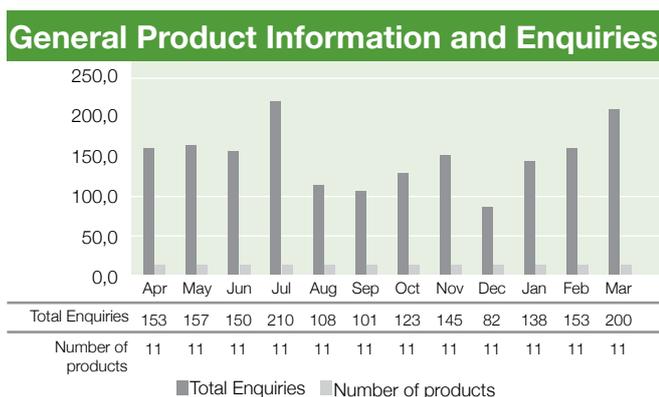
The average success rate for publishing near real-time data products for the year under review was 94%. A variety of public good information was provided to tertiary institutions. Furthermore the drought monitoring desk on the website was updated regularly.

Publications for the year under review include:

- Twelve Daily Weather Bulletins
- Twelve Climate Summaries of South Africa.
- Making available all electronic versions of the Climate Summary (since Jan 2006), in a searchable format, through Sabinet Online.
- The outstanding Aeronautical Summary for Mafikeng was completed and provided to Aviation.
- Twelve CLIMAT reports and seven CLIMAT TEMP reports (In line with a decision taken by the WMO Commission for Climatology, (Resolution 3 (CCI-XV), WMO-No. 1054) the SAWS discontinued the provision, dissemination and international exchange of CLIMAT TEMP reports effective from November 2010).

Graph 10 below represents the number of climate enquiries handled on a month to month basis by the various SAWS offices.

Graph 10: General Product Information and Enquiries



## 4. Infrastructure modernisation

### Surface Observation Infrastructure

All Automatic Weather Stations (AWSs) were upgraded with new CR10X data loggers. This enabled more reliable data accessibility especially due to the added non-volatile memory. The addition of soil moisture sensors to the AWS was developed and tested. This augured well with the launch of the Flash Flood Guidance System. All AWSs functioned on GPRS communication, contributing to a huge cost saving.

A new generation Automatic Rainfall Station was developed to include soil moisture sensors in the ARS. The collaboration with the ARC revealed the need to review the deployment plan as the ARC, in some cases, had AWSs in the vicinity of the envisaged locations.

### Remote Sensing Infrastructure

#### Lightning Detection Network (LDN)

As part of the LDN expansion, the sites at Aliwal North, Springbok and Satara were commissioned. The LDN sites are run on 3G links. The LDN UPS remote monitoring system was rolled out, which will assist in diagnosing sources of power problems for the LDN and introduce greater efficiency in LDN maintenance. Network performance was improved by relocating sensors to Aberdeen, Alkantpan, Lebowakgomo, Zebediela, Musina & Vryheid, with a new sensor to be placed at Alkantpan. Coverage is currently at 22 sensors. SAWS envisages eventually having a total of 23 sensors around the country.

### National Weather Radar Network

The Radar project progressed well. To date SAWS has committed 82% of the total grant allocation of R240 million and has commissioned the following seven radars in:

- Irene (November 2009)
- Bethlehem (January 2010)

- Mthatha (March 2010)
- Ottosdal (April 2010)
- Ermelo (July 2010)
- East London (August 2010)
- Polokwane

The radar installation at Durban, Port Elizabeth and Bloemfontein suffered setbacks, which prompted SAWS to seek alternative locations for their construction. These setbacks resulted in the programme completion date being shifted from March 2011 to August 2011. The next two sites at Durban and Bloemfontein are set to be complete by July 2011. The X-Band Mobile radars are expected to be complete by July 2011.

#### ICT Infrastructure

New network links were installed at King Shaka International Airport, Lanseria Airport, Satara LDN, Aliwal North LDN, De Aar LDN, Lephalale LDN, BLTECH for multicast data and upgraded Mthatha bandwidth. Cost savings occurred, by moving three Sentech VSAT links to Telkom VSAT services.

The new website was launched and generated a great deal of positive comments. New versions of Metcap and Sumo were developed, resolving some bugs that were found in the previous version. The Qualimet software implementation commenced. This will allow SAWS a great degree of quality control on the data for Climate.

Development of the automated population of the Forecast Product Generator for the medium range timescale, which relieves forecasters from a laborious process, commenced.

A new data flow procedure was developed for the uploading of METCAP data to the climate database. The new methods use different treads and a file upload mechanism, which optimises the network usage and eliminates database locking.

#### Virtualisation

Virtualisation ICT infrastructure was installed. This was a first step towards making ICT greener and to introduce greater efficiency in SAWS. The biggest achievement was to successfully port the main SAFFG servers for the national calculations and web as well as the Gauteng regional systems, from physical to virtual. Since then a number of systems had been successfully virtualised, with a total of 33 physical servers that were ported to the Virtual Machine (VM) platform. This provided a mean of 8.4 hosts per physical VM server against a target of 10:1 which could be achieved once additional disk space became available. This initiative allowed for high availability and demand balancing on the servers. This functionality significantly reduced the risk of losing a host through hardware failure.

#### Marine Observation Infrastructure

With the vastness of the southern ocean and lack of fixed locations for monitoring weather parameters needed for evaluation of marine products issued, the use of ship time provided by the SA Agulhas and Somali Current Large Marine Ecosystems Project, a mooring (buoy) was deployed at 4,300 meters (12,900 feet) of water using the South African Fisheries Research Ship *Algoa*. These moorings act as reference stations for validating satellite observations and improving weather forecasting and climate models.

The SAWS deployed a further 68 drifters, of which 7 formed part of the International ARGOS III pilot project. SAWS deployed double the number of drifters en route to Marion Island. This assisted forecasters with real time data along the Southern and Indian Oceans, especially for the summer rainfall areas. Additional buoys were deployed on voyage to Antarctica which in turn will assist SA to monitor sea weather during winter.

The relocation of the meteorological office and site at Marion Island was completed successfully. The new base was formally opened by the Deputy Minister of Public Works and DDG for DEA Oceans and Coast during March 2011.

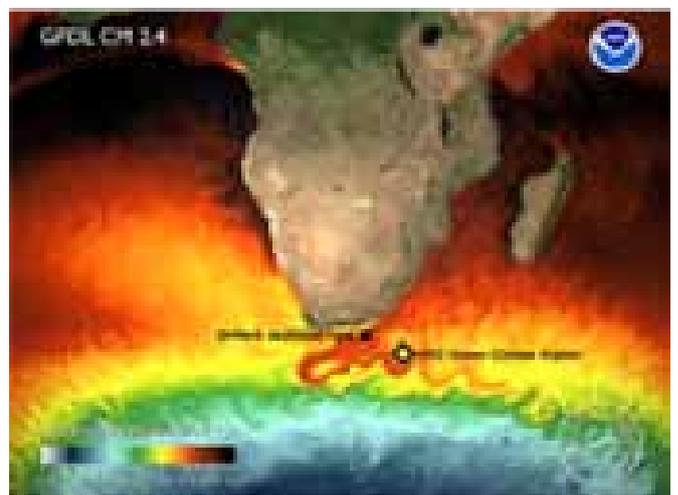
Picture 1: The spread of drifting weather buoys over the southern oceans



Picture 2: A moored buoy southeast of South Africa carries sensors to measure how much atmospheric carbon dioxide is absorbed into the Ocean in this critical region for the global Climate system



Picture 3: Drifters deployed just outside of Port-Elizabeth as part of the International Adopt a Buoy Programme.



# Corporate Affairs

Promote beneficial and enduring relationships with key stakeholders

## Stakeholder Relations

### Celebrating 150 years of service to South Africans

On 26 October 2010 SAWS celebrated 150 years of service to South Africans. This event provided an opportunity for focussed stakeholder relations and communications actions throughout the year, which culminated in a gala event on 26 October.

Table 7 on the following page shows activities relating to our 150-year celebrations

### Building Stakeholder Relations

In order to ensure improved service delivery and meeting the needs of clients, SAWS engaged with a wide variety of stakeholders during the year, ranging from the National Nuclear Regulator, various Aviation and Marine structures, National Government, Air Quality Fora, Climate Change structures and National Disaster Management structures.

### Customer Perception Survey 2010/11

Following a comprehensive Customer Perception Survey (involving 315 respondents) in 2009, the South African Weather Service commissioned a follow-up survey for the period 2010/11, consisting of 100 respondents. This survey revealed that 90% of customers are either satisfied or very satisfied with the overall services they receive from SAWS and that overall satisfaction, measured against a variety of variables, was at the 84% mark. These figures represent a slight increase in the previous survey, which was already at a high level.

Graph 11 on page 69 shows the distributions with overall customer satisfaction for 2010/11.



Table 7

Focus	Action	Target group	Benefits
Technological development.	Launch of new radar network (Pretoria) and Mthatha radar.	Media, weather sensitive industries, government, local communities.	SAWS' technological advances in order to improve weather forecasting.
Climate Change.	Climate Change workshop to further strengthen relationships.	Climate Change structures, both government and private sector.	Fostering SAWS' role in Climate Change matters and improving communications between stakeholders.
Corporate Social Investment.	Re-launch of the Fognet project in Venda.	Local community, University of Pretoria.	Securing funds from the Water Research Commission to expand the project.
Indigenous weather knowledge.	Launch of book on indigenous weather knowledge.	Media, academic institutions.	Fulfilling the need to provide an extensive record of indigenous weather knowledge in South Africa.
SAWS history.	Publishing of a coffee table book "At the Forefront of Weather" to commemorate our 150 years.	Media, weather sensitive industries, government.	Providing a comprehensive overview of SAWS' achievements over 150 years.

Table 8

Action	Beneficiaries	Nature of Engagement	Benefits to SAWS
SAWS Corporate Golf Day (10 April 2010).	Belleville Children's Home, Big Brothers and Sisters.	Fundraising event by involving current SAWS clients.	Western Cape client engagements, SAWS contributing to communities in need.
Sponsorship.	Nyeleti Children's Home.	Contributing to living expenses of 5 learners.	Outreach to poor communities.
Donation.	Identified disadvantaged schools in 7 provinces.	Process started to donate 201 old computers to beneficiaries in 7 provinces.	Outreach to poor communities.
Donation.	Highbury Junior Secondary School and Highbury community.	Upgrading classrooms to the Highbury community (Mthatha) and soliciting of R150 000 from a SSI (SAWS service provider) to build the school toilets.	Community support for the security of the SAWS Radar.
Creating AIDS awareness and counselling.	Contractors in the Polokwane vicinity.	Volunteer counselling and testing i.r.o. AIDS to contractors at the Polokwane radar site.	SAWS regarded as contributing to the protection of communities.

Action	Beneficiaries	Nature of Engagement	Benefits to SAWS
Sponsorship.	UP second year meteorology students, Vondo village and Tshiavha Primary school at Tshiavha village under the Thulamela Municipality.	Venda Fognet project: Sponsorship to Second year Meteorology students for their community project.	Relaunching of the Fognet project by the Deputy Minister and securing funds from the WRC for future projects.
Sponsorship.	MASCA inhabitants.	Women in Action forum outreach to the MASCA home for the elderly (Mamelodi).	Reaching out to the poor and underprivileged.

Graph 11: Customer Satisfaction for 2010/11



### Conferences

In order to promote beneficial relationships with a wide variety of stakeholders, SAWS participated in 9 conferences and workshops nationally and internationally, where it presented papers on relevant topics. These engagements and contributions served in building the reputation of SAWS as a national, regional and international role player in the field of meteorological science, as well as in disseminating weather-related information and understanding to its clients.

World Meteorological Day 2011 was celebrated in the format of a national symposium, showcasing the scientific work of SAWS.

### Corporate Social Investment

Table 8 on the previous page reflects on SAWS' Corporate Social Investment

### Effective Internal and External communication

#### SAWS Communication Review and Strategy

An Impact Assessment on the implementation of SAWS three year (2008/11) communication strategy was conducted. The results of the impact assessment informed the review of SAWS' Communication, Media, Sponsorship and Corporate Social Investment policies as well as the SAWS 2011/14 Communication Strategy.

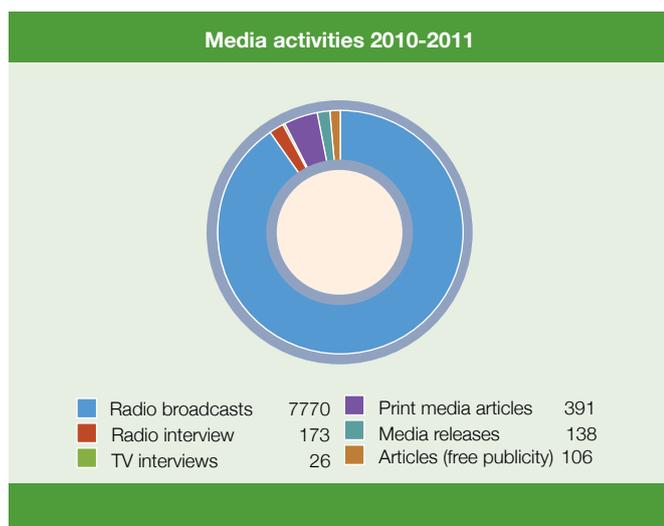
#### External communications

Different media channels were used to communicate SAWS' achievements and celebrations of its 150 years of existence. SAWS leadership and achievements were profiled in business to business magazines, national newspapers and an international magazine, while the quarterly Aviation Newsletter was published on the SAWS internet and intranet. SAWS also participated in the Top Gender Empowered Parastatal Awards, administered by TOPCO media, and was crowned as winner in this category. Weather and organisational awareness was furthermore improved by arranging for special

weather-related radio talks, as well as interviews on radio and national television regarding SAWS' 150 year celebrations. Several radio interviews, focussing on heavy rainfall incidents and fatalities caused by lightning during the last two months of the quarter, were conducted. Precautionary measures for lightning during thunderstorms were highlighted.

