Operational Overview

Through the past 13 years, Telecom Namibia has evolved to become a progressive, dynamic, innovative and spirited company to spearhead Namibia's drive in advancing Vision 2030.

Telecom Namibia is moving with vigour towards its transformation into a fully integrated communications company. The seeds of change, which were sewn with the LunduRura Sisen-Xasib change management and transformation project, continue to be nurtured and we are beginning to see changes as a result of our relentless efforts to forge a stronger, more nimble company. Our vision is to position Telecom Namibia to respond to a rapidly changing marketplace and to be increasingly customer-centric.

Our telecommunication industry in Namibia is undergoing profound change, driven by technology and competition. During the last year, Telecom Namibia has pursued its strategic plan to maximise operational efficiencies, with a sharp focus on customer-centricity, speed, quality and cost. This part of the report summarises some of the activities carried out during the 2004/5 financial year.

Fixed Line Services

Telecom Consumer Services (TCS), the business unit which manages and operates Telecom Namibia's fixed line telephony services for residential and small-to-medium sized business markets requiring voice services, charted moderate performance in the financial year under review.

Increased competition from mobile voice business adversely affected Telecom Namibia's voice revenue. Local calls dropped marginally, contributing only 23% to call revenue. National calls declined by 4%, contributing 31% to call revenue. Fixed-to-cell calls went up by 2%, contributing 45% to call revenue. The latter segment is expected to out-grow the other segments in the near future.

Traffic sales for the year decreased by 1.3%, while revenue from line rentals increased by 5.3% from the previous year. In the latter segment a growth of about 19% against previous year was observed for ISDN basic rate. Other revenue, which includes amendments, miscellaneous revenue and auction sales went down by 8% on the preceding year.

Non-payment of bills and migration of customers reduced the number of lines sold by 11,390. To retain customers and stimulate Direct Exchange Line (DEL) usage and sales, a new pre-paid product, CallMaker, was introduced in July 2004. This product has grown from 2,308 lines in 2004 to 4,395 in 2005. In spite of the disconnections, the customer base increased by 2% from 136,350 to 138,997.

The usage of value added services on the prepaid platform increased last year. During the year our **Reminder Service** recorded 5,861 reminders sent to business customers and 80,887 to residential customers. A total of 1,695 customers made use of the **Wake-Up Calls Service** last year. **FlexiCall**, which is a popular service, generated a usage value of approximately N$48,71 million while a total of 1,379,549 recharge vouchers were used. **TeleMail** saw the number of activated TeleMail boxes stabilizing around 51,200. In total 284,582 messages were deposited of which 16,067 were remotely retrieved and 3,078,145 were home retrievals.

Customer Satisfaction

Telecom Namibia's focus is to better understand our customers, and through this deliver better customer service and customer satisfaction. The aim is to become the service provider of choice to our customers as a way to drive up customer loyalty and combat churn.

Our strategy is to focus on efficient service delivery and service assurance to our Multi-services, High flyers, One-liners and Let's Talk customer segments. This will be supported by concerted efforts to ensure a high degree of uptime of our networks, efficient use of resources and increased customer satisfaction by aligning our systems to offer bundled services and manage them as single relationships.

Quality of Service

Over N$14,53 million was invested to improve and upgrade the access network especially those parts served with aging technologies. Future

efforts will mostly concentrate on replacing obsolete technologies and aligning services towards convergence of data and voice. Satellite technology was introduced earlier to provide services in areas with no infrastructure, like remote lodges.

Prospects in terms of future network expansion are into a wireless environment that would address the rural requirements for services. Telecom Namibia plans to migrate the network towards packet-based networks.

The deployment of a 3G technology such as CDMA is currently underway. The objective of CDMA (Code Division Multiple Access) project is to provide fixed wireless access services to cater for rural, suburban and urban subscribers. Services offered by CDMA are fixed wireless voice and fixed wireless data applications. A "live" trial is expected to be held in early 2006 to test and verify some of the technical capabilities. CDMA is being implemented to face future challenges and, in so doing, fulfill customer and business requirements.

Our relentless efforts to further improve the quality of service and customer satisfaction is indicated by faster installation response time and fewer waiting applicants. There was only a slight improvement in our fault rates from the previous year due to the difficulty in securing spare equipment for obsolete technologies. Overall, installation response time improved from 14 days to 9 days and waiting applicants reduced by almost half, from 738 in 2004 to 345 in 2005.

