



## Operational Overview

### Business Development

Telecom Namibia reviewed its vision to align with a new era of transforming network infrastructure to deliver enhanced services and capabilities. Our new vision is To be Namibia's most preferred, high performance information communication technology (ICT) service provider of world-class standards. This new vision is forward-looking and is intended to focus Telecom Namibia for the coming "era of Internet Protocol (IP)," which will see the convergence of voice, data and video, as well as the implementation of always-on, ubiquitous, IP-based wireless communications systems.

Telecom Namibia's extended ICT value chain requires the introduction of a broad range of products and services, as well as the extension of Telecom Namibia's network capabilities. A transition to an IP based network (IP/MPLS) will be done to provide an ICT product and service portfolio to customers via access technologies such as Asymmetrical Digital Subscriber Line (ADSL), Code Division Multiple Access (CDMA), Worldwide Interoperability for Microwave Access (Wi-MAX) and Metro Ethernet. These projects will support the transition towards a new Next Generation Network (NGN).

Some of these access technologies were implemented in a pre-launch phase during the last financial year:

- The Multi Protocol Label Switching (MPLS) technology will enable the deployment of a new IP based network that will address the changing needs of our customers in a competitive landscape and ensure that new IT and IP based revenue streams can be capitalised on.
- The deployment of ADSL technology has made tremendous progress and customers eagerly awaiting the arrival of broadband will soon enjoy fast Internet connectivity and a range of new services.

The introduction of mobile services, based on CDMA technology, is one of the absolute highlights in the past year, taking into account the inevitable spectre of fixed-mobile convergence. The SWITCH mobile services will offer an attractive alternative for typical GSM services by offering a generous city and community coverage at highly affordable prices.

### Voice Services

Telecom Namibia voice business continues to record slow and stable growth over the past few years. This business is generally being affected by competition from mobile voice services and other low cost services offered by Voice of IP and call-back service operators.

A tower at the town of Oshakati.



Local call revenue declined by three per cent during 2006 compared to the previous year, contributing 23 per cent to total call revenue. A marginal increase in national call revenue was recorded in 2006 compared to the previous year. Fixed to cell call revenue declined by 2 per cent in 2006 compared to the previous year, contributing about 37 per cent to call revenue. The unfavourable growth rate in domestic call revenue is mainly attributed to a general decline in domestic call volumes of minutes.

International outgoing traffic increased by four per cent from 62.2 million minutes in 2005 to 64.9 million minutes in 2006. The Compound Annual Growth Rate (CAGR) for international outgoing traffic is estimated to be two per cent during the period 2003 to 2006 using 2003 as the base year. Outgoing traffic to South Africa accounted for 80 per cent of total international outgoing traffic with a CAGR of 1.4 per cent. Despite the positive growth in international outgoing traffic, international call revenue continue to decline due to continuous downward review of international tariffs over the years.

Total traffic volumes for 2006 decreased by 1.1 per cent. Revenue from ISDN BRA increased by 16 per cent in 2006 compared to the previous year. Direct Exchange Lines (DELs) declined by two per cent from 138 997 in 2005 to 136 163 in 2006 with a low CAGR of two per cent from 2003 to 2006, mainly due to disconnections. Telecom Namibia continued to offer other value added services such as Telemail, wake-up call, reminder service, etc as well as competition lines to grow the voice business.

Given competitive pressures from mobile voice telephony, the future calls for introducing more fixed-mobile solutions, introducing new products to the market and building new revenue streams. Telecom launched SWITCH prepaid services which will offer an attractive alternative for mobile telephony and data services at affordable prices. Post paid voice and data services are due for launch during 2007.

### Quality Of Service (QoS) Improvement

The QoS is core to our business. We continued to focus on the improvement of QoS indicators as a key strategic priority. The areas that enjoyed attention are service delivery, service assurance and preventative maintenance.

Telecom Namibia invested extensively in the training of the Customer Interfacing Staff this year, providing on average 22.8 days training per individual.

### Customer Care Centre (CCC)

The Telecom Namibia Customer Care Centre is currently undergoing a transformation process in order to meet the demands of the future.

A number of indicators have shown improvement as a result:

- Abandoned call rate was reduced from 53 per cent to five per cent.
- Quality of calls improved from 55 per cent to 80 per cent.
- Service levels improved from 33 per cent to 74 per cent.