Graph 12 below shows the distribution of information for the year under review.

Graph 12: Media activities 2010-11



During the year under review a relationship was forged with E-TV, which resulted in a widened platform for the dissemination of severe weather warnings in order to ensure that warnings reach the vulnerable communities, thus contributing to the safety of lives and property. Forging relationships with the media also presented a platform for SAWS alerts, with visual notifications on Multi choice's KykNet programme. (See Pictures 4 and 5 below).

Picture 4 and 5: Visual notifications on E-TV



Brand awareness programme

In implementing the brand awareness programme, signage and corporate branding was prioritised for the weather offices at the King Shaka and Bloemfontein airports. As part of the celebration of 150 years of service to South Africans, information material was developed. Brand ambassadors were appointed, covering Bolepi House (Pretoria), ICT, Irene, Stellenbosch, Port Elizabeth, Cape Town, Calvinia, Nelspruit, Durban and Bloemfontein. Two brand awareness workshops were held with regional staff and the publishing of the updated Corporate Profile strengthened effective communications of the SAWS mandate and programmes.

External brand awareness was increased through SAWS' participation in exhibitions, addressing the specific needs of the stakeholder group. These included: Nampo Harvest Day (18 -21 May); Free State Science Week (3 – 6 May), an exhibition in Parliament (16 April), and a careers day exhibition, coinciding with the re-launch of the Venda Fognet project (25 August 2010), which increased careers awareness among school learners. Regional Offices (Thohoyandou, Kimberly, De Aar and Irene, KZN) participated in Science Expo and career exhibitions, where SAWS displayed live products to the school learners and teachers. SAWS' KZN office also participated in the Virginia Air show in July and in September 2010 SAWS won the best exhibition stand at the DMISA conference that was held in Jeffrey's Bay. SAWS furthermore participated at the AAD 2010 show (Africa Aerospace and Defence 2010) air show held at Ysterplaat Air-force base in Cape Town, the Military air show at Hoedspruit military base (21 -22 October) and the NEPAD Transport exhibition at Gallagher Estates (13-15 October).

#### Internal communication

Internal communication was facilitated through country-wide quarterly staff meetings, road shows, staff communiqués and internal newsletters.



## Legal Services

### Contract Management

Contract Management processes form an integral part of managing organisation legal risk. As part of legal risk management, SAWS conducted a Contracts and Memorandum of Understandings review. The Contract Management Framework is also under review as part of continuous improvements.

### Litigation

There was no litigation matter that was ruled against SAWS during the financial year. A total of R270, 000.00 was collected in respect of the legal costs from third parties. SAWS anticipates collecting a further R850, 000.00 in legal costs from third parties.

### Intellectual Property (IP)

A committee to look at all IP in SAWS was established in order to implement the IP policy that was developed in the previous year.

### Policy Review

As part of compliance monitoring, SAWS reviewed its policies with an aim to strengthen its internal controls.

### Review of SAWS Act

The draft SAWS amendment bill was submitted to cabinet for discussion and approval. The review looks at the incorporation of Air Quality information collection and monitoring, issues of corporate governance and issues of authority in communication of severe weather information.

## International relations

### International cooperation

The South African Weather Service (SAWS) actively participated in programmes and committees of the World Meteorological Organisation (WMO), thereby strengthening South Africa's international positioning and role. The participation in WMO Executive Council meetings and committees allowed South Africa to make valuable inputs to the WMO Strategy and Operational Planning, budgeting and programmes for national weather services in developing countries. In addition SAWS did sterling work in developing the first paper ever for WMO on gender mainstreaming in member national weather services.

International responsibilities were fulfilled in respect of being the Regional Telecommunications Hub (RTH), Regional Specialised Meteorological Centre (RSMC) and Global Producing Centre for long-range forecasts (GPC). In terms of contributing to the region's climate change adaptation initiatives, the SADC region received support and guidance from the RSMC- Pretoria in areas of severe weather forecasting through WMO's Severe Weather Forecast Demonstration Project. Plans for SAWS to play an important role in the implementation of the Southern African Flash Flood Guidance System progressed well. In addition, contract work was conducted by SAWS personnel in several parts of the African continent, mainly on information and communications technology and meteorological instrumentation.

### Meteorological Association of Southern Africa and SADC

SAWS continued its regional leadership role through the hosting of the Meteorological Association of South Africa (MASA), supporting its secretariat, chairing its Board and providing the initial draft strategic plan. The special MASA Annual General Meeting (AGM), held in Zimbabwe, approved the MASA Strategy and it was subsequently presented and welcomed by the meeting of SADC Ministers responsible for Transport and Meteorology. This was considered an excellent plan for developing meteorology and its socio-economic applications in the region.

SAWS participated in the first meeting for African Ministers responsible for Meteorology in Kenya during April 2010 and contributed to the development of an integrated African strategy for meteorology and the development of a Ministerial Declaration. At this meeting, SAWS-manufactured meteorological instruments, which can provide technological solutions for the continent, were on display. During its participation in the ICAO 37<sup>th</sup> Assembly, SAWS presented a paper on SADC cooperation in aviation meteorology towards civil aviation safety in Southern Africa.

### SAWS International Positioning

Eighty two (82) SAWS personnel participated in various international conferences, workshops and meetings. Technical trips included workshops on products and service development in research, general, marine and aviation forecasting. Administrative trips included the attendance of the 37<sup>th</sup> ICAO Assembly, a WMO Training Symposium and the WMO Regional Association 1 (Africa) Conference. These meetings helped shape the future of meteorological development and applications for

the region and also the rest of the world and had an important positive impact on SAWS' service delivery record and expansion. In addition, several SAWS personnel benefitted from training opportunities, ploughing back newly acquired knowledge into product and service improvement.

International travel costs were covered by SAWS' international travel budget (51%) and external sponsorship, mainly from the WMO (49%). The breakdown of international travel funding in Graph 13 below elucidates the important international support and contribution for SAWS personnel.

Graph 13: International Travel Sponsorship April 2010 – March 2011



# Executive Projects

## Total Quality Management

Preparations towards the certification of the SAWS Quality Management System (QMS) progressed, with internal QMS audits being conducted in Pretoria and at all regional offices. The first SAWS QMS Management Review was conducted and the necessary Quality Planning documents were revised to ensure that SAWS was on track in meeting the requirements of the international standard, ISO 9001:2008. Strategic and Operational Quality Objectives for the organisation were approved by the Executive Management. The Quality Policy and Quality Manual were also improved to address current business and operational practices. The first external Quality Management audit took place in March 2011, aimed at identifying the level of SAWS' certification readiness. A certification body was appointed to conduct formal assessments of the structure and implementation of the QMS. The planning for the Certification Assessments was finalised with the certification body. Certification assessments are planned for the first and second quarters of the 2011/2012 financial year.

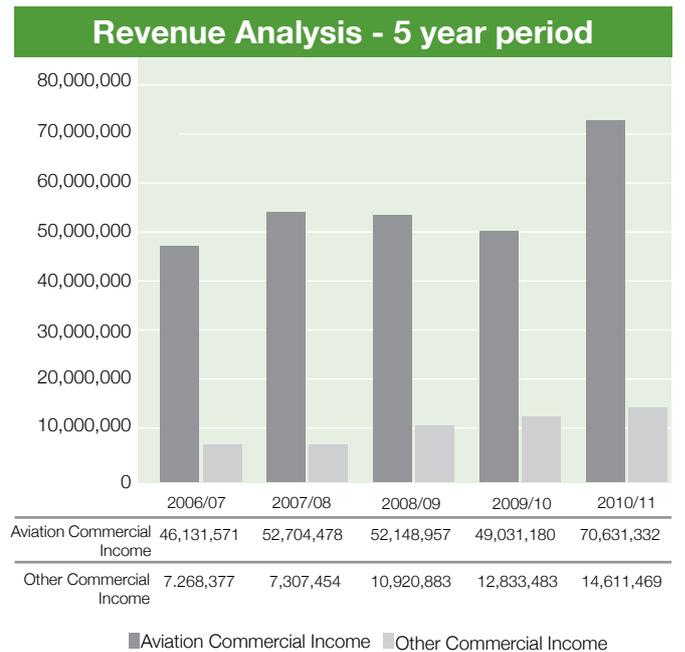
## Commercialisation Programme

SAWS' commercial revenue is comprised of Aviation and other non-regulated income. The Aviation revenue is based on a regulated tariff that allows SAWS to recover its costs, whilst providing a value-added service to the Aviation Industry. In the 2008/9 and 2009/10 financial years, SAWS did not recover all aviation related costs, however, the tariff for 2010/11 was adjusted to allow fair recovery: hence the 44% increase in revenue.

In respect of non-regulated commercial revenue, SAWS developed a "Go-to-Market Plan" and identified 20 opportunities in the process. Out of those 20 opportunities, the ones that were actively pursued are the selling of automatic weather stations; automatic rainfall stations; lightning data; geo-specific web portals; and public web advertising. To date, commercial sales have grown from R7.3 million in 2007/08, R10.9 million in 2008/09, R12.8 in 2009/10 and R14.6 million in 2010/11.

Graph 14 below depicts the commercial revenue trend over a five year period.

Graph 14: Revenue Analysis for the 5-Year period 2006/7 – 2010/11



## Occupational Health and Safety

The Occupational Health and Safety programme was forged through commissioning a baseline risk assessment for key operational areas, Bolepi and Irene offices. This exercise enabled SAWS to develop and implement an occupational health and safety risk management plan. Further risk control measures, such as conducting an indoor air quality survey in the affected area, were implemented based on the outcome of the mercury poisoning incident that happened in the previous reporting period. The number of incidents has also shown a progressive decline over four successive quarters. This is a sign that SAWS' efforts of promoting health and safety are now yielding positive outcomes. Capacity building with regard to first aid training continued as planned, with 14 officials successfully completing their first aid level 1 course. Quarterly statutory health and safety committee meetings were successfully held.

# Human Capital Management

## Human Capital Programme

- With a view to implement the career pathing component and Attraction and Retention strategy, SAWS, in consensus with Labour, agreed on a benchmarking exercise to be conducted in the new financial year.
- On another front, SAWS worked in conjunction with other stakeholders on the Wellness Programme for SAWS. To this end an MoU was signed to develop a suitable programme, complementary to ongoing programmes on formalised skills transfer programmes and training initiatives.

## International training-related visits

- During the second quarter of 2010/2011, SAWS hosted a delegation from Oman who conducted a site visit and discussed the training of their forecasters in South Africa.
- SAWS also hosted a delegation from Nanning University and the Regional Training Centre in China. The purpose of the visit was to exchange information regarding training and development of Meteorologists.

## Cooperation with tertiary institutions and certification institutions

- SAWS and the University of Pretoria entered into a third party agreement on the continuous education and training in order to ensure that the new Certificate in Forecasting, NQF 7, will be registered at the University and be quality assured by the Council of Higher Education. Certification will be done at the University of Pretoria.
- The Joint Working Group between SAWS and the University of Pretoria finalised the new Honours degree that was implemented in 2011. A template for the training manuals was drafted and submitted to the JWG for approval. Furthermore, it was agreed that SAWS bursary students who are studying their



Honours should have co-study leaders from the University and SAWS, as well as Bursaries for MSc and PHD studies.

- The Joint Working Group between SAWS and the University of Zululand finalised its programme of action, discussed possible changes in the current curriculum, bursaries and improving Hydrometeorological courses in line with WMO requirements.
- The National Certificate was reviewed and reregistered by the South African Qualifications Authority in 2011. There is a need for an advanced Certificate in Weather Observation.

#### Recognition of SAWS Meteorological Training Institute as a Regional Training Centre for Southern Africa

- Following a resolution by the MASA II AGM in 2009, nominations by Swaziland and Mozambique were submitted to the WMO in support of the SAWS Meteorological Training Institute becoming a recognised Regional Training Centre (RTC). An assessment site visit by the WMO to the SAWS Meteorological Training Institute took place from 5 – 7 October 2010, in preparation for the accreditation process as a Regional Training Centre, expected in the next financial year.
- On Monday, 6 December 2010, SAWS launched its WMO-recognised Centre of Excellence in Satellite Training. The launch was followed by a training workshop that was attended by 5 meteorologists from South Africa and 15 meteorologists from other African countries.

#### Educational outreach

- SAWS hosted a Career Day in Limpopo province, Vhembe District on 25 August 2010 for 500 learners from 3 Primary Schools and 3 Secondary Schools. SAWS employees conducted learner awareness and career workshops.