Prepaid Portfolio

After a thorough study on all supply chain components and user demand, a new road map for the prepaid sector was established. This evolution ensures that the end-user of Telecom's prepaid products will gain more value while paying less for the product. Telecom Namibia has been repositioning its pre-paid business to give customers more value for their money. Various trials are being conducted, all being very successful. Soon, an aggressive roll out of prepaid solutions will be introduced in the market, with the emphasis on the northern regions of Namibia.

The prepaid distribution network will also serve a bigger footprint in the country, with the introduction of the electronic virtual voucher. The N$10 virtual recharge voucher is already available at key retailer outlets in the country.

Multimedia Services

Telecom Multimedia Services (TMM) is responsible for managing the business relationships with the Total Solutions and Full House customers of Telecom Namibia. As part of our multimedia business, we develop and promote customer premise equipment (CPE), Internet access, Internet protocol applications, high-speed data and value added products and services. Our main focus areas are customer relationship management, value-added data products, profitability, and customer satisfaction.

In the areas of CPE, Internet services and Internet Protocol, Telecom Namibia is competing with other players in the market. This reality requires a high quality standard of service offering and a management challenge for continuous improvement, value addition and innovation. Our objective is to be the preferred service provider in Namibia in all the target markets with attractive pricing and healthy revenue streams through scales of economy and efficiencies.

Internet Services

During the year under review, Telecom Namibia continued to sustain its market share with a stronger foothold in the Namibian Internet market. As Namibia's leading Internet Service Provider, iWay provides nationwide Internet access, effecting a seamless, information superhighway with leading-edge technology.

iWay realised a customer growth of 16% for the financial year 2004/5, which brought about a 9% growth in revenue.

Our ISP platform has been upgraded with the following benefits to its customers:

- Faster internet browsing
- Improved anti-virus protection
- Reduced spam

A new product, **iStay On** became available this year offering an Always-on IP service to customers. With iStay On a customer will have a 24/7 dedicated wireless link with a Committed Information Rate (CIR) of 8kb/s and a burst data rate of up to 64kb/s.

Other product offerings of iWay are **iLink** - a dial-up Internet service, **iSite** (web hosting), **iMake** (web design), **iMail** (email service) and **iDeal** for businesses, big or small, to connect to the Internet at fast speeds.

With the Internet growing in popularity, Telecom Namibia will further intensify the availability and offering of IP-based applications that will enrich information and bring content alive.

New Products

Our Least Cost Routing (LCR) product was launched, offering cheap fixed-to-cell calls to all our PABX customers. This was done through a special arrangement with the mobile operator. All ISPs are now also afforded the opportunity to reach more customers through the Wireless LAN services and thereby contribute to the development of the use of information and communication technologies in Namibia.

A wireless Always-on IP product was launched with a guaranteed access speed of 16kb/s, burstable to 64kb/s.

A number of plans are being investigated to make our network and systems future-proof. First, the company is investigating the possibility of converting to a Multiprotocol Label Switching (MPLS) IP core network capable of supporting all current and future services. Secondly, to implement an Asymmetrical Digital Subscriber Line (ADSL) to support Telecom Namibia's broadband strategy. Lastly, to employ metropolitan Ethernet as a high-speed local-area network (LAN) technology.

Infinitum (IP & Data)

Infinitum serves as Namibia's IP bandwidth provider. Specializing in the provision of Tier-1 Access, we pride ourselves in being the Internet Access Provider with a 100% digital network, managed from a single, central point. Customers have access to the most resilient IP backbone infrastructure.

Huge capital investments were made to expand our IP network to meet customer demands, with over 36 Mb/s of International bandwidth (both directions), and more than 16 Mb/s bandwidth on our national core. Our international connectivity is complemented by extensive Internet access arrangements with global Internet carriers and access providers such as Xantic, UUNET-SA and Telkom-SA.

Effectively, Infinitum combines the advantage of wide area coverage with the speed and quality of Telecom Namibia's core transport links, which are fully managed by the company's Telecommunications Management Network Centre in Windhoek. The benefits of centralised network management include 24-hour internal network surveillance, proactive maintenance and remote configuration of network elements.

Walvis Bay equipment room.

Infinitum Product Features

Unique Infinitum features have been key in strengthening our position and reputation in the market. Our network is operated on SDH technology with an IP network overlay. Its fully resilient backbone covers all main centres, with 5 points of presence.