A customer survey conducted through the retail channel provides proof of these improvements. For example, the number of customer complaints declined by 42 per cent.

**A typical** Telecom Namibia public phone booth.



## Service Delivery and Assurance

In the area of service delivery and assurance, we recorded improvements in the level of QoS and the average efficiency performance statistics for the whole of Namibia is as follows:

- Total Fault Rate decreased from 351 faults per 1000 lines to 348.
- Total Fault Repair Time improved from 2.82 days to 2.77.
- Total Installation Response Time showed an 8.9 per cent improvement from 10.89 days to 9.92 days.
- The per centage uptime of Public Payphones is 92 per cent compared to 85 per cent the previous year.

## Customer satisfaction

Telecom Namibia conducted a survey on customer satisfaction in July 2006. This survey gathered valuable information from across our customer segments to help us improve our services to the market. This survey revealed an overall satisfaction rate of 78 per cent, a one-point improvement from the previous year. The customer satisfaction rate for the Teleshops is higher at 93.1 per cent.

## Some Initiatives to Improve Services

- Aggressive rejuvenation of copper network especially in the urban areas to reduce fault rates.
- Deployment of coin phones in February 2007 as well as new FlexiPhones to increase the number of prepaid phones all over the country.
- Deployment of payphones in informal settlements via Dial@way IP VSAT.
- Deployment of vending machines to make prepaid cards available 24 hours in selected areas.
- Future franchising business for prepaid to increase channel distributions throughout the country.
- Roll-out of the CDMA network in five major towns by the end of 2006; namely Oshakati, Tsumeb, Windhoek, Walvis Bay and Keetmanshoop with at least 34 base stations deployed.
- Further roll-out of CDMA to areas to replace obsolete technologies.

## Multimedia Services

Telecom Namibia offers a wide range of multimedia products and services in the form of customer premises equipment (CPE), Internet access, Internet protocol (IP) applications, high speed data and value added products and services.

Products and services were bundled to satisfy the needs of the customers per segment. Customised solutions were offered by addressing each customer's individual needs and wants.

Our product range includes the following:

- A wide variety of customer premises equipment (CPE);
- Value added services (VAS);
- Data and Internet services (IP);
- Virtual private networks (VPN);
- LAN, WAN, Intranets and Extranets;
- Structured cabling;
- Leased cost routing;
- Co-location services;
- Disaster recover site facilities;
- Web hosting;
- Web development;
- E-mail services.

Access to the various services was achieved with a range of access network technologies:

- Radio based services (Broadband Wireless, Multi Gain Wireless services, Wireless LAN services, Wi-Fi Hotspots);
- Copper based (analogue, HDSL, ISDN, Leased lines);
- Fibre optic networks;
- Satellite (VSAT and Dial@way).

Like other fixed line telecommunications operators worldwide, Telecom Namibia is also confronted with the challenges



associated with the rapid convergence of voice and data, as well as wireline (fixed) and wireless networks. The convergence of VoIP, mobile, content and data with voice creates a demand for new products and services. The convergence of the telecommunications and IT industries (into Information Communication and Technology - ICT) poses significant challenges for telecommunications operators. The support for IP related technologies is now a strategic element in the design, development and use of Telecom Namibia's network.

### **iWay**

iWay is still Namibia's leading Internet Service Provider (ISP) and has not only shown positive growth in their customer base but also tremendous growth in revenue. A new product, i-Stay On, which became available as an always-on IP service to customers, is performing well.

ISP customers have an increasing variety of choices from a wide range of operators. However, the demand from customers for new products and services is rising.

Namibia's ISP market will become an increasingly fierce battleground for market share. Due to convergence and deregulation, the competitive playing field in Namibia is rapidly changing. Existing players will expand their services (up and down the value chain) and new players will enter the market soon.

### **Infinitum & Telematics (IP & Data)**

Infinitum, specialising in Tier-1 access is Namibia's largest provider of an IP backbone and International bandwidth (Worldwide Web connectivity). During the year under review, Telecom Namibia continued to make huge capital investments to expand both the national and international IP connectivity. Telecom Namibia partnered with global Internet carriers such as SAIX and Intelsat for the provisioning of Internet access to Namibia.

