

## CORPORATE SUPPORT DIVISIONS

### CORPORATE FINANCE & ADMINISTRATION

Telecom Namibia prides itself on maintaining sound financial principles which allow for ever-improving shareholder returns, and a build-up of financial capacity to invest in Namibia and venture into foreign markets.

Being a major importer of capital infrastructure, coupled with a sizeable long-term debt book, the Company accrued significant benefits from the stronger NAD and lower interest rates during 2003.

During the year under review, capital projects amounting to N\$131 million were financed through own resources. Finance charges dropped accordingly from N\$62 million to N\$59 million year-on-year.

Telecom Namibia will continue to enforce tight credit control to ensure adequate cashflow, in order to meet the capital demands for the delivery of a world class service to our customers.

Much emphasis has been placed on setting up facilities for account payments. The intention is to have payment methods available to all customers, which would save costs and time.

Direct debiting, Internet banking via the major banking institutions, and ATM payments are now available to customers.

Procurement and Black Economic Empowerment (BEE) initiatives are of strategic importance, and are receiving the necessary attention.

The Supply Chain concept is being embedded to ensure the development of longer-term relationships. These relationships will enhance the quality of products and services, improvement of delivery time and transparent pricing structures.

Telecom Namibia welcomes and embraces BEE initiatives.

BEE companies may receive up to 15 % preference on all open tenders, depending on the percentage shareholding by previously disadvantaged individuals. Companies qualifying for BEE status are invited to submit their credentials for future references.

The year ahead will have many challenges, inter alia

- Black Economic Empowerment enforcement;
- Foreign venture financial planning;
- Embedding cost control measures within the organisation.



## CORPORATE MARKETING & BUSINESS DEVELOPMENT



From supplying Namibia's largest public and private sector organisations, to supplying people who use our services at home and in public places, Telecom Namibia is the country's only integrated telecommunications company. It is Corporate Marketing's vision to keep it that way. We want to expand our service portfolio in line with international standards, while proving to our customers that we rightfully deserve being their most preferred telecommunications operator in the country.

### Market Research & Development

One major objective of Corporate Marketing is to constantly learn more about our customers communication needs. During the last financial year, we employed new sophisticated customer analysts to help us understand such needs better. For the annual market research survey 1,470 TN customers were interviewed countrywide at random, to air their views about Telecom Namibia's products, support services and image. These findings help us tailor our product portfolio and service offers, which in return help to increase the current satisfaction rate of 78.6%. This became our key asset in terms of customer retention.

### Product Research & Development

The successful launch of Video-conferencing and SmartFax underpins our efforts and is a direct result of our market research. Both these services are in great demand in the country's business community. Furthermore, our other products have also been successfully channeled through the New Product Introduction & Implementation process, which will be launched in the new Financial Year. Amongst these are Broadband Wireless, Wireless IP, DialAw@y VSAT, the on-line version of Yellow Pages and CallMaker, a pre-paid service on a fixed line, which allows customers to pay for rental and call charges in advance.

The re-launch of Telemail was a direct outflow of the results derived from applying the Product Life Cycle Management process.

### Directory Services

Simplifying the internal process, eliminating delays and inaccuracy were also the aims of the Telecom Directory for 2003. The directory was a revised version of the whole production process for the directory booklet.

Data capturing and collection to develop the electronic yellow pages, have been completed, and iWAY – Telecom Namibia's own Internet Service Provider, is in the process of developing the website. At the same time, a project kicked off to put the directory 'white pages' on CD-ROM. Revenue-generation expands with the re-introduction of second-entry charges.

### Pricing & Tariffs

An initiative that Telecom undertook to meet the challenges of open competition, entails the re-balancing of local charges versus long-distance and international call charges. This was done to reflect the cost structure of the services more clearly. The first adjustment was announced at the end of the financial year 1999/2000, with effect from 1 October 2000. Now by 2003, international call charges are declining significantly. A first decline was introduced on 1 March 2003 when peak and off-peak rates to theRSA

decreased significantly. A second reduction entailed the introduction of off-peak tariffs worldwide, which amounted to at least 20% less than peak rates. For the Internet users, an off-off peak rate of 10 cents per minute was introduced, making the usage of the Internet very affordable.