Infinitum has the most extensive domestic urban and rural reach in Namibia, enabling Internet users to transact and communicate with users at any Namibian location. Our extensive national *peering* facilities with access providers such as iafrica, Namibnet, Mweb and UUNET ensure access to all content in Namibia and have been configured to reduce latency and response times to and from this content, to world-class standards.

Customer Premises Equipment

Focusing on the branch exchange market, Telecom Namibia offers a wide range of products, as well as installation and maintenance services at all major centres in Namibia. This is a further enabler to offer a total solution to customers, promoting a one stop shop. Our Business Centre in Windhoek and our network of TeleShops and TeleService Centres display a wide range of ordinary and digital telephones and accessories.

Customer Relations Management (CRM)

CRM is an ongoing process. As part of this effort, we are moving more aggressively towards enabling customers to self-manage their account and relationship with us. In subscribing to services, customers want the full-end-to-end flow. This includes everything from shopping for products and services to self-ordering and provisioning to being able to monitor account status. Telecom Namibia is piecing together its systems to provide a single user experience.

To us customer service is a way of life, a journey and a culture. It is our belief that exceptional customer service will make us a service provider of choice and improve profitability, reduce marketing costs and enhance our reputation. Thus customer relationship is just that – an investment – so that we focus time and money on this to improve customer satisfaction.

Future Outlook

Fully cognisant of the inevitability of Voice over IP in the near future, business models in general and product and service offerings in particular are changing. The main focus for the immediate future is to revamp the company's IP backbone with Multiprotocol Label Switching (MPLS).

MPLS enables enterprising customers to use access protocols of their choice, including Asynchronous Transfer Mode, Digital Subscriber Line, Ethernet, Frame Relay, etc. This translates into lower cost of ownership while Telecom Namibia can tap into a wider market with fewer limitations on access options. Converged services portfolio, flexibility and security will resonate with potential customers.

The future of telecommunications is shaped by the convergence of voice and data. Customers are demanding cheaper but more reliable products. In fact, customers want more than just connectivity. With voice revenue declining, Telecom Namibia is repositioning its business towards data. Moving forward, the objective is to create a converged IP-based network to support the various aspects of future customer demand.

International Business

Telecom Namibia provides customers with quality international telecommunications services (voice, data and maritime), at competitive rates to 242 destinations around the world, including competent and friendly operator assisted services. Two centres, i.e. International Exchange in Windhoek and the Walvis Bay Radio Station, offer call establishment and a comprehensive enquiry service on a 24-hour basis.

International Traffic

International outgoing call volumes stabilised at 62.2 million minutes in 2005. While traffic to South Africa has stabilized, traffic to the other neighbouring countries increased by 4% over the previous year. The whole Africa traffic accounts for 94% of the total international traffic.

Telecom Namibia introduced lower peak and off-peak tariffs of approximately 15% to international destinations from 1 July 2005. Lower accounting rates were negotiated with Telkom South Africa but further reduction is still envisaged especially to mobile operators.

Demonstrating VSAT product to rural customers.

To improve our performance and to attract further traffic from all over the world, Telecom Namibia introduced a new route via satellite to Europe. More routes will be opened with suitable partners to increase the ability to compete the international calling card market.

Internet Usage

Internet usage increased greatly during the year. This increase, together with direct access to the cellular network, is steadily eroding voice traffic over the Telecom Namibia network. The use of callback services resulted in the number of incoming call minutes more than doubling from our main trading partners. Illegal breakout from the Internet using voice over Internet protocol (VoIP) and least cost routing is shrinking the traffic flowing to and from our national network.

Telecom Namibia has 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 tripled via links through South Africa and Europe. With more licensed operators 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.

The IP Bandwidth lease tariffs will be decreased by approximately 20%, effective 1 December 2005.

Prospects

To counter the loss of voice traffic to mobile services Telecom Namibia negotiated lower rates to make fixed to cellular calls from PABXs. The lower rates were directly passed on to our customers and more than 200 customers now use this convenient facility.

Across the borders Telecom Namibia spread its wings and received Foreign Direct Investor status in Angola. This will enable Telecom Namibia to

acquire 44% shares in Mundo Startel (MST) a start-up fixed line operator in Angola. Tenders were called for the provision of a Next Generation Network and ZTE of China was selected as the successful bidder to roll out the network in 2006.

In South Africa, Telecom Namibia is part of CommuniTel, a shareholder in the Second Network Operator. The controlling partner is TATA VSNL from India and Telecom Namibia plays its role as a regional operator with local knowledge. The process to get the SNO licensed is very slow but the Regulator has indicated that a licence will be issued before the end of 2005. Telecom Namibia's involvement in a South African operator will give it better access to the big neighbouring market and will also provide access to the SAT-3 undersea optic fibre cable to Europe.