### **Services to Namibian Mobile Operators**

Telecom Namibia has a very substantial fibre optic backbone and distribution network that we make available to MTC and Cell One. We provide interconnect services in Olympia, Prosperita, Windhoek West and Oshakati for voice and SMS services. At the end of September 2006 we had supplied 251 links for MTC. These varied from n x 64kbps to more than 72 x 2 Mbps links between the exchanges. The total linked bandwidth is close to 750 Mbps and growing rapidly with the MTC upgrade to 3G services. The links are provided over a variety of technologies - over fibre for major routes, microwave or broadband wireless for distribution and VSAT or copper for the last mile.

Due to the very remote location of some of these installations the operation and maintenance of these services require a major effort, as all are critical to the successful mobile service operations.

Due to the large mobile customer base many interconnect calls are made between the fixed line business customers of Telecom Namibia and the larger number of MTC customers. This interconnect is a major traffic driver and is growing rapidly from Telecom Namibia's side. Least cost routing from the Telecom Namibia network is also still growing due to the cost differential offered by MTC.

### **Customer Premises Equipment**

Telecom Namibia, in conjunction with Siemens, provides a wide range of products, installation and maintenance services for the branch exchange market. Telecom Namibia's sales outlets, Teleshops, offer a wide range of customer premises equipment to the market.

### **Customer Relationship Management (CRM)**

CRM within Telecom Namibia is our business strategy that aims to understand, anticipate, manage and personalise the needs of our current and potential customers. The company recognises CRM as an ongoing process, but we are striving to uncover the secrets of outstanding customer service.

With its prime focus of building relationships with our key customers, the key focus areas for the past year have been:

- Visits and interactions with key customers;
- Account management;
- Sales;

## International Services

### International links

Telecom Namibia provides customers worldwide with access to Namibia via high quality dedicated links for voice, data and Internet services. Today the quality of incoming calls cannot be guaranteed as the originating parties do not all provide high quality links to the main routes used by Telecom Namibia. Some operators also use cheap VoIP circuits that are a best effort service. Telecom Namibia offers Calling Line Identification Presentation to its customers. This is not present when a low cost route is used.

The customer direct dial service is also complemented by friendly operator assisted services. Two centres, in Windhoek and Walvis Bay, cater for voice services to 242 destinations and to maritime and land based radio stations all over Namibia and its territorial waters.

### International Traffic

International outgoing call volumes increased by four per cent to 64,9 million minutes in 2006. Traffic to South Africa has stabilised, while traffic to neighbouring countries increased by 8 per cent over the previous year.

During June to September 2006 a special rate (50 per cent lower during off-peak periods) was introduced to Germany to coincide with the Soccer World Cup held there. Lower accounting rates were negotiated with Telkom SA that also resulted in lower rates being passed on to the customers. To improve quality of service and increase traffic volumes, additional capacity was added to two satellite operators in Europe and the USA.

### International IP Link

Internet usage continues to grow strongly. We have dedicated international bandwidth to ensure adequate high quality connectivity to the World Wide Web at competitive rates. During the past year the regional and international capacity was doubled via links through South Africa and Europe. With the second licensed mobile operator in the pipeline, these routes will become even more important. The usage on all the routes is constantly monitored in order to ensure quality service to all our customers. Adequate capacity is maintained to ensure a service with no bandwidth oversell.

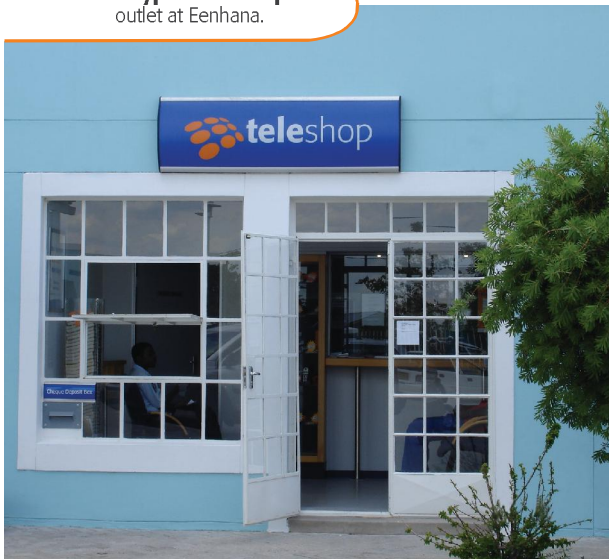
The IP Bandwidth lease tariffs will again be decreased by approximately 20 per cent at the end of 2006.