## Advertising & Promotions & Branding

Getting closer to the customers was the objective when Telecom Namibia decided to 'go mobile'. The acquisition of the mobile unit – a colorful bus equipped with state-of-the-art telecommunications technology - enables Telecom Namibia to demonstrate and promote its products and services to the most rural and remote areas. This also helped in closing the regional digital gap, and increase awareness regarding new technical solutions for connecting customers to our telecommunications networks.

As a novelty, the bus participated in the various regional shows countrywide, and was well received by our customers. Needless to say, Telecom Namibia has won four prizes in total, which includes best industrial stand at the Windhoek Show in 2003.

TN embarked upon a brand audit with the objective to improve its image and visibility. The outcome of this performance test will determine the brand architecture, positioning and identity, as well as manually outlining the application of the brand.

## Business Development

From a strategic perspective, Corporate Marketing was not only driving the consolidation of Telecom Namibia's leading position in the Namibian market, but also designed long-term business strategies. The three pillars of the Corporate Strategy are as follows: firstly to maintain market leadership in view of competitive environment. Secondly to continue to transform TN into a customer oriented and cost effective organization and thirdly to expand regionally where TN's future growth lies. All strategies are linked to detailed activity plans. The establishment of the new Business Unit TPP, which stands for Telecom Pay Phones was one of the many initiatives that were successfully implemented.

## Future Plans

The future is about constantly increasing customer satisfaction.

Some of the initiatives underway to cater for these challenges, include the development of customer care strategies, the creation of a strong brand and the launch of exciting new products.

## HUMAN RESOURCES AND STRATEGIC TRAINING



### Introduction

The Corporate Human Resources and Strategic Training Division is responsible for the human resources strategy of Telecom Namibia. This Division is also the custodian of human resources policies and procedures.

The year under review has been quite eventful for this Division. Many Human Resources projects were embarked upon and were successfully completed.

### Affirmative Action Measures

During the reporting period of 2001, 2002 and 2003 Telecom Namibia submitted affirmative action reports in line with section 27 (2) of the Affirmative Action Act. The Commission in all instances approved of the progress reports, and presented Telecom Namibia with Affirmative Action Compliance Certificates.

Although, Telecom Namibia achieved its set targets for the three year reporting periods, the provision of employment opportunities to women and persons with disabilities remains a challenge, since these persons represent a mere 32% of TN's total workforce. In addition, women and persons with disabilities are not well represented at managerial level within the company. The Namibian labour market still does not provide sufficient trained women in the field of telecommunication. This is further compounded by the fact that, in general, a limited number of women in Namibia possess high-technology skills.

However, efforts are being made to specifically target women in our recruitment drive for apprenticeship training. Despite these barriers, Telecom Namibia, as a whole, has achieved the numerical goals set in the Affirmative Action Plan, which spans over a three-year period.

Some solutions have been identified for implementation in order to address the shortage of women and persons with disabilities, and which will hopefully increase their representation at all levels of the Company. These are:

- Target women and persons with disabilities in our recruitment drive for apprenticeship training and the recruitment of university or polytechnic graduate technicians.
- Increase the enrollment of women for the Management Development Program, which is offered yearly.
- All employment advertising will, in future and where applicable, contain the phrase: "applicants from AA designated categories, particularly women, are encouraged to apply."
- Telecom Namibia's Human Resources practitioners are to ensure that suitably qualified women are given reference in appointments to vacant positions.
- Human resources organisational reviews will be performed every quarter in order to ensure the full implementation of these measures.

However, despite the challenges facing us, it is worth mentioning that, on a positive note, the overall representation of the designated groups has reached the level of 88% of the total workforce.

Management will continue to encourage all Telecom Namibia employees to value diversity and accept that Telecom Namibia has to reflect the appropriate balance of the demographic profile of all the Namibian communities. In this regard, a plan has been devised, allowing the Affirmative Action (AA) Committee to embark on a company-wide information awareness campaign.