- On 19 August 2010, SAWS, in collaboration with the Department of Environmental Affairs, hosted 20 girl children for an educational tour as part of “Take a Girl Child to Work Day”.

#### Performance management system and best practice reward and incentive programme

The Performance Review template was developed and distributed for application. Assessments and personal development plans were done according to schedule and training needs determined. Performance assessment reviews were done for the financial year ending 31 March 2011.

#### Employee relations

- Six Bargaining Forum meetings were convened during the year. The SAWS Employment Equity Plan 2010-2013 and Report were drafted in consultation with the Employment Equity Committee and submitted to the Department of Labour on 30 September 2010. The Benchmarking Task Team has appointed a service provider for the benchmarking process. Salary negotiations for the 2011/2012 financial year commenced during quarter 4.
- CCMA cases were successfully defended. Internal disciplinary cases and grievances were handled in compliance with SAWS Policies.
- Presentations of Medical Aid Schemes for the 2011 products were conducted around the county.
- World Aids Day was commemorated on 1 December 2010 and 45 employees participated in voluntary counselling and testing on that day.
- 100% compliance to legislation and regulations was achieved.
- Labour and Management engaged in a benchmarking exercise as well as finalising the career pathing in a task team appointed by the Bargaining Forum.

Ensuring the availability of critical and scarce skills to ensure delivery of high quality projects

On 25 November 2010, SAWS hosted its second Employee Recognition Awards function at the Saint George Hotel. The Employee of the Month and the Chairperson's Quarterly Achievement Awards initiatives were established for all full-time employees of SAWS and designed to recognise excellence over and above job responsibilities.

The beginning of the fourth quarter of the financial year concentrated on the new intake of bursars. Based on the need to address the critical skills shortage in the scientific arena, SAWS has identified the creation of strategy-driven human capital capacity as a strategic goal. The chosen fields of study by the bursars are aligned to the strategic goals of SAWS Strategy for 2009-2012.

#### Bursary & Internship Recipients

Table 9: Recipients of bursaries and internships

2010/2011							
COURSE	TOTAL	M	F	A	C	I	W
	<b>53</b>						
<b>Weather Observers</b>	13	9	4	11	2	0	0
<b>BSc: Undergraduate: Meteorology/ Geography &amp; Hydrology/Physics</b>	16	8	8	14	0	0	2
<b>BSc: Honours</b>	8	4	4	3	0	0	4
<b>Meteorology/Geography</b>							
<b>Master of Science</b>	2		2		0	1	1
<b>National Diploma in Information Technology</b>	1		1	1	0	0	0
<b>INTERNS</b>	13	5	8	13	0	0	0

2009/2010							
COURSE	TOTAL	M	F	A	C	I	W
	<b>42</b>						
<b>Weather Observers</b>	13	6	7	8	0	0	5
<b>BSc Undergraduate: Meteorology/ Geography &amp; Hydrology/Physics</b>							
<b>BSc: Honours</b>	12	6	6	9	0	0	3
<b>Meteorology &amp; Earth and Atmospheric Science</b>							
<b>BSc: Honours Bridging Meteorology</b>	1	1		1	0	0	0
<b>Master of Science</b>	2		2	0	0	1	1
<b>National Diploma in Information Technology</b>	2	1	1	2	0	0	0
<b>National Diploma in Electrical Engineering</b>	3	1	2	3	0	0	0
<b>INTERNS</b>	9	3	6	9	0	0	0

Table 10: Staff Profile as on 31 March 2011

Occupational Levels	Male				Female				Foreign Nationals		Total
	A	C	I	W	A	C	I	W	Male	Female	
Top management	2	0	0	1	2	0	0	0	0	0	5
Senior management	6	0	1	2	3	0	1	0	0	0	13
Professionally qualified and experienced specialists and mid-management	27	5	2	28	9	1	0	6	2	0	80
Skilled technical and academically qualified workers, junior management	46	6	4	24	28	3	3	18	0	0	132
Semi-skilled and discretionary decision- making	35	7	0	10	29	5	1	4	0	0	91
Unskilled and defined decision-making	19	8	0	1	7	3	0	1	0	0	39
<b>TOTAL PERMANENT</b>	<b>135</b>	<b>26</b>	<b>7</b>	<b>66</b>	<b>78</b>	<b>12</b>	<b>5</b>	<b>29</b>	<b>2</b>	<b>0</b>	<b>360</b>
Temporary employees	5	0	0	0	6	0	0	0	0	0	11
<b>GRAND TOTAL</b>	<b>140</b>	<b>26</b>	<b>7</b>	<b>66</b>	<b>84</b>	<b>12</b>	<b>5</b>	<b>29</b>	<b>2</b>	<b>0</b>	<b>371</b>

Table 11: Employee Relations activities for the year under review

Nature of cases	Black		White		Coloured		Asian		Outstanding Cases	Other
	Male	Female	Male	Female	Male	Female	Male	Female		
CCMA Cases	3	0	0	0	1	0	0	0	2	
Grievances	1	0	0	0	0	0	0	0	0	
Disciplinary Cases	0	1	1	0	0	1	0	0	1	
Total	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	

During February 2011 SAWS hosted the PUMA and AMESD System Administration and Application Software training courses for 24 participants from SADC.

The previous page shows the Human Capital Management Report as of **31 March 2011**. It includes work profile as per Employment Equity categories, Employee Relations Statistics and Staff turnover.

As on 31 March 2011, the total staff establishment was 360. The overall turnover for the financial period 2010/11 was 8.53%. The turnover figure on scarce and critical skills which stood at 2,2% at the end of the financial year.





For a complete list of acronyms please see page 130.

# PART 3

Report of the Audit and Risk Committee	82
Report of the Auditor-General	84
Statement of Responsibility by the Board	86
Report of the Accounting Authority	87
Statement of Financial Position	94
Statement of Financial Performance	95
Statement of Changes in Net Assets	96
Cash Flow Statement	97
Notes to the Annual Financial Statements	98

# Report of the Audit and Risk Committee

## for the year ended 31 March 2011

### Audit & Risk Committee Responsibility

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

### Audit & Risk Committee Members And Attendance

The Audit & Risk Committee plays a critical role in the corporate governance of the entity. The Audit & Risk Committee consists of the members listed hereunder. During the current financial year four meetings were held. Fully constituted Committee meetings were held on 28 July 2010, 15 November 2010 and a special meeting on 10 February 2011. The membership of the Committee, as well as the number of meetings held and attended were as reflected in Table 12 below:

Table 12

Members	No. of ordinary meetings			No. of special meetings	
	Meetings held	Meetings attended		Meetings held	Meetings attended
		With a quorum	Without a quorum		
Ms Medi Mokuena (Chairperson)	4	-	2	1	1
Mr Siyabonga Makhaye	4	2	1	1	1
Mr Lance Williams	4	2	1	1	1
Mr Melusi Ntumba*	4	2	-	1	-

\*An independent member of the Committee who is not necessarily the member of the Board.

NB: The Committee also convened on 17 May 2010 and 7 February 2011. However, in both instances, the required quorum could not be met at the eleventh hour, due to unforeseen circumstances. Urgent matters were subsequently considered in a round robin.

### The effectiveness of internal control

The Audit & Risk Committee guided the Internal Audit unit in the preparation and implementation of the annual audit plan. The internal audit function has been outsourced to SizweNtsaluba vsp. 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, the internal audit provides the Audit 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 suggested enhancements to the controls and processes.

According to various Reports of the internal auditors, the Audit Report on the Annual Financial Statements and management report of the Auditor-General, it was noted that no significant or material non-compliance with the

prescribed policies and procedures have been reported. Accordingly, we can report that the systems of internal control for the year 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 & Risk Committee is satisfied with the content and quality of Monthly and Quarterly Reports prepared and issued by the Chief Executive Officer of the Entity during the year under review.

#### **Evaluation of annual financial statements**

The Audit & Risk Committee has:

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



Ms M Mokuena

Chairperson of the Audit & Risk Committee

28 July 2011

# Report of the Auditor-General for the year ended 31 March 2011

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

### REPORT ON THE FINANCIAL STATEMENTS

#### Introduction

1. I have audited the accompanying financial statements of South African Weather Service, which comprise the statement of financial position as at 31 March 2011, and the statement of comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended, a summary of significant accounting policies and other explanatory information as set out on pages 94 to 129.

#### 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 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), and for such internal control as management determines 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. As required by section 188 of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) and section 4 of the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA), my responsibility is to express an opinion on these financial statements based on my audit.
4. I conducted my audit in accordance with International Standards on Auditing and *General Notice 1111 of 2010* issued in *Government Gazette 33872 of 15 December 2010*. 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.
5. 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.
6. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

## Opinion

7. 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 2011 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 PFMA.

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

8. In accordance with the PAA and in terms of *General Notice 1111 of 2010*, issued in *Government Gazette 33872 of 15 December 2010*, I include below my findings on the annual performance report as set out on pages 16 to 41 and material non-compliance with laws and regulations applicable to the public entity.

## Predetermined objectives

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

## Compliance with laws and regulations

10. There are no findings concerning material non-compliance with laws and regulations applicable to the public entity.

## INTERNAL CONTROL

11. In accordance with the PAA and in terms of *General Notice 1111 of 2010*, issued in *Government Gazette 33872 of 15 December 2010*, I considered internal control relevant to my audit, but not for the purpose of expressing an opinion on the effectiveness of internal control. There are no significant deficiencies in internal control that resulted in a qualification of the auditor's opinion on the financial statements and/or findings on predetermined objectives and/or material non-compliance with laws and regulations.

*Auditor-General*

Pretoria

30 July 2011



AUDITOR - GENERAL  
SOUTH AFRICA

*Auditing to build public confidence*

# Statement of Responsibility by the Board for the year ended 31 March 2011

The Annual Financial Statements are the responsibility of the Board. The Financial Statements, presented on pages 94 to 129 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 judgment 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, and to prevent and detect material misstatement and loss. The systems are implemented and monitored by suitably trained personnel with an appropriate segregation of authority and duties. The Board reviewed the entity's system of internal control and risk management for the year and is of the opinion that they were effective for the year 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 the Board and all its committees. The Board believes that all representations made to the auditor-general during their audit were valid and appreciated.

## Approval of financial statements

The Financial Statements on pages 94 to 129 were approved by the Board on 28 July 2011 and signed on its behalf by:



Dr L. Makuleni  
Chief Executive Officer



Ms K Njobe  
Chairperson of the Board

# Report by the Accounting Authority for the year ended 31 March 2011

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 South African Weather Service has adopted the South African Statements of Generally Recognised Accounting Practices (GRAP 1- 3) and the South African Statements of Generally Accepted Accounting Practices (GAAP).

## General review of the state of affairs

The South African Weather Service (SAWS) has performed well in the period under review; especially in the overall implementation of key strategic programmes and the provision of public good services, despite the global economic crisis and realised a net surplus of R115.6 million. The SAWS increased its revenue (excluding capital expenditure grant) while operational expenses increased by 7% compared to the prior year.

## REVENUE

Total revenue (excluding capital expenditure grant) increased by 14% (R 28.76 m) from R 200.28 million (FY 2010) to R 229.04 million (FY 2011). The increase was attributed to:

	2011	2010	Increase/(Decrease)	
	Rm	Rm	Rm	%
Government grant - Operational expenditure	<b>137.39</b>	133.37	<b>4.03</b>	3%
Government grant - Capital expenditure	<b>95.67</b>	139.87	<b>(44.20)</b>	-32%
Aviation income	<b>70.63</b>	49.03	<b>21.60</b>	44%
Aviation instruments maintenance income	<b>0.52</b>	0.26	<b>0.26</b>	102%
Information fees	<b>5.64</b>	4.20	<b>1.44</b>	34%
Letting aircraft	<b>2.10</b>	-	<b>2.10</b>	100%
Lightning detection network sales	<b>4.03</b>	5.28	<b>(1.25)</b>	-24%
Sale of instruments	<b>1.73</b>	3.67	<b>(1.94)</b>	-53%
Other income	<b>0.70</b>	0.68	<b>0.02</b>	3%
Profit / (Loss) on disposal of assets	-	0.03	<b>(0.03)</b>	-100%
Donations received	<b>0.11</b>	0.05	<b>0.07</b>	151%
Interest received from debtors	<b>0.51</b>	0.42	<b>0.09</b>	21%
Interest due to discounting of receivables	<b>1.85</b>	1.01	<b>0.84</b>	83%
Income from investments	<b>3.81</b>	2.30	<b>1.52</b>	66%
	<b>324.72</b>	<b>340.15</b>	<b>(15.44)</b>	<b>-5%</b>

Regulated aviation revenue increased by 44%, mainly due to the tariff increase, increased traffic volumes including Soccer World Cup related traffic. The Minister of Environmental Affairs granted SAWS a tariff increase in order to address the shortfall in the tariff emanating from the previous financial period.

Other non - regulated commercial revenue increased by 5% year on year. Non regulated commercial revenue comprises mainly of the sale of lightning detection networks totalling R 4.03 million for the year (2010: R 5.28 million), information fees totalling R 5.6 million (2010: R 4.2 million) and instrument sales of R1.73 million (2010: R3.67 million).

Interest received from outstanding debtors accounts increased from R 0.4 million in 2010 to R 0.5 million in 2011.