## Marketing and Sales

### Market and Product R&D

The focus for this year was to identify specific market requirements and develop solutions and strategies for Telecom Namibia to be a total ICT provider for both business and residential market segments.

**A typical Teleshop**  
outlet at Eenhana.



Due to popular market demand a more affordable recharge denomination of N\$5 was introduced. Virtual voucher distribution agreements were signed with strategic partners to ensure availability of recharge vouchers in all major retail outlets in the different towns, including recharging via SMS for the sake of convenience.

Hotspots were introduced nationally in most major towns in Namibia to cater for Internet requirements of both business and residential customers. The service experience will be enhanced with the introduction of ADSL and other broadband services, like WiMAX and CDMA1X- EVDO in the new financial year. Customer experience has also been taken to a new level, with the introduction of a fully automated IVR (Interactive Voice Response) system that allows for services ranging from competition lines, opinion polls, data base hosting and call routing services. Video conferencing services will be expanded to all major towns in Namibia during the new financial year.

Revenue recorded from new products launched during this financial year have shown a growth rate of 100 per cent from the previous financial year and stood at approximately N\$18 million. A number of products and services are planned for launch in the new financial year. These products and services will focus on specific market requirements for business and residential segments and include solutions like, Short Messaging Services (SMS), narrow and broadband services from technologies like CDMA 2000 1X and EVDO, Metro Ethernet, ADSL, WiMAX Multimedia Messaging, content, Virtual Private Network, Fast Ethernet links and Video Calling.

### Pricing and Tariffs

Major studies were concluded, aimed at restructuring Telecom Namibia's tariff and charging structures. The focus was on accelerating tariffs re-balancing mainly towards competitive tariff structures and applying the philosophy of keeping Telecom Namibia tariffs affordable to all customer segments. Tariffs for international IP bandwidth were reduced by approximately 20 per cent as from the 1 November 2005. Tariffs for international leased circuits were reduced by up to 20 per cent on 1 October 2005. On 1 July 2006, charging bands for national fixed to fixed line calls were merged leading to a reduction in domestic charging bands from three bands, namely: Local, 100 km and above 100 km to two only, namely: Local and National. Another major milestone is the planned move from a Unit Based Charging system to Per Second Billing scheduled to be implemented in the new financial year starting 1 October 2006.

On 1 October 2006, international call charges will be adjusted as follows:

- Tariffs for fixed-to-fixed calls to Angola, South Africa and neighbouring countries will be reduced on average by 20 per cent, six per cent and five per cent, respectively.
- Tariffs for calls to other international fixed line destinations will be lowered by an average of 15 per cent.
- Tariffs for fixed-to-mobile calls to Angola, RSA, Germany, The Netherlands, Sweden, Switzerland and UK will be kept unchanged, while fixed-to-mobile calls to Rest of the world and USA will be reduced by 15 per cent.
- Tariffs for calls to neighbouring mobile destinations will be adjusted to be inline with current fixed-to-RSA mobile tariffs.

Tariff structures for other products such as Dialaw@y VSAT and Callmaker were re-structured during the financial year under review.

### Directory Product

The directory for this year was designed to be more than just a "nice-to-have". It is easy to use and customers can find people and places hassle-free. Emergency phone numbers for each town are listed in the first pages of the directory. Under the Medical Section, new listings were added for Acupuncturists, Biokineticists, Dental Laboratories, Family Physicians, Homeopaths, Laboratories, Orthodontist, Pathologists and Psychometrics

The Online Directory has been revised to make it user-friendlier, especially in terms of allowing for different ways to search for numbers. It is also a complete copy of the printed Directory.

### Sales opportunities

The sales environment is changing very rapidly due to new technologies and increasing customer demands. The trends in the market have changed from mostly analogue services to more digital and IP services. The focus of sales is now to provide customer solutions in addition to offering products and services. Telecom Namibia has invested more in the training of employees and sales representatives to ensure proper customer service and solutions for enhancing businesses of our customers.