While concerted efforts are being made to balance structures, a significant percentage of highly skilled persons from the designated groups are continuously leaving the company, taking up higher positions outside Telecom Namibia. Although we welcome the upward mobility of our employees, this interrupts or retards the realisation of our targets.

## Compensation and Systems Department

The telecommunication environment is a dynamic one and ever-changing. Therefore, it requires constant adaptation to ensure competitiveness. On the compensation front, the Corporate Human Resources and Strategic Training Division has continued to provide a specialised remuneration service to the Company with a view to supporting its strategic goals and objectives. To this end it is envisaged that Telecom Namibia would be an employer of choice, to spearhead and maintain a performance-driven culture, as well as to ensure an innovative and creative environment for all our employees. The main achievements regarding compensation have been:

### **Remuneration Working Committee**

The Company's compensation strategy was reviewed and subsequently approved by the Board of Directors. Telecom Namibia's current salary structure was reviewed to incorporate competitiveness and flexibility, as well as to ensure that it reflects market realities. A new dual-pay structure was approved by the Board of Directors, and is due for implementation in the new financial year. This new compensation strategy will enable Telecom Namibia to attract, retain and motivate key skills and talent, to facilitate customer value and satisfaction. It also seeks to provide a direct link between performance and reward, thus enabling Telecom Namibia to make provision for differential increases for performers and non-performers. In addition, it would make provision for ensuring that employees are able to progress within the scales, based on performance and/or competency factors. A Remuneration Working Committee comprised of key stakeholders in the business, was established to help refine compensation initiatives.

### **Job Evaluations**

With regard to job evaluations, a Board-commissioned Grades Audit Exercise was completed, and the ensuing results are due for implementation, as of 01 October 2003. The objective of the exercise was to ensure that each employee is rewarded according to his inputs, and that a difference in grades is due to a difference in complexities and decision-making levels.

### **Performance Management System**

A new Performance Management System (PMS), which includes a Performance Audit Committee system, was implemented. The new PMS aims to ensure that all employees have performance contracts, and that quality audit checks are done regularly on the system, by the Performance Audit Committee, with a view to ensuring that there is alignment between company and team/individual performance. In this regard, a gain-sharing scheme (revenue-based performance bonus) was also implemented, through which competitive performance bonuses, directly linked to company and individual performance, will be paid to employees. For the first time employees can earn a bonus of up to 200% of the available bonus pool of their basic monthly pay.

## HUMAN RESOURCES AND STRATEGIC TRAINING (coninued)

### Housing Allowance

On the benefit side, we repositioned the housing benefit, by moving away from a housing subsidy scheme to a competitive housing allowance scheme. A number of compensation-related policies were also reviewed to ensure continuous adaptation and ability to meet the demands and requirements of our internal customers (line management) and our most important assets, our employees. These initiatives were all done with a view to enhancing Telecom Namibia's market competitiveness. Such initiatives would ensure that Telecom Namibia continue to be regarded as an employer of choice, as well as to benefit from the skills and knowledge of its workforce through enhanced company performance, improved employee morale, as well as increased employee loyalty.

### Training and Development

Telecom Namibia believes that human capital is the cornerstone of every organisation, and should be nurtured. The Company has, over the years, invested a substantial amount of money into the training and development of employees, to ensure that the ever-increasing demands of its customers are met. Telecom Namibia will continue to invest in human capital, because through such efforts the company will remain competitive in a global competitive market.

In order to develop the employee's skills and competencies, the Company operates an in-house Training Centre, which is responsible for Technical, Commercial and Management training, as well as training in Information Technology for all employees in the company.

As part of the Company's social responsibility programme, Telecom Namibia offers bursaries annually to high school graduates, to pursue tertiary education opportunities at institutions within the Southern African Development Community (SADC). The company sponsored 45 bursaries over the past six years to the tune of N\$2,659,397, for students studying at various Universities and Technikons in the SADC region.