Interest received due to discounting of receivables increased from R 1.0 million in 2010 to R 1.9 in 2011. International Accounting Standard 39; Financial Instruments, requires that when a receivable is raised that receivable will be initially recognised at its fair value, and this would take into account the effect of the time value of money. Similarly, for the purchase of goods on extended payment terms the effect of time value of money should be reflected in the purchase value.

Revenue from investments increased by 66% from R 2.3 million (2010) to R 3.8 million in 2011 due to increased cash surplus. Surplus cash funds, per the current accounts, 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 relation between internally generated revenue and revenue received as a grant (excluding capital expenditure grant) from DEA is as follows:

	2011	2010
External as % of total revenue	40%	33%
Internal as % of total revenue	60%	67%
	<b>100%</b>	<b>100%</b>

## EXPENSES

Total expenses on a year on year basis increased by 9% (R 17.36 million) from R 193.2 million (FY 2010) to R211.28 million. Below is the breakdown of the expenses:

	2011	2010	Increase/(Decrease)	
	Rm	Rm	Rm	%
Administrative Expenses	<b>9.90</b>	5.06	4.84	96%
Employee costs	<b>121.18</b>	114.78	6.40	6%
Amortisation	<b>0.26</b>	2.35	(2.09)	(89%)
Depreciation	<b>13.26</b>	11.92	1.34	11%
Other operating expenses	<b>66.30</b>	59.38	6.92	12%
Finance costs	<b>0.38</b>	0.43	(0.05)	(12%)
<b>Total</b>	<b>211.28</b>	<b>193.92</b>	<b>17.36</b>	<b>9%</b>

### **Selling and administration expenditure**

Administration expenses have increased by 95% from R 5.05 million (FY 2010) to R 9.85 million (FY 2011). This increase was mainly attributed to the following:

- Provision for bad debts increased from R 0.256 million in 2010 (write back of the provision) to R 3.85 million in the current financial period mainly due to the 1 Time debt as a result of the ongoing dispute.
- Administration fees comprising of payments made to ATNS calculated as a fixed cost of total invoices billed to Aviation customers increased by 43% to R0.620 million (FY 2010: R0.432 million) due to increased aviation revenue.

### **Employee benefits**

Employee costs have increased by 6% from R 114.78 million (FY 2010) to R 121.18 million (FY 2011). The average annual cost of living increase applied by SAWS was 8.5%. Vacant positions emanating from resignations were filled in towards the end of the financial and the majority will be filled in during the first quarter of the next financial period.

Employee costs constitute 57% (FY 2010: 59%) of the total expenses of the SAWS.

### **Depreciation**

Depreciation increased by 13% from R 11.92 million (2010) to R 13.26 million (FY 2011). The increase is as a result of capital expenditure spent on the new Radar Equipment, engine overhaul of the aircraft, new furniture and equipment for the Durban and Lanseria offices.

### **Other operating expenses**

Other operating expenses increased by 12% (R 6.92 million) from R 59.38 million (FY 2010) to R 66.3 million (FY 2011).

- The following were the major increases in operating expenses:
  - International membership fees increased by 63% (R0.87 million) from R1.4 million (FY 2010) to R2.3 million due to a more than expected increase in WMO subscription fees. There were also additional subscription fees paid to MASA not previously incurred in the last financial period.
  - Electricity and power generation increased by 35% (R0.54 million) from R1.5 million (FY 2010) to R2.08 million due to the increase by ESKOM as granted by the National Energy Regulator of South Africa (NERSA).
  - Licenses for computer software increased by 25% (R0.794 million) from R3.2 million (FY 2010) to R3.99 million mainly due to the upgrade of the Ninjo View software to the Ninjo Production software.

### **Finance costs**

Finance costs decreased by 12% from R 0.43 million (2010) to R 0.38million (2011) due to the effect of the implementation of IAS 39 as discussed above.

## 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 by the operator of an aircraft in respect of 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:

In 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 2011 – 31 March 2012)	R 35.23
Year 2 ((1 April 2012 – 31 March 2013)	R 32.48
Year 3 (1 April 2013 – 31 March 2014)	R 33.08
- W = Square root of (MCM in metric tonnes divided by 50)
- D = Distance of flight in the flight information region of South Africa in kilometre divided by 100.

### Category 2:

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 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 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 in 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.

- **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 to 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.

#### UTILISATION OF DONOR FUNDS

An amount of R 14.55 million (FY 2010: R 3.7 million) including interest was received during the year under review from donor funds. A total of R 1.04 million (FY 2010: R 3.1 million) was utilised as donor funding expenditure based on the current year's donations received and funds carried over from the previous financial period. These funds were received with conditions as agreed with the donors.

Detailed information on these projects is discussed under the Chief Executive Officer's report in the Annual Report 2011. The amounts received from donors are recorded as a liability against which expenses are charged. The balance available at year end was R15.59 million (FY 2010: R 3.42 million).

#### CAPITAL EXPENDITURE GRANT

An amount of R92.5 million was received from DEA during the current financial period as a contribution towards the radar network recapitalisation project of R 240 million. The interest earned for the financial year was R1.65 million. The full amount of R240 million has been received from DEA since 2008 earning interest of R13.43 million over the period.

During the period under review a total of four Radar systems were installed. Three fixed radars (S-Band) were installed in Ottosdal, Ermelo, East London and Polokwane. The construction in Durban is in progress and is due to be completed in May 2010. The sites in Bloemfontein and Port Elizabeth have been delayed due to the issues being currently resolved with stakeholders. The construction for Bloemfontein is due to commence in the second week of May and the construction in Port Elizabeth in July 2011.

#### ROLLOVER FUNDS – INVESTMENT PROJECTS

National Treasury granted SAWS R44.7 million during the current financial period as a result of surplus funds from previous financial periods. Approval was granted by the SAWS Board on how these funds were to be utilised.

The following projects were approved by the Board and are on track to be completed by the end of the financial period ending 31 March 2012:

- Waterkloof Land Development
- Address Post Retirement Medical Aid Liability Benefit Shortfall
- Radar Infrastructure Development: Western Cape
- Radar Infrastructure Development: Relocation of Bloemfontein S-band radar site
- GAW Development of Forecast Product Generator

Most of the projects have gone through the tender/RFQ process and some have already commenced.

### **SAAQI's project**

During 2010 the SAWS and DEA signed an M.O.U. regarding the systematic transfer of the responsibility of maintaining the stations that monitor air quality in South Africa. The first part of this process is the transfer of the assets in the Vaal region.

The DEA has transferred a total amount of R11.22 million to enable SAWS to discharge its responsibilities in this regard. The proposed business case containing the budget allocation of what the R11.22 million constitutes is still in the process of being finalised by the Climate Service Department within SAWS.

The total spending as at 31 March 2011 amounts to R 0.826 million. The total budget allocated to SAWS for the 2011/12 financial period is R12.18 million.

## **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. Detailed discussion of the application and results of Corporate Governance in the organisation is discussed under the heading Chief Executive Officer's report Corporate Governance in the Annual Report.

Full disclosure of risk items and policies are discussed under note 20 in the Annual Financial Statements, disclosure of all conflict of interest and contracts with related parties are done in the 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 have been strictly monitored.

The Audit Committee meets on a regular basis and ensures that management adheres to internal controls and accounting policies and procedures. Sizwe Ntsaluba VSP was appointed in the financial period ending 31 March 2009 as internal auditors to SAWS. This is an ongoing process and will ensure the effective implementation of internal audit and control procedures and adherence of management thereto. A three year rolling internal audit plan as well as a one year plan was developed by them. A risk assessment was performed during the year.

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

## **PERFORMANCE INFORMATION**

Performance targets are set on an annual basis. Full disclosure of these targets and performance against them is 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.

# Statement of Financial Position

## as at 31 March 2011

	Notes	2011 R	2010 R
<b>ASSETS</b>			
<b>Non-Current Assets</b>			
		<b>341 885 751</b>	253 233 482
Property, plant and equipment	4	292 123 140	215 141 091
Intangible assets	5	5 232 611	5 192 391
Investment property	6	44 530 000	32 900 000
<b>Current Assets</b>			
		<b>161 951 005</b>	105 008 634
Inventory	7	4 773 979	6 718 618
Trade and other receivables	8	15 462 202	14 241 138
Cash and cash equivalents	9	141 714 824	84 048 878
<b>TOTAL ASSETS</b>		<b>503 836 756</b>	358 242 116
<b>NET ASSETS AND LIABILITIES</b>			
<b>Non-Current Liabilities</b>			
		<b>37 147 589</b>	<b>35 023 467</b>
Deferred rental obligations	10,1	7 001 299	8 493 467
Retirement benefit obligations	11	30 146 290	26 530 000
<b>Current Liabilities</b>			
		<b>74 477 611</b>	53 920 200
Current portion:Retirement benefit obligations	11	829 215	560 000
Trade and other payables	12	29 173 931	25 854 310
Provisions	13	453 286	497 301
Donor funding	14	15 592 888	3 419 076
Radar recapitalisation project	14	28 428 291	23 589 513
<b>TOTAL LIABILITIES</b>		<b>111 625 200</b>	<b>88 943 667</b>
<b>Net Assets</b>		<b>392 211 556</b>	269 298 449
Non-distributable reserve		57 184 730	57 509 494
Accumulated surpluses		335 026 826	211 788 955
<b>TOTAL NET ASSETS AND LIABILITIES</b>		<b>503 836 756</b>	358 242 116
<b>Total Net Assets</b>		<b>392 211 556</b>	269 298 449

# Statement of Financial Performance

## for the year ended 31 March 2011

	Notes	2011 R	2010 R
Government Grant - Operational Expenditure		137 392 882	133 367 000
Government Grant - Capital Expenditure		95 672 581	139 869 949
Commercial Revenue		84 659 001	62 436 665
Other income		6 990 893	4 478 306
<b>Total revenue</b>	15	<b>324 715 357</b>	340 151 920
Administrative expenses		(9 899 134)	(5 055 904)
Employee costs		(121 177 862)	(114 779 933)
Amortisation	5	(256 023)	(2 352 368)
Depreciation	4	(13 264 447)	(11 921 906)
Other operating expenses		(66 295 454)	(59 383 428)
Finance costs	16	(383 911)	(431 949)
<b>Total expenses</b>		<b>(211 276 831)</b>	(193 925 488)
<b>Operating (Deficit) / Surplus for the Year</b>		<b>113 438 526</b>	146 226 432
(Losses) / Gains from fair value adjustments/revaluations	4,6	<b>9 799 345</b>	(14 100 000)
<b>(Deficit) / Surplus for the Year</b>		<b>123 237 871</b>	132 126 432

# Statement of Changes in Net Assets

## for the year ended 31 March 2011

	Notes	Non-distributable Reserve R	Accumulated Surpluses / (Deficits) R	Total R
<b>Balance at 1 April 2009 - as previously reported</b>		61 274 577	80 312 605	141 587 182
Effect of prior year error	28	-	(650 082)	(650 082)
<b>Balance at 1 April 2009 - restated</b>		61 274 577	79 662 523	140 937 100
Property valuation		(4 806 412)	-	<b>(4 806 412)</b>
Aircraft valuation / Impairment		1 041 329	-	<b>1 041 329</b>
Net surplus / (deficit) for the year	28	-	132 126 432	<b>132 126 432</b>
				-
<b>Balance at 31 March 2010</b>		<b>57 509 494</b>	<b>211 788 955</b>	<b>269 298 449</b>
Property valuation		315 792		<b>315 792</b>
Aircraft valuation / Impairment		(640 556)		<b>(640 556)</b>
Net surplus / (deficit) for the year		-	123 237 871	<b>123 237 871</b>
				-
<b>Balance at 31 March 2011</b>		<b>57 184 730</b>	<b>335 026 826</b>	<b>392 211 556</b>

# Cash Flow Statement

for the year ended 31 March 2011

	Notes	2011 R	2010 R
<b>Cash Flow from Operating Activities</b>			
<b>Receipts</b>		<b>323 494 295</b>	340 836 413
Government grant		233 065 463	273 236 949
Commercial and other income		86 617 751	65 303 430
Income from investments		3 811 081	2 296 034
<b>Payments</b>		<b>(172 473 799)</b>	(186 340 896)
Employee benefits expense		(121 177 862)	(114 779 933)
Suppliers		(50 912 028)	(71 129 014)
Finance costs		(383 909)	(431 949)
<b>Net Cash Flows from / (Used in) Operating Activities</b>	18	<b>151 020 496</b>	154 495 517
<b>Cash Flow from Investing Activities</b>			
Proceeds on disposal of property, plant and equipment and intangible assets		193 911	76 182
Acquisition of property, plant and equipment and intangible assets		(95 672 581)	(139 869 950)
<b>Net Cash Flows from / (Used in) Investing Activities</b>		<b>(95 478 670)</b>	(139 793 768)
<b>Cash Flow from Financing Activities</b>			
(Decrease)/increase in long-term liabilities		2 124 120	908 285
(Decrease)/increase in short-term liabilities		-	-
<b>Net Cash Flow from / (Used in) Financing Activities</b>		<b>2 124 120</b>	908 285
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>57 665 946</b>	15 610 034
Cash and cash equivalents at the beginning of the year		84 048 878	68 438 844
<b>Cash and Cash Equivalents at End of the Year</b>	9	<b>141 714 824</b>	84 048 878

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 1. Presentation of financial statements