The company has sales representatives throughout the country to ensure quicker response to customers countrywide and during the next financial year even more customer representatives will be deployed in order to provide a more efficient service. Customer relationship managers are serving the top 200 customers in the country and plans are in place to strengthen the sales force. The move is towards having a customer-focused sales force with increased knowledge on customer needs, new products, services and solutions. Customers can be assured that within the new financial year many more creative solutions will be implemented.

### Distribution and Customer Retention

The external customer survey results portray a satisfaction rate of 91.2 per cent in the retail distribution channel of Telecom Namibia. The retail channel contributed about N\$488 million of Telecom Namibia's total revenue, succeeding in achieving

94.6 per cent of the set sales targets and after a saving of three per cent on operational expenses, brought the total channel profitability to a 52 per cent average.

In the past year the prepaid revenue for Telecom Namibia was under tremendous strain and we were faced with new challenges. Innovative approaches were introduced to maintain the same income levels (e.g. virtual distribution of prepaid airtime through all retail outlets). The company also embarked on a pilot project, testing the availability of airtime through vending machines and to be rolled out towards the end of 2006.

In April this year Telecom Namibia extended the retail distribution channel by opening four new outlets in the north and far north areas of the country. New Teleshops have been established at Ongwediva, Oshikango, Uutapi and Eenhana.

In order to meet customer demands, the company introduced new facilities to the public in retail outlets such as copying, faxing, private national/international calls and Internet access. We are in the process of rolling out these facilities and the majority of outlets have been covered.

Internet access is available at the following outlets:

- **Erongo Business Area**  
Teleshops Henties Bay, Omaruru, Swakopmund and Walvis Bay.
- **Far North Business Area**  
Teleshops Oshakati, Ongwediva, Uutapi, Opuwo, Ondangwa and Oshikango.
- **Hardap Business Area**  
Teleshops Gobabis, Mariental, Maltahöhe and Rehoboth.
- **Karas Business Area**  
Teleshops Oranjemund, Rosh Pinah, Lüderitz and Keetmanshoop.
- **North-east Business Area**  
Teleshops Grootfontein, Katima Mulilo, Otjiwarongo, Outjo, Khorixas, Otavi, Rundu and Tsumeb.
- **Windhoek Business Area**  
Telecentre, Teleshops Klein Windhoek and Maerua Mall.

With regard to customer retention, Telecom Namibia did not meet the target, but the number of disconnected lines was reduced significantly by 18 per cent from the previous financial year. This is due to new processes and procedures developed and implemented to track the reasons for disconnection and alternative solutions developed to assist customers in planning communication needs and expenses better e.g. the introduction of the CallMaker Package and Leased Cost Routing Product.

## International Ventures

### Angola

#### Investment

Shareholders have invested capital of US\$9.7 million for the initial start-up of the company Mundo Startel (MST) in Angola. Telecom Namibia owns 44 per cent of MST and 56 per cent is owned by Angolan partners. An additional loan to the amount of US\$12.8 million has been granted by the shareholders for ordering the NGN equipment for phase one which covers the roll out of the network in Luanda. Discussions are at an advanced stage with financial institutions for financing the rollout of the network in other parts of Angola.

#### Infrastructure

MST has designed a full IP next generation network for roll out throughout Angola over a period of five years.

The access to customers is entirely based on wireless technologies. MST will establish its own international and national links with redundancy but will also make use of existing terrestrial networks by incumbent operators.

The network components were ordered and delivered for installation by a supplier that was selected via public tender. The final network roll out will cover all 18 provinces of Angola, starting in Luanda. The rest of the rollout is planned in phases and will follow on demand from customers. The network is anticipated to be ready for services by Q2.

MST is currently constructing accommodation for the NGN network and office space for the employees. This building is nearing completion after it was seriously delayed by shortages of materials from neighbouring countries. The building is expected to be ready for handover by end of October 2006 when installation of the NGN will commence.

### Human Resources

The Management committee consisting of the MD, Deputy MD, Technical Manager, Finance Manager and Human Resource Manager was appointed. The Marketing Manager has been recruited and is due to start his duties at the beginning of October 2006. Other positions filled are the Manager: HR, Manager: Marketing, Project Manager and a Strategic Planner.

In the technical division seven engineers/technicians were recruited and sent for training in the various fields of the Next Generation Network.