During the period under review, Telecom Namibia invested an amount of N\$1,930,319 in developing the skills, knowledge and attitudes of employees, while 1,371 employees attended various courses locally, regionally and internationally.



## Corporate Social Welfare

Corporate Social Welfare, as part of Telecom Namibia's Human Resource support division, comprises a Social Welfare component, Nova Vita, and Occupational Health and Safety sections.

**The Social Welfare** section is responsible for the Employee Assistance Programme (EAP), and carries out a broad range of professional services pertaining to social, psychological, financial and medical assistance to all our staff. Through this service, more than 200 employees from Telecom Namibia, NamPost and private patients, were counselled during the year.

**The Nova Vita Rehabilitation Centre** provides rehabilitation services for patients from all over Namibia, as well as countries within SADC. This Centre, based in Klein Windhoek, has been home to hundreds of despairing patients for the past ten years. It offers a thorough and intensive in-patient professional rehabilitation program, over a duration of twenty days, for alcohol and other drug-related cases.

**Occupational Health and Safety** is a new section within this Department, which strives to reduce and eliminate losses of a controllable nature e.g. people, assets, time and production, which the Company might lose due to carelessness or negligence.



## HUMAN RESOURCES AND STRATEGIC TRAINING (continued)

### Future Outlook

With the imminent opening in Namibia of the telecommunication market to competition, we expect that the immediate future will be characterised by a battle for scarce skills and talent. It is against this background that the company developed a two-year strategic plan to reposition its Training Centre, in order to be more reliant on internally developed skills.

The Company has also introduced various staff-retention strategies, amongst others, the expansion of the vehicle benefit scheme to include junior managerial levels. We shall continue to monitor market movements concerning market-related remuneration.

Rapid changes in the industry, which are driven by Technology, place a strain on the traditional methods of human capital management. These changes call for more emphasis to be placed on the soft skills of employees, to get the maximum benefit out of them, through motivation and differentiated treatment.

We acknowledge that to survive in a competitive environment, more and more attention ought to be devoted to the management of our people.





## TECHNOLOGY DIVISION

The Technology Division is the driving force behind the development of Information and Communication Technologies (ICT) in Namibia. The Division has achieved remarkable progress during the past financial year in spreading the benefits of ICT to every village and corner of the country, linking the country's inhabitants to the rest of the world and giving them equal opportunity to take part in the Information Age.

Telecommunications infrastructure is the foundation for further development of economies and societies, and there can be no doubt that it is vital for every country to build the best information infrastructure that it can. Whilst we are striving to keep abreast of the technological advances of the Information Age, it remains a challenge to establish and maintain networks that are accessible to every inhabitant of the country and to find the right kind of technologies to improve the telecommunications infrastructure at a low cost. The digital disparities between the "haves" and the "have-nots" remain the most important challenge that will require tremendous resources in our efforts to close that gap.



For the recording purposes of this Annual Report it is important to reflect on the crisis we had on 21st December 2002 when the 200m Reoland UltraPhone tower (south of Stampriet and Gochas) collapsed under the pressure of heavy windstorms. Although the crisis happened in the midst of the holiday season, the Technology Division managed to re-connect the majority of customers by mid-January 2003 by means of a temporary UltraPhone cell deployed at Gochas and five VSAT satellite systems installed at strategic points. By March 2003, a newly manufactured mast was erected and a new system installed and commissioned at Reoland. This could have only been achieved through excellent teamwork and the readiness of Telecom Namibia to act swiftly and decisively during times of a crisis.