#### 1.1 Basis of Preparation of the Financial Statements

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

#### 1.2 Standard of GRAP

GRAP 1:	Presentation of financial statements
GRAP 2:	Cash flow statements
GRAP 3:	Accounting policies, changes in accounting estimates and errors
GRAP 4:	The effects of changes in foreign exchange rates
GRAP 5:	Borrowing costs
GRAP 6:	Consolidated and separate Financial Statements
GRAP 7:	Investments in Associate
GRAP 8:	Interest in Joint Ventures
GRAP 9:	Revenue from exchange transactions
GRAP 10:	Financial reporting in hyperinflationary economics
GRAP 11:	Construction contracts
GRAP 12:	Inventories
GRAP 13:	Leases
GRAP 14:	Events after the reporting date
GRAP 16:	Investment property
GRAP 17:	Property, plant and equipment
GRAP 19:	Provisions, contingent liabilities and contingent assets
GRAP 21:	Impairment of Non-cash-generating Assets
GRAP 23:	Revenue from Non-exchange Transactions
GRAP 24:	Presentation of Budget Information in Financial Statements
GRAP 26:	Impairment of Cash-generating Assets
GRAP 100:	Non-current assets held for sale and discontinued operations
GRAP 101:	Agriculture
GRAP 102:	Intangible assets
GRAP 103:	Heritage assets

Currently the recognition and measurement principles in the above GRAP and GAAP Statements do not differ or result in material differences in items presented and disclosed in the financial statements. The implementation of GRAP statements has resulted in the following significant changes in the presentation of the financial statements:

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 1.2.1 Terminology differences:

Standard of GRAP

Statement of financial performance

Statement of financial position

Statement of changes in net assets

Net assets

Surplus / deficit for the year

Accumulated surplus / deficit

Contributions from owners

Distributions to owners

Reporting date

1.2.2. The cash flow statement can only be prepared in accordance with the direct method.

1.2.3. Specific information has been presented separately on the statement of financial position such as:

- (a) receivables from non-exchange transactions, including taxes and transfers;
- (b) taxes and transfers payable;
- (c) trade and other payables from non-exchange transactions;

1.2.4. The amount and nature of any restrictions on cash balances is required to be disclosed.

The financial statements are presented in South African rand since that is the functional currency in which the majority of the South African Weather Service's transactions are denominated. The annual financial statements have been prepared on the going concern basis. All accounting policies have been consistently applied to all the periods presented.

## 2. Summary of significant accounting policies

The financial statements of the South African Weather Service have been prepared in accordance with South African Statements of Generally Accepted Accounting Practices (GAAP) and with South African Standards of Generally Recognised Accounting Practices (GRAP). The preparation of financial statements in conformity with GAAP and GRAP require the use of certain critical financial statements accounting estimates. It also requires management to exercise its judgment in the process of applying the Entity's accounting policies.

### 2.1 Revenue Recognition

Revenue comprises of 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.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

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Revenue is measured at the fair value of the consideration received or receivable and represents the amounts receivable for services provided in the normal course of business.

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.

Monies received from donors are recorded as a liability against which expenses are charged, surpluses are either paid back or recognised in the Statement of Financial Performance depending on terms of the particular contract.

### 2.2 Government and Other Grants

Government grants are recognised when it is probable that future economic benefits will flow to the organisation and when the amount of the grant can be measured reliably. Government grants are recognised as revenue to the extent that there is no further obligation arising from the receipt of the transfer payment. A liability is recognised to the extent that the grant is conditional. The liability is transferred to revenue as and when the conditions attached to the grant are met.

### 2.3 The South African Weather Service as a Lessee

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

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. The difference between the amounts recognised as an expense and the contractual payments are recognised as an operating lease asset. This liability is not discounted.

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

### 2.4 Foreign Currencies

Transactions in currencies other than the functional currency (Rands) are initially recorded at the rates of exchange ruling on the dates of the transactions. Monetary assets and liabilities denominated in such currencies are retranslated at the rates ruling on the Statement of Financial Position date. Exchange differences arising on the settlement of monetary items or on reporting an enterprise's monetary items at rates different from those at which they were initially recorded are recognised as income or expenses in the period in which they arise.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

The South African Weather Service did not enter into forward contracts and options in order to hedge its exposure to foreign exchange risks, during the financial period under review.

### 2.5 Property, Plant, Equipment and Depreciation

Land and buildings and aircraft are shown at fair value.

Revaluations of aircrafts and land and buildings are performed annually using fair values at the Statement of Financial Position date. Any revaluation increase arising on the revaluation is credited to the revaluation reserve, except to the extent that it reverses a revaluation decrease for the same asset previously recognised as an expense, in which case the increase is credited to the Statement of Performance to the extent of the decrease previously charged.

A decrease in the carrying amount arising on the revaluation is charged as an expense to the extent that it exceeds the balance, if any, held in the properties revaluation reserve relating to a previous revaluation of that asset.

On the subsequent sale or retirement of a revalued asset, the attributable revaluation surplus remaining in the revaluation reserve is transferred to accumulated surpluses.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably.

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

Depreciation is charged so as to write off the cost or valuation of assets over their estimated useful lives, using the straight-line method, on the following bases:

	2011 (Years)	2010 (Years)
Buildings - lease improvements	10	10
Fence	10	10
Houses	50	50
Commercial property	-	-
Aircraft - Airframes	20	20
Aircraft - Engines	5400 hrs	5400 hrs
Aircraft - Propellers	5	5
Motor vehicles	5	5
Meteorological instruments - Other	10	10
Meteorological instruments - Radar	25	10
Office equipment	10	10
Computer equipment	5	5
Computer software and website development	5	5
Library books and equipment	10	10
Furniture and fittings	10	10
Tools and other equipment	10	10

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each Statement of Financial Position date.

All other repairs and maintenance are charged to the Statement of Financial Performance during the financial period in which they are incurred.

### 2.6 Intangible Assets

An intangible asset is recognised when:

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

Intangible assets are initially recognised at cost.

Acquired computer software and website development are capitalised on the basis of the costs incurred to bring to use the specific software or website and amortised over the useful lives (five years) using the straight-line method.

### 2.7 Investment Property

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

Investment property is shown at fair value based on periodic but at least annual valuations by external independent valuers. The investment property is held for capital appreciation. A gain or loss arising from a change in the fair value of investment property is recognised in surplus or deficit in the year in which it arises.

### 2.8 Inventories

Inventories are stated at the lower of cost and net realisable value. Net realisable value represents the estimate selling price less all estimated cost to completion and cost to be incurred in marketing, selling and distribution. Inventory consists of consumable goods and goods held for resale.

Cost is determined on the following basis:

- Consumable goods are valued using the weighted average cost basis.
- Redundant and slow moving stocks are identified and written down with regard to their estimated economic or realisable values.

### 2.9 Impairment

The recoverable amount is the higher of the assets less cost to sell or the value in use.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 2.10 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 cost, which include transaction costs. Subsequent to initial recognition these instruments are measured as set out below.

#### Financial Assets

##### - *Trade and other receivables*

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

##### - *Writing off of debts*

Prior to writing of debts, management assess 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 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.

##### - *Cash and cash equivalents*

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments and bank overdrafts. Cash and cash equivalents are measured at fair value.

#### Financial Liabilities

The entity's principal financial liabilities are trade and other payables. Trade and other payables are stated at fair value of money.

#### Gains and Losses on Subsequent Measurement

Gains and losses arising from a change in the fair value of financial instruments, are included in the net surplus or deficit for the period in which it arises.

#### 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 and any prior adjustments to reflect the fair value of the asset that were reported in equity is included in net surplus or deficit for the period.

#### Fair Value Considerations

The fair values at which financial instruments are carried at the Statement of Financial Position date were determined using available market values. Where market values were not available, fair values were calculated by discounting

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

expected future cash flows 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 approximate their fair value due to the short term trading cycle of these items.

### 2.11 Provisions

#### Liabilities

Provisions for liabilities are recognised when the South African Weather Service has a present obligation as a result of a past event and it is probable that this will result in an outflow of economic benefits that can be reliably estimated.

#### Impairment of Receivables

Impairment of receivables are recognised when the South African Weather Service outstanding debtors are above 120 days and debts which on merit appear to be irrecoverable.

#### 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 account of the recommendations of independent qualified actuaries. For defined benefit obligation the related current service cost, and where applicable the past service cost are determined by using 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 contribution to defined benefit obligation are charged to the Statement of Financial Performance in the year to which they relate. Once the contribution has 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.

### 2.12 Comparative Figures

Where necessary, comparative figures were adjusted to conform to changes in the presentation in the current period.

### 2.13 Taxation

No provision has been 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).

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 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 placed the South African Weather Service listed in Schedule 3 A within the scope of VAT. The Amendment Act, however has 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 departments of Government and state-controlled entities are regarded as related party transactions and are disclosed separately in the notes to the financial statements (refer note 22).

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 charged.

### 2.16 Fruitless, Wasteful and Irregular Expenditure

Irregular expenditure means expenditure incurred in contravention of, or not in accordance with, a requirement of the Public Audit Act, 2004 (Act No. 25 of 2004). Fruitless and wasteful expenditure means expenditure that was incurred in vain and would have been avoided should reasonable care have been exercised. All irregular, fruitless or wasteful expenditure is charged against income in the period it was incurred.

## 3 Significant Accounting Judgements

In preparing the financial statements, management is required to make estimates and assumptions that affect the amounts represented in the financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the 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 results was that the useful life has not changed from the previous financial year.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 4. Property, Plant and Equipment

Cost or Valuation	2011				
	Opening Balance	Additions	Revaluation	Disposals	Closing Balance
	R	R	R	R	R
Building lease improvements	2 742 445	-	-	-	2 742 445
Commercial property	11 760 000	-	240 000	-	12 000 000
Fence	1 172 728	-	-	-	1 172 728
Bethlehem houses	1 453 627	-	75 792	-	1 529 419
Irene Property	2 100 000	-	-	-	2 100 000
Aircraft airframes	3 518 608	-	(467 910)	-	3 050 698
Aircraft engines	6 817 635	2 300 209	(2 297 066)	-	6 820 778
Aircraft propeller	763 593	-	293 763	-	1 057 356
Motor vehicles	61 722	-	-	-	61 722
Meteorological instruments - Other	51 798 610	1 642 080	-	(4 917 598)	48 523 092
Meteorological instruments - Radar	158 432 599	87 007 969	-	-	245 440 568
Office equipment	1 577 127	126 760	-	(789)	1 703 098
Computer equipment	28 383 519	3 360 200	-	(874 801)	30 868 918
Library books and equipment	157 395	20 622	-	(156 798)	21 219
Furniture and fittings	4 862 854	260 672	-	(29 020)	5 094 506
Tools and other equipment	3 323 129	600 308	-	(58 259)	3 865 178
	<b>278 925 591</b>	<b>95 318 820</b>	<b>(2 155 421)</b>	<b>(6 037 265)</b>	<b>366 051 725</b>

Accumulated Depreciation and impairment losses	2011				
	Opening Balance	Depreciation	Additions	Disposals / Impairments	Closing Balance
	R	R	R	R	R
Building lease improvements	1 855 715	272 216	-	-	2 127 931
Commercial property	-	-	-	-	-
Fence	207 448	117 208	-	-	324 656
Bethlehem houses	128 628	30 792	-	-	159 420
Irene Property	-	-	-	-	-
Aircraft airframes	1 197 825	144 950	-	-	1 342 775
Aircraft engines	2 382 357	223 261	-	-	2 605 618
Aircraft propeller	409 948	353 643	-	-	763 591
Motor vehicles	61 722	(18 518)	-	-	43 204
Meteorological instruments - Other	22 129 299	4 187 168	-	(2 259 905)	24 056 562
Meteorological instruments - Radar	11 869 701	5 938 503	-	-	17 808 204
Office equipment	776 743	85 477	-	(711)	861 509
Computer equipment	18 551 216	1 235 121	-	(760 113)	19 026 224
Library books and equipment	82 023	1 032	-	(81 885)	1 170
Furniture and fittings	2 770 586	388 784	-	6 493	3 165 863
Tools and other equipment	1 361 292	304 808	-	(24 242)	1 641 858
	<b>63 784 503</b>	<b>13 264 445</b>	<b>-</b>	<b>(3 120 363)</b>	<b>73 928 585</b>

At 31 March 2011, a total of 2407 assets that had a nil cost and accumulated depreciation were still in use at the Weather Service.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

Cost or Valuation	2010				
	Opening Balance	Additions	Revaluation	Disposals	Closing Balance
	R	R	R	R	R
Building lease improvements	2 742 445	-	-	-	2 742 445
Commercial property	16 800 000	-	(5 040 000)	-	11 760 000
Fence	1 172 728	-	-	-	1 172 728
Bethlehem houses	1 220 039	-	233 588	-	1 453 627
Irene Property	-	2 100 000	-	-	2 100 000
Aircraft airframes	3 980 312	-	(461 704)	-	3 518 608
Aircraft engines	5 546 190	-	1 271 445	-	6 817 635
Aircraft propeller	532 008	-	231 585	-	763 593
Motor vehicles	72 322	-	-	(10 600)	61 722
Meteorological instruments - Other	50 668 808	1 129 802	-	-	51 798 610
Meteorological instruments - Radar	22 744 730	135 687 869	-	-	158 432 599
Office equipment	1 428 156	148 971	-	-	1 577 127
Computer equipment	27 651 797	802 707	-	(70 985)	28 383 519
Library books and equipment	156 795	600	-	-	157 395
Furniture and fittings	4 862 854	-	-	-	4 862 854
Tools and other equipment	3 338 713	-	-	(15 584)	3 323 129
	<b>142 917 897</b>	<b>139 869 949</b>	<b>(3 765 086)</b>	<b>(97 169)</b>	<b>278 925 591</b>