### Constraints

Angola specific issues seriously delayed the project. These issues are:

- Approval to start with the construction of the building
- Importation of material and network equipment at the Namibian/Angolan border and at the Luanda port.
- Frequency spectrum requirements.
- The acquisition of sites throughout Luanda and the availability of power and the supply thereof to the sites.
- The issuing of work visa for the expatriates to continuously work in Luanda.

## South Africa

The Second Network Operator in South Africa was finally launched in Johannesburg on 31 August 2006 under the name Neotel. At its birth, Neotel announced the launch of its wholesale international services. Wholesale customers of Neotel are able to pass the advantages of Neotel's service quality and price benefits on to the end users. Neotel expects to have its first residential and SMME customers connected by the end of Q2 next year.

In February 2007, due to the delays of the Infraco network supplied by Government, Corporate Services will begin with a limited number of customers in the major metros of Johannesburg, Pretoria, Cape Town and Durban. Vendor selection was done through a robust process to ensure that Neotel can provide the latest services at competitive prices. As the strategic equity partner VSNL will ensure early market entry and enforce world standard pricing from the local suppliers. Telecom Namibia will add value through its local knowledge of serving African customers with appropriate product offerings. Due to the delay and uncertainty with InfraCo the cable capacity on SAT-3 could not be accessed as yet. This will again be actively pursued during 2007 when the initial landing monopoly is coming to an end.

## Networks and Systems

While the network and systems grow and expand annually, the level of service performance and quality is commendable. Network failures are detected immediately, followed by prompt responses and ongoing regular follow-ups.

Furthermore, the backbone networks and systems maintained the high level of availability above 99.9 per cent. However, the many different Access Networks achieved a performance scale of 99.6 per cent mainly due to external factors, such as grid power failures, contractor damage, lightning, vandalism, and so on.

See attached tables on the next page in respect of networks and systems availability and quality.

## Capital Projects

Telecom Namibia's ICMS (Integrated Customer Management and Billing System) was upgraded in order to expand its capability and features allowing new workflows and billing methods.

The Channel 7 Access Road was re-built thereby allowing safe access to the site for Telecom Namibia's maintenance and operations personnel.



## Backbone Network and Business Systems Performance 2004 - 2005

<b>International</b>	Availability	%	Answer- Seizure	Ratio	ASR
All international outgoing routes (average)	-		60.02		(+1,97)
All international incoming routes (average)	-		55.24		(-3,90)
All national routes (average)	-		64.48		(-0,81)
Average other neighbouring countries	-		39.01		(-4,41)
Average for direct international satellite routes	99,997		(-0,001)		52(+10)
International switching centre	99,974		-		-

## Backbone Network and Business Systems Performance 2006 - 2007

<b>National</b>	Availability	%	Change	Ports used	Change
Optic Fibre SDH network	99,965		-0,032	-	-
Microwave - digital	99,732		-0,177	-	-
OFDC Networks	98,958		+1,209	-	-
EWSD digital exchanges	100		0	-	-
DLU's	99,999		+0,009	-	-
SDE's	99,980		+0,054	-	-
Rurtel	98,717		-1,052	845	-156
Ultra Phones	99,881		-0,053	6521	+33
DECT	99,974		+0,012	1110	+164
MGW	99,912		-6,088	3537	+433
VSAT hub Faraway	99,880		+0,097	-	-
VSAT hub Dial@wayIP	99,962		+0,918	-	-
<b>Total National backbone network (average)</b>	<b>99,678</b>		<b>+0,006</b>	-	-

<b>Support Systems</b>	Availability	%	Change
Engine generators	99,980		-0,015
Rectifiers	99,994		-0,003
Batteries	100		0
Air-condition	100		+0,001
Solar Systems	99,979		-0,015
Fire systems	100		0
UPS	99,970		-0,03
<b>Total average Support Systems (across 312 sites)</b>	<b>99,989</b>		<b>-0,009</b>
<b>Average power availability</b>	<b>99,987</b>		<b>-0,011</b>

<b>Business Systems</b>	Availability	%	Change
Internet	99,74		-0,22
Exchange (e-mail)	100		0
Domain Controllers (Logon authentication)	99,96		-0,04
ICMS	99,98		0
SAP	100		0
Mediation	100		0
<b>Total average Business Systems</b>	<b>99,95</b>		<b>-0,043</b>