During the 2002/2003 Financial Year, the Technology Division started with various major capital projects, which were completed successfully. These projects are listed and described below:

1. **MTC links:** A total of 20 backbone links were installed countrywide for the connection of new mobile cellular telephone base stations of MTC to the Telecom Namibia fixed network. The project included the installation of a centralised management network system for these backbone links.
2. **Namdeb Multimedia Backbone:** The scope of this project entailed the provisioning of a digital communication infrastructure within the Namdeb restricted diamond territory. Phase One of the project was completed in December 2002 during which Daberas was connected to Oranjemund and Elizabeth Bay to Lüderitz. Phase Two of the project extended the network from Oranjemund to Chameis. The project was ahead of schedule much to the delight of the Namdeb mining company. Part of the project is to extend the link from Charneis to Lüderitz during the new financial year.
3. **FarAway VSAT:** Since the introduction of this satellite communication system in 2000 as a rural communication solution, significant efforts went into the development of in-house technical expertise on this product. During the past financial year an additional six FarAway VSAT sites were deployed, which brought the total to 64 FarAway VSAT sites in Namibia.
4. **DialAw@y IP VSAT:** The hub station for DialAw@y IP VSAT terminals was installed and commissioned in August 2003.
5. **De Beers Marine Namibia VSAT System:** During September 2003, the De Beers Marine Namibia VSAT system was moved from Cape Town to the premises of the Windhoek Earth Station. The successful redeployment made it possible for De Beers to continue communicating with the company's offshore mining vessels without any hitches.
6. **Switching:** A total of eleven ISDN Digital Line Units (DLU's) were installed in Windhoek and commissioned successfully. The Shelter DLU (SDLU) project was also completed, which added much needed port capacity to the network. A new DLU site at MediClinic also came into operation.
7. **Rurtel:** The two village towns of Oshikunde and Onyulaye were connected to the re-engineered Rurtel system in February 2003.

## TECHNOLOGY DIVISION (continued)

8. **Aussenkehr:** Additional UMC Multiplexers were installed at various sites along the Orange river to provide additional network capacity and for the general improvement of the quality of telecommunication services in this agricultural area.
9. **MGW:** Three new MGW wireless access network systems were installed at Katima Mulilo, Onesi and Outapi during November 2003. The existing Rurtel towers at Onesi and Outapi were each extended by 18 meters to enable an optimum coverage footprint.
10. **Broadband Wireless System and Wireless LAN:** The construction of four new base stations in Windhoek started during the year under review to cater for the Broadband Wireless System and the Wireless LAN. The commissioning was scheduled for the first half of 2004. The two systems would make it possible for business customers to obtain wireless transmission links with scalable bandwidth to a maximum of 2Mb/s.
11. **Integrated Customer Care and Billing System (ICMS):** The upgrading of the ICMS Customer Care and Billing System kicked-off with the initial planning stage and the finalisation of contractual agreements. The project roll out was scheduled for early in the new financial year and the completion period was estimated to be within eight months.
12. **CAD/GIS:** The scope of the CAD/GIS project is aimed at the centralisation and computerisation of all networks and relevant records. This project was activated in various simultaneous kick-off phases. Firstly, the different old systems used in Windhoek and the central region were replaced with one modern platform and consequently all network records were updated during this phase. Secondly, all regions under the administration of the Telecom Consumer Services business unit were scheduled to be computerised and linked to each other during the new financial year. Once a full-fledged GIS system has been installed a major milestone would have been reached in the upgrading and modernisation of the entire network of Telecom Namibia.
13. **UMC Multiplexers:** The installation of UMC Multiplexers was necessitated by the old OFDC systems at Brakwater and along the Kavango River which have all reached their capacity. The installations in the Kavango area were close to completion and commissioning was scheduled towards the end of the year. The commissioning of the systems in the Brakwater area were planned for December 2003 although the entire project was scheduled to continue into the new financial year. A centralised UMC management system is also being installed to enable efficient control mechanisms, which will result in improved availability of systems and better customer services.

## Ongoing Projects

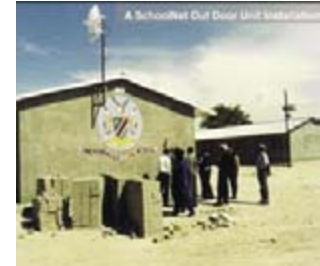
The implementation of a range of technology projects will continue well into the 2003/2004 financial year before they are finally completed and commissioned. The following is a listing of such projects earmarked as Ongoing Projects:

1. Faraway and DialAw@y IP VSAT installations at customer premises;
2. ICMS upgrading to version 5.2 with the addition of CRM solutions (Customer Relationship Management);
3. EWSD additional ports/ISDN capacity expansion;
4. UMC management system;
5. Brakwater UMC project roll-out;
6. Broadband Wireless and Wireless LAN in Windhoek;
7. Access cable networks in Windhoek;
8. CAD/GIS;
9. Installation of additional public phones and management system upgrade; and
10. MGW installations at Katima Mulilo, Onesi and Outapi.