Accumulated Depreciation and impairment losses	2010				
	Opening Balance	Depreciation	Additions	Disposals / Impairments	Closing Balance
	R	R	R	R	R
Building lease improvements	1 855 305	410	-	-	1 855 715
Commercial property	-	-	-	-	-
Fence	90 235	117 213	-	-	207 448
Bethlehem houses	95 039	33 589	-	-	128 628
Irene Property	-	-	-	-	-
Aircraft airframes	1 021 816	176 009	-	-	1 197 825
Aircraft engines	2 382 357	-	-	-	2 382 357
Aircraft propeller	290 299	119 649	-	-	409 948
Motor vehicles	57 861	14 461	-	(10 600)	61 722
Meteorological instruments - Other	16 583 139	5 546 160	-	-	22 129 299
Meteorological instruments - Radar	10 064 054	1 353 161	-	452 486	11 869 701
Office equipment	676 558	100 185	-	-	776 743
Computer equipment	14 621 519	3 863 929	-	65 768	18 551 216
Library books and equipment	71 512	10 511	-	-	82 023
Furniture and fittings	2 447 930	321 501	-	1 155	2 770 586
Tools and other equipment	1 087 042	284 090	-	(9 840)	1 361 292
	<b>51 344 666</b>	<b>11 940 868</b>	<b>-</b>	<b>498 969</b>	<b>63 784 503</b>

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Net Book Value

	2011 R	2010 R
Building lease improvements	614 514	886 730
Commercial property	12 000 000	11 760 000
Fence	848 072	965 280
Bethlehem houses	1 369 999	1 324 999
Irene Property	2 100 000	2 100 000
Aircraft	6 216 848	7 109 706
Aircraft airframes	1 707 923	2 320 783
Aircraft engines	4 215 160	4 435 278
Aircraft propeller	293 765	353 645
Motor vehicles	18 518	-
Meteorological instruments - Other	24 466 530	29 669 311
Meteorological instruments - Radar	227 632 364	146 562 898
Office equipment	841 589	800 386
Computer equipment	11 842 694	9 832 303
Library books and equipment	20 049	75 372
Furniture and fittings	1 928 643	2 092 264
Tools and other equipment	2 223 320	1 961 837
	<b>292 123 140</b>	<b>215 141 091</b>

### Aircraft

The Entity's aircrafts were revalued at 31 March 2011 by independent valuers, Skycare Maintenance.

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 exist, the deficit is expensed (2011: R 1,8530,655 was expensed). If aircraft were stated on the historical cost basis, the amounts would be as follows:

	2011 R	2010 R
Cost	9 811 735	9 811 735
Accumulated depreciation	(9 811 735)	(9 811 735)
Net book value	-	-

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Bethlehem Houses

The houses were revalued at 31 March 2011 by an independent valuer, Johan Breytenbach. Valuations were made on 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:

	2011 R	2010 R
Cost	600 000	600 000
Accumulated depreciation	(92 000)	(84 000)
Net book value	<b>508 000</b>	<b>516 000</b>

The property includes Erf 1997 and Erf 2064 in the town of Bethlehem.

Erf 1997, also known as 8 Dr Clark Street, Bethlehem has an area of 1997 square meters and includes a house and outbuildings.

Erf 2064, also known as 19 Gordon Dreyer Street, Bethlehem has an area of 1568 square meters and includes a house and outbuildings.

The title deed of the Bethlehem property has not been registered in the name of South African Weather Service at financial year end however the Minister of Public Works passed all the rights, obligations and liabilities of the properties to South African Weather Service on the commencement of the South African Weather Service 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, Workshop, Storage wings and some supporting outbuildings and carports. In accordance with the registration of ownership of the property, the property may 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 at 31 March 2011 by independent valuers, T.I. Lehobye Valuations.

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

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Net Book Value

Fair value of commercial property

Net book value

	2011	2010
	R	R
Fair value of commercial property	8 960 000	8 960 000
Net book value	<b>8 960 000</b>	<b>8 960 000</b>

### 5. Intangible Assets

Cost or Valuation	2011				
	Opening Balance	Additions	Revaluation	Disposals	Closing Balance
	R	R	R	R	R
Computer software	13 128 556	353 761	-	(113 978)	13 368 339
	<b>13 128 556</b>	<b>353 761</b>	<b>-</b>	<b>(113 978)</b>	<b>13 368 339</b>

Accumulated Amortisation	2011				
	Opening Balance	Amortisation	Additions	Disposals/ Impairments	Closing Balance
	R	R	R	R	R
Computer software	7 936 165	256 023	-	(56 460)	8 135 728
	<b>7 936 165</b>	<b>256 023</b>	<b>-</b>	<b>(56 460)</b>	<b>8 135 728</b>

Cost or Valuation	2010				
	Opening Balance	Additions	Revaluation	Disposals	Closing Balance
	R	R	R	R	R
Computer software	13 128 556	-	-	-	13 128 556
	<b>13 128 556</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13 128 556</b>

Accumulated Amortisation	2010				
	Opening Balance	Amortisation	Additions	Disposals/ Impairments	Closing Balance
	R	R	R	R	R
Computer software	4 408 608	2 352 368	-	1 175 189	7 936 165
	<b>4 408 608</b>	<b>2 352 368</b>	<b>-</b>	<b>1 175 189</b>	<b>7 936 165</b>

### Net Book Value

Computer software

	2011	2010
	R	R
Computer software	5 232 611	5 192 391

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 6. Investment Property

Cost or Valuation	2011				
	Opening Balance	Additions	Fair value adjustment	Disposals	Closing Balance
	R	R	R	R	R
Remaining extent of portion 264 of the farm Garstfontein 374	44 660 000	-	11 870 000	-	56 530 000
Less: Commercial property	(11 760 000)	-	(240 000)	-	(12 000 000)
	<b>32 900 000</b>	-	<b>11 630 000</b>	-	<b>44 530 000</b>

Cost or Valuation	2010				
	Opening Balance	Additions	Fair value adjustment	Disposals	Closing Balance
	R	R	R	R	R
Remaining extent of portion 264 of the farm Garstfontein 374	63 800 000	-	(19 140 000)	-	44 660 000
Less: Commercial property	(16 800 000)	-	5 040 000	-	(11 760 000)
	<b>47 000 000</b>	-	<b>(14 100 000)</b>	-	<b>32 900 000</b>

The property was valued at 31 March 2011 by an independent valuator, T.I. Lehobye Valuations. 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 to determine the value of this type of property.

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

Net Book Value	2011	2010
	R	R
Fair value of investment property	26 890 000	26 890 000
Less fair value of commercial property	(8 960 000)	(8 960 000)
Net book value	<b>17 930 000</b>	<b>17 930 000</b>

The investment property includes Portions 411, portion of portion 412, portion 423 and 424 (which are portions of the remaining extent of portion 264) of the farm Garstfontein 374, Registration Division JR, Gauteng. The property consist of 37,1116 ha and is located immediately west of the N1 National Freeway to the Northern Province and immediately north of Rigel Avenue.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 7. Inventory

		2011	2010
		R	R
Bolepi	Consumables and maintenance	348 885	378 069
Irene	Maintenance and parts	3 739 246	4 666 305
Irene work-in-progress	Automatic weather stations	685 848	1 674 244
		<b>4 773 979</b>	<b>6 718 618</b>

### 8. Trade and Other Receivables

		2011	2010
		R	R
Trade receivables		20 415 137	17 354 313
Discounting of receivables		(151 016)	(124 553)
Provision for impairment of receivables		(9 252 540)	(5 619 954)
Prepayments		1 940 751	1 363 235
Other receivables		2 509 870	1 268 097
		<b>15 462 202</b>	<b>14 241 138</b>

Interest is charged on any long outstanding trade debtor accounts at the rate prescribed by the National Treasury. The carrying amount of trade and other receivables approximate their fair value.

Trade and other receivables are stated at fair value providing for the time value of money and impairment of receivables.

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

Trade and other receivables which are under 3 months past due are not automatically considered to be impaired. Judgement is used to impair amounts under 3 months past due. At 31 March 2011, R 4,949,889 (2010: R 6,165,456) were past due but not impaired.

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

	31-60 days	61-90 days	91-120 days	Over 120 days
Trade receivables	2 698 010	523 425	(69 765)	1 798 219

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

	2011	2010
	R	R
Opening balance	(5 619 954)	(5 877 051)
Provision (raised)/utilised	(3 632 586)	-
Reversal of provision not utilised	-	257 097
Closing balance	<b>(9 252 540)</b>	<b>(5 619 954)</b>

The maximum exposure to credit risk at the reporting date is the fair value of each class of loan mentioned above. The entity does not hold any collateral as security.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 9. Cash and Cash Equivalents

	2011 R	2010 R
Bank balances and cash	62 064 095	70 486 447
Short-term investment	79 650 729	13 562 431
	<b>141 714 824</b>	<b>84 048 878</b>

Cash and cash equivalents consists of cash and short-term investments.

### 10. Commitments

#### 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.

There is no fixed escalation for the rental agreements relating to the computer equipment, equipment and furniture and fittings. The duration of the rentals varies between eighteen 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 of the fleet shall at all times, during and after termination of the agreement, remain vested in Kempston Vehicle Leasing.

	Equipment	Premises	Motor Vehicles	Total
Rent Commitment: 0 - 1 year				
Minimum lease payments - 2012	889 619	12 256 454	3 091 477	16 237 550
	889 619	12 256 454	3 091 477	16 237 550
Rent Commitment: 2 - 5 year				
Minimum lease payments - 2013	483 457	13 241 991	3 091 477	16 816 925
Minimum lease payments - 2014	22 826	2 801 769	3 091 477	5 916 072
Minimum lease payments - 2015	-	613 343	-	613 343
Minimum lease payments - 2016	-	-	-	-
	506 283	16 657 103	6 182 954	23 346 340
Rent Commitment: 5+ year				
Minimum lease payments - 2017	-	-	-	-
Minimum lease payments - 2018	-	-	-	-
Total commitment	1 395 902	28 913 557	9 274 431	39 583 890

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 10.1 Deferred Rental obligations

	2011 R	2010 R
Opening balance	8 493 466	9 167 198
Deferred rental utilised	(1 492 167)	(673 731)
Closing balance	7 001 299	8 493 467

### 11. Retirement Benefit Obligations

#### Amounts Recognised in the Statement of Financial Performance

	2011 R	2010 R
Post-employment medical benefits:		
Current service cost	910 000	990 000
Interest cost	2 500 000	2 230 000
Expected return on plan assets	-	-
Net actuarial losses/(gains) recognised in the year	1 036 000	(1 120 000)
Past service cost	-	-
Total included in 'employee benefits expense'	4 446 000,00	2 100 000
Actual return on plan assets	-	-

#### Amounts Recognised in the Statement of Financial Position

	2011 R	2010 R
Post-employment medical benefits:		
Present value of funded obligations	-	-
Fair value of plan assets	-	-
Present value of unfunded obligations	30 975 505	27 090 000
Unrecognised actuarial gains/(losses)	-	-
Unrecognised past service cost	-	-
Net Liability in the Statement of Financial Position	30 975 505	27 090 000
Less: Current liability	829 215	560 000
Long-term provision	30 146 290	26 530 000
Amounts in the Statement of Financial Position:		
Liabilities	30 975 505	27 090 000
Assets	-	-
Net liability in the Statement of Financial Position:	30 975 505	27 090 000
Current provision	829 215	560 000

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Movements in the Net Liability in the Statement of Financial Position:

	2011 R	2010 R
Post-employment medical obligation:		
Net liability at start of year	27 090 000	25 440 000
Net expense recognised in the Statement of Financial Performance	4 446 000	2 100 000
Contributions	(560 495)	(450 000)
Net liability at end of year	30 975 505	27 090 000
Less: Current portion	829 215	560 000
Long-term provision	30 146 290	26 530 000

### Principal Actuarial Assumptions at Statement of Financial Position Date:

	2011 R	2010 R
Discount rate 31 March (%)	9.24%	9%
General increases to medical aid subsidy (%)	7.91%	7%
Proportion continuing membership at retirement (%)	100,0	100,0
Proportion of retiring members who are married (%)	90,0	90,0
Retirement age (years)	60	60

The projection of the results from 31 March 2011 to 31 March 2012, assuming that future events follow the assumptions exactly, is as follows :

	R
Post-employment medical obligation:	
Net liability at start of year	30 975 505
Interest cost	2 863 470
Current service cost	1 508 694
Benefit payments	(829 215)
Projected accrued services liability at end of year	34 518 454

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Sensitivity Analyses

The results are dependent on the assumptions used. The table below shows how the past service cost as at 31 March 2011 would be impacted by changes to these assumptions:

#### In-Service and Continuation Members

	Accrued Service Liabilities as at 31.3.2010 (R million)	% Increase
<b>Assumptions as above</b>	<b>30,98</b>	
Discount rate - increases by 1% p.a.	26,48	-15%
Discount rate - reduces by 1% p.a.	36,67	18%
Subsidy inflation - increases by 1% p.a.	36,77	19%
Subsidy inflation - reduces by 1% p.a.	26,34	-15%
Retirement age - 55	38,27	24%

The tables below show how the current service cost and interest cost for the year to 31 March 2011 would be impacted by changes to the assumptions:

#### In-Service Members

	Current Service Cost 1.4.2011 - 31.3.2012 (R million)	% Increase
<b>Assumptions as above</b>	<b>1,5</b>	
Discount rate - increases by 1% p.a.	1,18	-22%
Discount rate - reduces by 1% p.a.	1,94	29%
Subsidy inflation - increases by 1% p.a.	1,96	30%
Subsidy inflation - reduces by 1% p.a.	1,16	-23%
Retirement age - 55	1,77	17%

#### Interest Cost

	Interest Cost 1.4.2010 - 31.3.2011 (R million)	% Increase
<b>Assumptions as above</b>	<b>2,9</b>	
Discount rate - increases by 1% p.a.	2,71	-5%
Discount rate - reduces by 1% p.a.	3,02	6%
Subsidy inflation - increases by 1% p.a.	3,40	19%
Subsidy inflation - reduces by 1% p.a.	2,43	-15%
Retirement age - 55	3,54	24%

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 12. Trade and Other Payables

	2011 R	2010 R
Trade payables	13 112 986	9 033 498
Discounting of payables	(66 243)	(41 447)
Employee related accruals	12 131 504	12 412 200
Other payables	3 995 684	4 450 059
	<b>29 173 931</b>	<b>25 854 310</b>

The carrying amount of trade and other payables approximate their fair value. Unrealised foreign exchange profit and loss is calculated using the spot rate at year-end.