Market and Product R&D

The annual customer satisfaction survey conducted in June 2005 revealed an overall satisfaction level of 77%, up by 4% on the previous year. A worthwhile detail is the increase of customer satisfaction with public phones which significantly increased by 6% to 82%.

In order to make the services more attractive to particular budget sensitive customer segments and lower the barrier of entry, a number of new services were modified or newly introduced, notably the N$10 recharge voucher, Affordable Line Connection, Best Friends package, the extension of the CallMaker validity period and price reduction of the CallMaker starter pack.

Always-on IP was introduced for the heavy Internet users making the service much more affordable to them. To cater for rural and remote customers with high need for voice and data services the Dialaw@y hub was upgraded to accommodate more customers. HotSpots have been piloted extensively and all indicate a proliferation of HotSpots in 2006.

Revenue from new products launched recorded during 2004 and 2005 have shown a very steep growth rate of 400%.

Pricing and Tariffs

Annual price and tariff adjustments are made to achieve the long-term objective of tariffs re-balancing aimed at aligning Telecom Namibia tariffs to the costs of providing the different services and eliminating cross-subsidisation between services. The positive result is that domestic charging zones were reduced to three only. This resulted in reduced cost for long distance calls to customers. Tariffs for calling international destinations were reduced by 14% on average. Tariffs for calls to Angola were reduced by 25% and 15% for peak and off peak respectively. Tariffs for calls to RSA mobile were reduced by 3% and 6% for peak and off peak respectively. The off-peak tariffs for calls to RSA fixed were reduced by 10%. Other products such as international leased circuits were reduced during the past financial year.

Corporate Identity

The introduction of a fresh and new logo and the re-branding of the entire company during the last year, were major milestones in Telecom Namibia's history. As the public perception stands in dire contrast to the Telecom Namibia's vision, mission and values, we embarked upon a holistic re-branding exercise. Changing the outside image also meant the standardisation of Teleshops, colours, cars, buildings, stationery, and so on. The simultaneous internal re-branding exercise included "living the brand" workshops, to strengthen the company values and commit ourselves to a customer oriented behaviour and our brand promise "sharing your world". This means that when we communicate, we share ideas, emotions, information, thoughts, dreams and expectations; we are in fact sharing a part of ourselves, and that Telecom Namibia is a vital part of that process

Directory Product

The upgrade of our Customer Management and Billing System greatly improved the operational efficiency at the Directory as evident in a significant reduction of potential sources of error by automating many process steps. New more customer-friendly improvements encompass the introduction of Government red pages and new Medical Services. The availability of the Directory on the Internet is still in progress. The company recorded a healthy growth in revenue from the Directory.

Networks and Systems

The company's decision in 1997 to invest in a 24-hour network management centre, the TMN Centre in Windhoek, continues to prove its operational and strategic importance. 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%. However, the many different Access Networks achieved a performance scale of 99.6% 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.

The fibre backbone ring network in the south-western corner of the country (securing the

Backbone Network and Business Systems Performance 2004 - 2005

International	Availability %		Answer-Seizure Ratio ASR	
All international outgoing direct routes (average)	--		58,05	(-2,63)
All international incoming routes (average)	--		59,14	(-1,58)
All national outgoing routes (average)	--		65,29	(+1,26)
Average South Africa link (fibre cable)	99,929	(-0,071)	72,45	(+1,20)
Average other neighbouring countries	--		39,01	(-4,41)
Average for direct international satellite routes	99,999	(-0,001)	52	(+10)
International switching centre	100		--	

National	Availability %	Change	Ports used	Ports used
Optic Fibre SDH network	99,997	+0,005	--	--
Microwave – digital and analogue	99,909	-0,043	--	--
OFDC Networks	97,749	0	--	--
EWSD digital exchanges	100	0	--	--
DLU's	99,990	-0,009	--	--
SDE's	99,926	-0,069	--	--
Rurtel	99,769	+0,085	845	-156
Ultra Phones	99,934	+0,028	6521	+33
DECT	99,962	-0,035	1110	+164
MGW	100	0	3537	+433
VSAT hub Faraway	99,783	+0,243	--	--
VSAT hub Dial@wayIP	99,044	-0,396	--	--
Total National backbone network (average)	**99,672**	**0.016**	**--**	**--**