It is expected that the Technology Division will complete 92% of the N\$155 million capital budget program within the 2003/2004 financial year despite the fact that some projects are earmarked as Ongoing Projects. There will thus be a minimum delay in the implementation of most of the projects.

## SchoolNet Namibia

A partnership agreement was signed with SchoolNet Namibia during the year to roll out and operate a wireless LAN network for schools and educational centers. The agreement is initially focussing on the connection of 500 schools in the northern regions by the end of 2004.



## ICT Alliance

Telecom Namibia became a founder member of the ICT Alliance at the beginning of the year and the company was also elected to serve on the interim steering committee. The Alliance brings together all major players in the ICT industry in order to combine their focus and efforts on the enhancement and roll out of ICT services, to specify Universal Access requirements, to set standards specifications and to encourage the sharing of infrastructure.



## Network and Systems Performances

See attached separate tables reflecting the availability and quality performance statistics.

## Systems Operations

There were many large volume and complex tasks to be completed during the year that demanded huge efforts and long working shifts at night from the Technology staff. The most important activities were:

ICMS – the technical implementation of Off Peak rates to international destinations, Off-Off Peak rates for Internet dial-up services, Peak and Off Peak rates to Angola, on-line CDR's for both VSATs via the mediation platform, tariffs for SmartFax, video conferencing, CallMaker, flat rate services for SchoolNet, and the bill payment reminder service.

SAP – the technical implementation of tax payment changes due to new regulations, new payroll version 4.6C implementation, management reports, procurement procedures, variance reports printing to designated printers, payment/discount terms.

Although both platforms, ICMS and SAP, have each their own “master plan”, plans will be embarked upon to establish a corporate Management Information System (MIS) master plan, which will be developed in stages. The automated balanced scorecard platform will be the first step towards the implementation of the MIS master plan.

It is worth noting that customer account statements were always printed and mailed by the 10th day of the month, which reflects positively on the reliability of the systems and in securing the monthly revenue of the company.

## TECHNOLOGY DIVISION (continued)

### Future Outlook

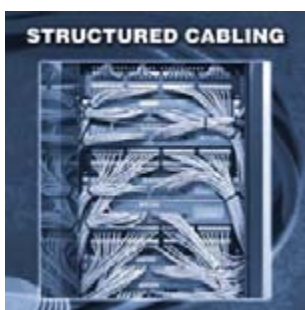
The Technology Division is committed to keep the current network and IT systems in impeccable shape and to take good care of the maintenance of the infrastructure. This will ensure that customers can comfortably place their trust on an infrastructure that provides quality and reliable services. Therefore, there will be huge demands for increased training programmes that should be provided to staff in order to keep them abreast of the rapidly changing technologies, developments in the IT field as well as to be constantly aware of the latest market demands. From the Technology Division perspective, it is generally accepted that Telecom Namibia will remain a “technology driven” business that will always be offering career opportunities to specialists in this field. It is generally accepted that global technological developments constitute the main driving forces behind customer needs and demands. A prerequisite for quality service is also a well-designed, reliable and secured backbone network infrastructure with ring-protected back-up routes.

Telecom Namibia will as a strategy continue with the installation of fixed-wireless infrastructure as these technologies have the greatest potential to provide services quickly and at the same time also provide a wide footprint coverage area in a relatively very short timeframe that is required for deployment. The investments required for copper cable networks, with its inherent geographical limitations, are more or less at the same levels as that required for fixed-wireless technologies. Wireless technologies in the local network are without any doubt an obvious business alternative for incumbent operators because of their beneficial factors of flexibility and reliability.