#### Included in the Trade Payables are Foreign Creditors:

	2011 Foreign Currency	2010 Foreign Currency	2011 R	2010 R
Proton Energy Systems	USD 0	USD 8 914	-	65 675
EUMETSYS	EUR 0	EUR 72 205	-	716 027
Skyview	GBP 975	GBP 0	10 678	-
UK Met Office	GBP 53 017	GBP 0	580 658	-
Vaisala Inc.	USD 80 649	USD 4 341	550 970	31 983
Vaisala Oyj	EUR 109 800	EUR 0	1 057 356	-
Australian Nuclear Science & Technology	AUD 5 494	AUD 0	38 694	-
Ernest Bassler and Partner	EUR 0	EUR 6 509	-	64 547
Eumetsys	EUR 124 411	EUR 0	1 198 060	-
Meteorological Technology International	GBP 3 915	GBP 0	42 878	-
Meteorological Association of SA (MASA)	USD 35 768	USD 0	244 356	-
CLS	EUR 55	EUR 0	530	-
Swedish Meteorological	EUR 699	EUR 1 031	6 729	10 224
Radar Technology Inc.	USD 101	USD 0	693	-
			<b>3 731 602</b>	<b>888 456</b>

#### Spot Rates at Year-End

2011 - USD = R6.8317  
 2011 - EUR = R9.62984  
 2011 - GBP = R10.9522  
 2011 - AUD = R7.04287

#### Spot Rates at Year-End

2010 - USD = R7.36757  
 2010 - EUR = R9.91658  
 2010 - GBP = R11.10124

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 13. Provisions

	2011			
	Opening Balance	Additional Provision	Utilised	Closing Balance
	R	R	R	R
Capped leave provision	497 301	26 937	(70 952)	453 286
	<b>497 301</b>	<b>26 937</b>	<b>(70 952)</b>	<b>453 286</b>

	2010			
	Opening Balance	Additional Provision	Utilised	Closing Balance
	R	R	R	R
Capped leave provision	676 061	(140 562)	(38 198)	497 301
	<b>676 061</b>	<b>(140 562)</b>	<b>(38 198)</b>	<b>497 301</b>

#### Capped Leave Provision

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

### 14. Donor funding

	2011	2010
	R	R
Radar recapitalisation project	28 428 291	23 589 513
Donor funds available	15 592 888	3 419 076
	<b>44 021 179</b>	<b>27 008 589</b>

### 15. Revenue

	2011	2010
	R	R
Government grant - Operational expenditure	137 392 882	133 367 000
Government grant - Capital expenditure	95 672 581	139 869 949
Aviation income	70 631 332	49 031 180
Aviation Instruments maintenance income	524 002	259 275
Information fees	5 638 653	4 198 363
Letting aircraft	2 101 695	-
Lightning detection network sales	4 033 962	5 282 660
Project/Automatic weather stations income	1 729 357	3 665 188
<b>Other income:</b>	<b>6 990 893</b>	<b>4 478 305</b>
Other income	704 892	682 960
Profit on disposal of assets	-	25 100
Donations received	114 009	45 433
Interest received from debtors	506 148	416 862
Interest due to discounting of receivables	1 854 765	1 011 918
Income from investments	3 811 079	2 296 032
	<b>324 715 357</b>	<b>340 151 920</b>

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Government Grant

Operational Expenditure: Grant was received from the Department of Environmental Affairs and was an operational grant for the 12 month period ending 31 March 2011. The grant is made subject to compliance to PFMA reporting requirements, an achievement of 40% target for procurement from historically disadvantaged individuals (HDI) companies excluding procurement from sole suppliers and other specific requirements from the department which SAWS has adhered to during the year under review. SAWS must also have a cost recovery plan in place in case of a potential increase in revenue. Infrastructure funds must be preceded by a 3 year business and implementation plan, and the CFO of DEA should attend Audit Committee meetings as an ex-officio member.

Capital Expenditure: Treated as revenue as a consequence of applying the GRAP reporting framework to Government grants. Refer to note 26. This treatment creates the false impression that SAWS has a material surplus. It is worth noting that the R94 million is a book entry that has no bearing on available funds for the organization as the money was used to purchase assets that have already been capitalized. Users of the financial statements will also note that this perceived surplus will wind down as the underlying assets are depreciated.

### Income from Investments

The amount of income from investments is made up of interest received from banks.

#### 16. Finance Costs

	2011 R	2010 R
Interest due to discounting of payables	383 911	431 949
	383 911	431 949

#### 17. Surplus for the Year

	2011 R	2010 R
Net surplus has been arrived at after charging (crediting):		
Foreign exchange gain	(185 193)	(428 887)
Foreign exchange loss	192 365	5 594
Auditor's remuneration	1 571 032	1 499 393
Bad debts	217 413	-
Inventory expensed: Equipment expensed	4 909 936	5 725 808
Impairment losses	121 028	1 720 245
Fair value adjustment on Investment Property	(11 630 000)	14 100 000
Legal fees	1 266 993	1 100 351
Impairment of receivables	3 632 586	-256 297
Communication cost/(refund)	8 510 539	9 056 862
Surplus on disposal of assets	2 659 481	(25 100)
Operating lease payments	14 145 703	14 225 017
Inventory adjustment	(174 843)	23 313

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

	2011 R	2010 R
<b>Depreciation:</b>		
Building lease improvements	272 216	410
Fence	117 208	107 440
Bethlehem houses	30 792	24 400
Aircraft airframes	144 950	176 009
Aircraft engines	223 261	-
Aircraft propeller	353 643	119 649
Motor vehicles	(18 518)	14 461
Meteorological instruments - Other	4 187 168	5 546 160
Meteorological instruments - Radar	5 938 503	1 353 161
Office equipment	85 477	100 185
Computer equipment	1 235 121	3 863 929
Library books and equipment	1 032	10 511
Furniture and fitting	388 784	321 501
Tools and other equipment	304 808	284 090
	<b>13 264 445</b>	<b>11 921 906</b>
Amortisation: Intangible assets	<b>256 023</b>	<b>2 352 368</b>

### 18. Net Cash Flows from/(Used in) Operating Activities

	2011 R	2010 R
<b>Surplus/(Deficit)</b>	<b>123 237 871</b>	<b>132 126 432</b>
<b>Non-Cash Movements</b>		
Depreciation	13 264 445	11 921 906
Amortisation	256 023	2 352 368
Fair value adjustment	(9 799 345)	14 100 000
Impairment	121 028	1 720 245
(Surplus)/deficit on disposal of property, plant and equipment	2 659 488	(25 100)
Decrease/(increase) in inventories	1 944 639	1 565 225
Decrease/(increase) in receivables	(1 221 064)	880 254
Increase/(decrease) in donor funding	17 012 590	(14 949 640)
Increase/(decrease) in payables	3 319 621	4 914 603
Increase/(decrease) in provisions	(44 015)	(178 760)
Increase/(decrease) in current portion retirement obligation	269 215	67 984
	<b>151 020 496</b>	<b>154 495 517</b>

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 19. Contingent Liabilities

- 19.1 The South African Weather Service assists qualifying officials to obtain 100% housing loans from financial institution without a cash deposit. For this purpose agreements have been entered into with approved financial institutions to the effect that the South African Weather Service will guarantee a maximum of 20% of the housing loan for which a person qualifies. The maximum amount is based on the official's basic salary. The South African Weather Service guaranteed 59 loans at 11 financial institutions with 2 remaining. The maximum contingent liability amounts to R 32 000 (2010: R 55 000).
- 19.2 SAWS v 1 Time: SAWS initiated legal action against 1 Time Airlines for outstanding monies due for non payment of tariff fees to the value of R1,922,067.00 plus interest at the annual rate prescribed by National Treasury a tempore morae. Legal expenses incurred during the year amounted to R301,206.07. Estimated legal costs R250,000.00.
- 19.3 Dr J Mphepya v SAWS: Dr J Mphepya took SAWS to the CCMA for unfair dismissal. The CCMA awarded Dr Mphepya three months salary equalling R242,901.00. The matter is currently under review. Legal costs for the year amount to R262,633.20. Estimated legal cost amounts to R350,000.00.

### 20. Risk Management

In the course of the entity's operations it is exposed to interest rate, foreign exchange, credit and liquidity risk. The entity has 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 program 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 exposures. Risk management is performed by management under policies approved by the executive committee. Management identifies, evaluates and hedges financial risks in close co-operation 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 through an ongoing review of future commitments and credit facilities.

Cash flow forecasts are prepared and adequate utilised borrowing facilities are monitored.

Liquidity risk is the risk that the entity will 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 budgets (reviewing receipt of government grants, and cash and cash equivalents) on the basis of expected cash flow.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

Prudent liquidity risk management implies maintaining sufficient cash and obtaining the continued commitment from the Department of Environmental Affairs for the government grant and the collection of the 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 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 2011</b>				
Trade and other payables	29 173 931	-	-	-
<b>Year end 31 March 2010</b>				
Trade and other payables	25 854 310	-	-	-

### Interest rate risk

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 so that fluctuations in variable rates do not have a material impact on surplus (deficit). The entity's exposure to interest rate risk and the effective interest rates on financial instruments at the statement of financial position date are as follows:

	Floating rate		TOTAL R
	Amount R	Effective interest rate	
<b>YTD 31 March 2011</b>			
Assets			
Cash	141 714 824	4%	141 714 824
Accounts receivable	15 462 202	8,50%	15 462 202
Total financial assets	157 177 026	4,44%	157 177 026
Total financial assets	157 177 026	-	157 177 026
Total financial liabilities	73 195 110	-	73 195 110
	83 981 916	-	83 981 916

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Credit risk

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

Credit risk consist mainly of cash deposits, cash equivalents and trade debtors. The entity managed to limit its treasury counter-party exposure by only dealing with well-established financial institutions approved by National Treasury through the approval of their investment policy in terms of Treasury Regulation. 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 limited mainly to the aviation industry. No events occurred in the industry during the financial year that may have an impact on the accounts receivable that has not been adequately provided for. Credit risk with regard to accounts receivable in the aviation industry is limited as the 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 difficulty in raising funds to meet commitments associated with financial instruments.

### Foreign currency risk

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

Foreign currency exposure at financial year-end relates to trade payables and is disclosed under note 12.

Summary:	2011	2010	2011	2010
	Foreign currency	Foreign currency	R	R
Euro payables	EUR 234 965	EUR 79 745	2 262 675	790 798
USD payables	USD 116 518	USD 13 255	796 024	97 658
GBP payables	GBP 57 907	GBP 0	634 209	-
AUD Payables	AUD 5 494	AUD 0	38 694	-

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Foreign currency sensitivity analysis

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

The following table details the entity's sensitivity to a 5% increase and decrease in 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. A positive number below indicates an increase in profit 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 profit and the balances below would be negative.

	Euro Impact		USD Impact	
	2011 R	2010 R	2011 R	2010 R
Profit or loss	<b>113 134</b>	39 540	<b>39 801</b>	4 883

	GBP Impact		AUD Impact	
	2011 R	2010 R	2011 R	2010 R
Profit or loss	<b>31 710</b>	-	<b>1 935</b>	-

In management 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.

## 22. Related Party Transactions

### Relationships

The listed related parties are public entities on the national level of government with the exception of Department of Environmental Affairs being the parent department of the South African Weather Service.