Support Systems	Availability %	Change
Engine generators	99,995	+0,012
Rectifiers	99,997	+0,001
Batteries	100	+0,006
Air-condition	99,999	-0,001
Solar Systems	99,994	-0,003
Fire systems	100	0
UPS	100	+0,022
Total average Support Systems (across 227 sites)	**99,998**	**+0,006**
Average power availability	**99,998**	**+0,007**

Business Systems	Availability %	Change
Internet	99,96	+0,05
Exchange (e-mail)	100	+0,02
Domain Controllers (Logon authentication)	100	+0,02
ICMS	99,98	-0,02
SAP	100	+0,03
Mediation	100	+0,02
Total average Business Systems	**99,990**	**+0,37**

Oranjemund-Rosh Pinah-Aus-Lüderitz backbone) guaranteed continuous services even during fibre breakages caused by road contractors who are constructing the Aus-Rosh Pinah track. More fibre backbone ring networks will be rolled out as these are essential for next generation networks and for connecting isolated analogue rural stations to the digital infrastructures.

This year the Windhoek Satellite Earth Station clocked 10 years in service with a very successful performance history. The establishment of the Standard "A" Satellite Earth Station and the Windhoek International Switching Exchange was a key milestone in the development of tele-communications over the past 10 years.

Capital Projects

The capital project budget for the year amounted to about N$140 million. Technology-specific projects completed amounted to N$76 million, while projects worth N$64 million at corporate level are still being implemented for completion in early 2006.

Some of the capital projects done during the 2004/5 financial year include:

A new **International Switching Centre** (ISC-2) with its Network Element Manager ("Net-manager") was successfully commissioned by Siemens, making it possible for Telecom Namibia to operate two independent international gateway exchanges. The second ISC is already from the new generation equipment and can be incorporated into future IPT networks. At the same time, additional trunk capacities were established for Telecom Namibia and Mobile Telecommunications (MTC) networks.

The old **113D processor** at the WGG exchange was replaced with a modern version which has more capacity and performance power. All our digital exchange processors are now of the same version which can handle any new upgrades.

The **Dial@way IP VSAT hub** at the Windhoek Satellite Earth Station was upgraded and expanded to a user capacity of 500 in order to cater for the increasing market demand. By the end of the year, 160 remote VSATs were connected countrywide.

The special **VSAT** system connecting remote Mobile Telecommunications (MTC) sites to the backbone has grown now to 9 sites with great performance success.

A **Disaster Recovery Centre** (DRC), located in Windhoek's Pioneers Park suburb, became operational during the year. All our major IT platforms were duplicated there as back-ups and linked via a Gigabit network to the headquarters. The DRC will also provide back-up facilities to MTC and NamPost and, in future, to external companies and institutions. Major operational risks will be eliminated by this centre.

The **ICMS billing system upgrade** to version V5.3 was done, thus enabling the company to implement the Auto Activation functionality. This function allows for fast and automatic activation and deactivation of customers, good revenue/ debt control mechanism and ensures proper and correct data quality.

Although commissioned as a network during 2004, the **Wireless LAN (WLAN) systems** in the Far North, Windhoek and Swakopmund originally served only SchoolNet with very good and stable performance. During 2005 Telecom Namibia's commercial "Always-on-Internet" services were launched with good take-up by the market and the ISPs.

WI-FI Hotspots were installed at some strategic places in Windhoek and the International Airport to test the market. The initial results are promising.

Various major capital projects are still in progress for completion in 2006. These include:

Network Fraud Management and Quality Assurance: this project, once implemented, will allow Telecom Namibia to monitor any fraudulent activity on the network as well as network service quality.

Connecting Rural Stations to Digital Back-bone: the linking of Kamanjab to Opuwo and Ruacana by a fibre backbone network was commenced and is scheduled for completion during the second quarter of 2006. At the same time, Epukiro will be connected to Buitepos by fibre infrastructure and Gobabis to Aminuis via Leonardville. Helmeringhausen as well as Namgorab and Kumakams will be connected to the Aus and Maltahöhe fibre infrastructure, respectively. All these links will be serviced by STM-16 transmission systems.

Oshakati new building complex: NPTH is still in the process of completing the technical building at Oshakati. Although many technical works locally are progressing well, Telecom Namibia's total systems still require much construction once premises are available.

New MTC connections: Work is in progress to connect MTC's new exchange and network to TN's network at Oshakati. In addition, 23 new links to new MTC base stations around the country will be completed during 2006.

Technician at work.