Broadband wireless services will also enjoy greater focus in order to enable Telecom Namibia to offer the type of services that are driven by market demands. This would imply that only those technologies, which are broadband compatible, might in future be implemented into Telecom Namibia’s networks. The same argument applies to Internet Protocol (IP) specifications. Telecom Namibia’s networks and systems must be IP compliant in order to ensure the company’s future business.

Whilst the company will continue to keep the backbone infrastructure to modern standards, the access networks will also undergo rigorous expansion and modernisation, particularly in the rural areas. The long-term goals behind the efforts of the Technology Division are to ultimately provide access to Information and Communication Technologies (ICT) to all customers and to enhance Universal Access in general. This means that Telecom Namibia’s single network should technically be enabled to support ICT demands and products. For this reason, it becomes imperative that the correct selection of suitable technologies be made for future deployment. However, it is becoming increasingly difficult to find the right balance between market demands, technical possibilities and affordability of these technologies to both Telecom Namibia and its customers. To find such a balance becomes extremely challenging taking into consideration Namibia’s vast geographical areas and distances with a very small and thinly scattered customer base.

In addition to these technical-infrastructure developments, the provisioning of Value Added Services remains an important market requirement since customers want to benefit from the features and facilities that are offered by today’s modern communication equipment and fancy gadgets. It will be suicidal for Telecom Namibia as a business to ignore these latest market needs and business opportunities. The same business focus should also be placed on fulfilling the market needs for e-Services and on-line products.



## BACKBONE NETWORK & BUSINESS SYSTEMS PERFORMANCE 2002/2003

<b>International</b>	<b>Availability %</b>	<b>Answer-Seizure Ratio ASR</b>
All international outgoing direct routes (average)	--	59,94 (-1,18)
All international incoming routes (average)	--	55,87 (+2,96)
All national outgoing routes (average)	--	66,72 (+0,2)
Average South Africa link (fibre cable)	100% (+0,159)	71,0 (+0,24)
Average other neighbouring countries	--	40,0 (-6,19)
Average for direct international satellite routes	99,98 (+0,01)	52 (-6,0)
International switching centre	100 (+0)	--

<b>National</b>	<b>Availability %</b>	<b>Change</b>	<b>Ports used</b>	<b>Δ Ports used</b>
Optic Fibre SDH network	99,996	+0,04	--	--
Microwave – digital and analogue	99,989	+0,393	--	--
MTC links	99,939	+0,062	--	--
OFDC Networks	98,616	-0,077	--	--
EWSD digital exchanges	100	+0,0	--	--
DLU's	99,998	-0,001	--	--
SDE's	99,956	+0,322	--	--
Rurtel	99,351	-0,246	936	--
Ultra Phones	99,681	-0,153	6515	+163
DECT	100	+0,118	1533	-267
MGW	99,987	-0,012	2480	+391
VSAT hub	99,79	-0,13	--	--
<b>Total National backbone network (average)</b>	<b>99,76</b>	<b>--</b>	<b>--</b>	<b>--</b>

## BACKBONE NETWORK & BUSINESS SYSTEMS PERFORMANCE 2002/2003 (CONTINUED)



<b>Support Systems</b>	<b>Availability %</b>	<b>Change</b>
Engine generators	99,989	+1,609
Rectifiers	99,993	+0,563
Batteries	99,996	+0,536
Air-conditioning	99,999	+0,209
Solar Systems	99,975	+0,475
Fire systems	100	0
UPS	100	+0,03
<b>Total average Support Systems</b>	<b>99,993</b>	<b>+0,483</b>
<b>Average power availability</b>	<b>99,992</b>	<b>+0,532</b>

<b>Business Systems</b>	<b>Availability %</b>	<b>Change</b>
Internet	99,911	--
Exchange (e-mail)	99,99	+0,007
Domain Controllers (Log-on authentication)	100	--
ICMS	100	+0,075
SAP	99,95	+0,163
Mediation	99,89	+0,398
<b>Total Average Business Systems</b>	<b>99,957</b>	<b>+0,107</b>