Transactions	2011 R	2010 R
<b>Government Grant</b>		
Department of Environmental Affairs	<b>233 065 463</b>	273 236 949
<b>Purchases</b>		
Air Traffic and Navigation Services Company	1 394 090	747 185
Airports Company SA	1 984 544	1 900 344
Council for Scientific and Industrial Research	166 670	202 428
Eskom	200 715	52 762
SA Broadcasting Corporation Ltd	11 748	12 380
ARC	216 545	140 433
ICASA	-	6 104
SA Post Office	51 217	41 003
South African Airways	318 928	359 259
SA Bureau of Standards	2 147	-
Telkom	5 934 996	6 491 477

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### Sales

	2011 R	2010 R
Airports Company SA	370 311	114 030
Denel Avia (Military)	1 171	1 144
Eskom	2 433 208	2 405 293
S.A Civil Aviation Authority	21	21
South African Airforce	445 507	244 530
South African Airways	22 091 089	16 201 432
South African Police	25 881	33 192
SA National Roads Agency	(150)	-
Transnet	950 751	2 280 758

### Related Party Transactions

#### Balances

##### Accounts payables

	2011 R	2010 R
Air Traffic and Navigation Services Company	-	147 475
Airports Company SA	41 530	15 619
Council for Scientific and Industrial Research	41 677	25 069
Eskom	9 586	10 027
ARC	-	140 433
SABC	-	4 680
South African Airways	80 972	-
Dihlabeng Local Municipality	8 548	-
Ethekwini DC Durban	114	-
Telkom	672 810	734 780

##### Accounts receivables

Airports Company SA	274 137	125 648
Denel Avia (Military)	702	625
Eskom	2 441 932	2 374 257
S.A Civil Aviation Authority	2 360	2 339
SA National Roads Agency	(150)	-
South African Airforce	75 705	72 724
South African Airways	1 842 239	1 395 091
Hantam Municipality	3 501	-
South African Police	10 542	6 271
Transnet	571 978	2 281 515

During the period under review members of the Board and employees were required to disclose their interest in any contracts that SAWS is entering into with an outside party. As a result the SAWS did not enter into the transactions with related parties.

# Notes to the Annual Financial Statements

for the year ended 31 March 2011

Executive management 2011																
Name	Status	Salary R	Perfor- mance Bonus R	Medical & UIF R	Pension R	Travel Allowance R	Acting Allowance R	Cellphone Allowance R	Lumpsum Pay R	Total R	Lumpsum					
											Medical & UIF R	Pension R	Travel Allowance R	Acting Allowance R	Cellphone Allowance R	Lumpsum Pay R
Dr L Makuleni		1 592 319	462 711	1 497	80 685	120 000	-	-	-	2 257 212						
Mr G Schulze		640 345	192 213	28 379	75 913	91 064	-	-	36 000	1 063 915						
Ms M Makoela		738 518	189 767	18 886	17 482	3 635	-	-	36 000	1 004 287						
Mr L Gcwensa		803 722	219 600	1 497	19 481	30 000	-	-	36 000	1 110 300						
Mr S Mda		959 596	154 723	32 615	7 487	-	-	-	36 000	1 190 421						
		<b>4 734 499</b>	<b>1 219 013</b>	<b>82 875</b>	<b>201 048</b>	<b>244 699</b>	<b>-</b>	<b>-</b>	<b>144 000</b>	<b>6 626 135</b>						

Executive management 2010																
Name	Status	Salary R	Perfor- mance Bonus R	Medical & UIF R	Pension R	Travel Allowance R	Acting Allowance R	Cellphone Allowance R	Lumpsum Pay R	Total R	Lumpsum					
											Medical & UIF R	Pension R	Travel Allowance R	Acting Allowance R	Cellphone Allowance R	Lumpsum Pay R
Dr L Makuleni		1 458 174	411 231	1 497	74 364	120 000	-	-	-	2 065 266						
Dr J Mphepya	Resigned July 09	268 591	-	10 480	-	35 918	-	-	10 775	365 315						
Mr G Schulze		573 512	160 619	26 273	65 801	101 026	-	-	36 000	963 231						
Ms M Makoela		659 012	149 598	16 159	10 742	43 620	-	-	36 000	915 131						
Mr L Gcwensa	Appointed June 09	720 104	85 553	1 497	11 970	72 000	12 100	-	34 000	937 225						
Mr S Mda	Appointed June 09	619 686	-	8 293	4 600	83 218	-	-	27 000	742 797						
		<b>4 299 078</b>	<b>807 001</b>	<b>64 200</b>	<b>167 476</b>	<b>455 782</b>	<b>12 100</b>	<b>143 775</b>	<b>39 551</b>	<b>5 988 965</b>						

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

Board Members		2011			2010
Name	Status	Fees R	Travel R	Total R	Total R
Prof L M Magi		38 364	5 420	<b>43 784</b>	55 330
Mr S Makhaye		44 298	7 035	<b>51 333</b>	26 916
Dr T N Mali		-	1 524	<b>1 524</b>	37 786
Rev L W Mbetse		45 757	2 301	<b>48 058</b>	74 373
Ms M M Mokuena		33 428	806	<b>34 234</b>	62 308
Mr T W Msomi		36 460	1 863	<b>38 323</b>	56 630
Ms K Njobe		-	-	-	59 829
Mr L R Williams		48 198	1 440	<b>49 638</b>	57 173
Prof H Winkler		-	199	<b>199</b>	10 766
Mr M C Ntumba		10 820	642	<b>11 462</b>	15 814
		257 325	21 230	<b>278 555</b>	456 925

Mr. M C Ntumba is a co opted member of the Audit and Risk committee.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 23. Material Losses

No material losses through criminal conduct expenditure was incurred during the period ended 31 March 2011.

### 24. Irregular Expenditure

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

### 25. Events after the reporting period

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

### 26. Reconciliation between accounting and budgeted profit

	2011 R	2010 R
Net surplus as per statement of Financial Performance	123 237 871	132 126 432
Government Grant - Operational expenses - Over budget	(1 477 875)	(2 830 004)
Government Grant - Capital expenses - Not budgeted	(95 672 581)	(139 869 949)
Commercial Revenue - Regulated - Over budget	(2 597 791)	10 016 736
Commercial Revenue - Non Regulated - Over budget	(256 079)	(1 797 767)
Interest income - Over budget	(5 665 844)	(3 307 952)
	17 567 701	(5 662 504)
Administrative expenses - Over budget	2 986 585	(1 199 854)
Employee benefits expense - Under budget	(3 066 545)	(4 460 888)
Depreciation - Over budget	(1 321 253)	(4 078 090)
Amortisation - Under budget	(3 083 265)	(247 636)
Other Operating Expenses - Under budget	(3 667 788)	(882 977)
Finance costs - Over budget	383 911	431 949
Revaluation surplus - Over budget	(9 799 346)	16 100 000
Budgeted Profit	-	-

The GRAP reporting Framework prescribes that Grants received for capital expenditure has to be taken to the Statement of Financial Performance once the requirements of the grant has been satisfied. A new accounting policy was developed to deal with with this situation during the current financial year. This accounting policy is based on GRAP 23. This standard is approved and effective, and was applied for the first time in the 31 March 2010 financial year.

### 27. Capital Commitments

At year end, capital commitments not provided for in the annual financial statements amounted to R44,726,497. These commitments were approved by National Treasury during the period. The SAWS Board has given management approval on how these funds should be utilised.

Capital Commitments are discussed further in the Accounting Authority Report.

# Notes to the Annual Financial Statements

## for the year ended 31 March 2011

### 28. Prior period errors

#### Income from sales of Automatic Weather Stations

During the financial year ending 31 March 2010, a total of three Automatic Weather Stations were sold, but the revenue and corresponding Cost of Sales were only recorded in the financial records for the financial period ending 31 March 2011. This error was corrected by adjusting the comparative figures at 31 March 2010.

Effect of the correction	Prior disclosure	Movement	Restated
Commercial Revenue	61 864 664	572 001	62 436 665
Other operating expenses	(59 212 765)	(170 663)	(59 383 428)
Inventory	6 889 281	(170 663)	6 718 618
Trade and other receivables	13 669 137	572 001	14 241 138

#### Deferred rental obligation

During the current financial year it came to light that the Deferred Rental Obligation was understated by R650,082. The understatement was due to an arithmetic error on the amortization worksheet. The error was correct retrospectively, affecting the obligation, as well as the opening balance of Accumulated Surplus of the comparative period.

Effect of the correction	Prior disclosure	Movement	Restated
Accumulated Surplus	80 312 605	(650 082)	79 662 523
Deferred rental obligation	6 351 217	650 082	7 001 299

# List of Acronyms

<b>ABC</b>	Activity Based Costing
<b>ACAMS</b>	Advisory Committee for Aeronautical Meteorological Services
<b>AFS</b>	Annual Financial Statement
<b>AG</b>	Auditor-General
<b>AGM</b>	Annual General Meeting
<b>AMDAR</b>	Aircraft Meteorological Data Relay
<b>AQMS</b>	Air Quality Management System
<b>AMESD</b>	African Monitoring of Environment for Sustainable Development
<b>ASAP</b>	Automated Shipboard Aerological Programme
<b>ATNS</b>	Air Traffic and Navigation Services
<b>AWC</b>	Aviation Weather Centre
<b>AWS</b>	Automatic Weather Station
<b>BCP</b>	Business Continuity Plan
<b>CAPEX</b>	Capital Expenditure
<b>CEO</b>	Chief Executive Officer
<b>CFO</b>	Chief Financial Officer
<b>CSI</b>	Corporate Social Investment
<b>DEA</b>	Department of Environmental Affairs
<b>DBCP</b>	Data Buoy Cooperation Panel
<b>DIRCO</b>	Department of International Relations and Cooperation
<b>DWA</b>	Department of Water Affairs
<b>ERM</b>	Enterprise-Wide Risk Management
<b>EXCO</b>	Executive Committee

<b>EUMETSAT</b>	European Organisation for the Exploitation of Meteorological Satellites
<b>GAAP</b>	Generally Accepted Accounting Practices
<b>GAW</b>	Global Atmosphere Watch
<b>GLOBE</b>	Global Learning and Observation to Benefit the Environment
<b>GPC</b>	Global Producing Centre
<b>GRAP</b>	Generally Recognised Accounting Practices
<b>HE</b>	Hydro Estimator
<b>ICAO</b>	International Civil Aviation Organisation
<b>ICT</b>	Information Communication Technology
<b>IMO</b>	International Maritime Organisation
<b>IOC</b>	Intergovernmental Oceanographic Commission
<b>IP</b>	Intellectual Property
<b>ISO</b>	International Standards Organisation
<b>JCOMM</b>	Joint Commission for Oceanography and Marine Meteorology
<b>JWG</b>	Joint Working Group
<b>KZN</b>	KwaZulu-Natal
<b>LDN</b>	Lightning Detection Network
<b>LOCJOC</b>	Local Joint Operations Centre
<b>LRF</b>	Long Range Forecasting
<b>MASA</b>	Meteorological Association of Southern Africa
<b>MANCO</b>	Management Committee

<b>MET</b>	Meteorology/ Meteorological
<b>MMS</b>	Multi-Model System
<b>MoU</b>	Memorandum of Understanding
<b>NATJOC</b>	National Joint Operation Centre
<b>NDMC</b>	National Disaster Management Centre
<b>NEPAD</b>	New Partnership for Africa's Development
<b>NERSA</b>	National Energy Regulator of South Africa
<b>NFC</b>	National Forecasting Centre
<b>NMS</b>	National Meteorological Service
<b>NOAA</b>	National Oceanic and Atmospheric Administration – United States of America
<b>OHS</b>	Occupational Health and Safety
<b>ORT</b>	Oliver Tambo International Airport
<b>QMS</b>	Quality Management System
<b>RFQ</b>	Request for Quote
<b>RTC</b>	Regional Training Centre
<b>PAA</b>	Public Audit Act
<b>PFMA</b>	Public Finance Management Act
<b>PMP</b>	Preventative Maintenance Plan
<b>PMS</b>	Performance Management System
<b>RADAR</b>	Radio Detection and Ranging
<b>RSMC</b>	Regional Specialised Meteorological Centre
<b>SAAQIS</b>	South African Air Quality Information System

<b>SACAA</b>	South African Civil Aviation Authority
<b>SADC</b>	Southern African Development Community
<b>SAFFG</b>	South African Flash Flood Guidance System
<b>SARPs</b>	Standards and Recommended Practices (ICAO)
<b>SAWS</b>	South African Weather Service
<b>SIGMET</b>	Significant Meteorological Information
<b>SIGWX</b>	Significant Weather Chart (ICAO)
<b>SLA</b>	Service Level Agreement
<b>SOLAS</b>	United Nations Convention for the Safety of Life at Sea
<b>SOOP</b>	Ships of Opportunity Programme
<b>SOT</b>	National Ship Observations Team
<b>STASAPP</b>	Station Application
<b>SWC</b>	FIFA Soccer World Cup
<b>TAF</b>	The Aerodrome Forecast
<b>TREND forecast</b>	Landing Forecast
<b>UK</b>	United Kingdom
<b>UM</b>	Unified Model
<b>USA</b>	United States of America
<b>UPS</b>	Uninterrupted Power Supply
<b>VFS</b>	Visual Flight Rules
<b>VOS</b>	Voluntary Observation Ships
<b>WMO</b>	World Meteorological Organisation
<b>WRC</b>	Water Research Commission

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Weather Service

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