

# Operations Review

## Transformation

Telecom Namibia started in late 2006 with the implementation of a major transformation programme to reposition itself as a next generation network (NGN) service provider. This has helped create a strong foundation for an advanced IP-based networking infrastructure for Namibia. With the IP/MPLS infrastructure in place, the company is forging ahead with streamlining the organisation, simplifying its structure, and shaping our customer-facing channels around future opportunities.

On the technical side, the central focus is on the expansion of the NGN infrastructure which implies final technical convergence. The re-alignment project was kicked off in November 2008 with the mandate to re-shape all technical departments structurally and functionally. Current key objectives are to unify and streamline operations to maximise the benefit from the NGN infrastructure.

On the operational side, the business processes project supports the technical transformation by re-defining the process and work flows. It ensures that the company is working smarter, getting more efficient when it comes to customer-oriented and competitive service delivery.

While re-organising itself technically and operationally, Telecom Namibia is also re-organising the customer facing channels to better service customer needs and increase competitiveness. The first step will be taken with the internal structural separation of the market appearance into three main segments in 2010.

## ICT Summit 2009

The main objective of the 3<sup>rd</sup> Telecom Namibia ICT Summit 2009, which was hosted in July 2009 under the theme "Visualising the Future: Confronting the Crisis," was to highlight and encourage sharing and exchange of knowledge and experience. Real capacity growing in terms of ICT skills building and implementation of intelligent technologies in the Namibian and African context can only be achieved in a combined effort between decision makers.

The key observation that emerged from the ICT Summit is that innovation is key to economic recovery. Everybody – human beings and organisations need to prepare for the future. The topics presented and the challenges discussed were not only in line with Telecom Namibia's strategy for ICT in Namibia, but that all ICT technologies and service offerings will greatly contribute to our country's Vision 2030 and the Millennium Development Goals which directly and indirectly affect the

country's social and economic development and growth.

## Regional connectivity and partnerships

Telecom Namibia is well connected to its neighbours through our voice, data and Internet connections. We also have solid cross-border connections via fibre optic networks to all our country's borders. During the past year we have increased our connectivity and now also provide optic fibre transmission links to Zambia via the Caprivi Region of Namibia. Besides, we have established a physical presence through shareholding in two telecommunications ventures in Angola and South Africa.

Our company is a minority shareholder in Neotel, the second network operator in South Africa. Neotel is now in its second year of operation with a fibre backbone between main cities and a substantial metro fibre in the main centres. Radio connections are used to connect tens of thousands of customers in Gauteng and Cape Town. In addition, Neotel has built CDMA and WiMAX networks to ensure good coverage in the main cities. To date Gauteng, Cape Town and Durban are served and this will be followed soon by more big cities.

As part of the regional strategy, Neotel and Telecom Namibia were connected at the RSA/Namibia border crossing at Onseepkans – Velloorsdrif. This connection made it financially viable for Telecom Namibia to access our SAT-3 cable system capacity via the landing point in Cape Town.

In Angola, Telecom Namibia has 44% equity in Mundo Startel, a start-up operator. We were only able to launch limited services in May after an extended start-up period. Mundo Startel has its main operations centre on the periphery of the Central Business District of Luanda from where it serves its customers via a high capacity microwave ring system in the city. During the next year this will be extended to Luanda Sul and thereafter to more centres throughout Angola. Customers are served with WiMAX to offer Virtual Private Networks (VPNs), internet and voice services. Mundo Startel is already carrying voice traffic for all the major operators in Angola. Its satellite operations are being put to good use by local ISPs and international operators servicing the oil sector.

## Harnessing broadband

Pent-up demand for data and value-added services is driving investments in undersea and terrestrial infrastructure. Telecom Namibia is participating in a number of submarine cable systems. The utilisation of undersea fibre optic capacities on SAT-3 and SEACOM was achieved during the second half of 2009, strengthening our broadband offerings nationally and internationally.

Telecom Namibia has been designated as the lead agent for the West Africa Cable System (WACS) being built from London to Cape Town with landings all along the African West Coast. Namibia will land the cable in Swakopmund and Telecom Namibia and Mobile Telecommunications (MTC) as well as Botswana Telecommunications Corporation (BTC) will be joint capacity owners in the venture. The Government of Namibia is also a sponsor to the cable via Namibia Post and Telecom Holdings Limited (NPTH) and the Ministry of Information and Communication Technology has made contributions in support of the cable project. The project is scheduled for completion during the second half of 2011.

The WACS project is expected to provide faster, broadband capacity for Namibia and contribute significantly to bringing the cost of connectivity down. The price of international bandwidth capacity remains high. Such infrastructure coupled with an effective regulatory environment will transform the reach and cost of broadband services.

#### Pricing & tariffs

With competition intensifying, Telecom Namibia's tariffs are under pressure from substitute products offered by other players in the industry. Despite this, the company continued to restructure its pricing for the different products and services in line with the company's long-term strategic plan.

During the year under review, Telecom Namibia introduced major tariff changes as well as a number of call plans and flat rate packages. These changes took into account a number of factors such as, among others, costs of providing the different services, fast-changing technological developments and macro and micro economic factors.

International call charges were reduced on average by 8% as from 1 October 2008. Reduced tariffs were implemented for destinations such as Angola, Germany, Netherlands, Sweden, Switzerland, UK, USA, Portugal, Spain, Australia, France, Kenya and rest of the world. Call charges for calls to South Africa and other neighbouring destinations were kept unchanged.

Local and internet dial-up call charges for both prepaid and postpaid calls were adjusted upwards by between 5% and 12% effective from 1 October 2008. Installation and rental charges for ISDN BRA and PRI were adjusted upwards by 10%. Installation and rental charges for basic telephone lines were increased by 10% and 9.4% respectively. These tariff changes were also aimed at accelerating alignment of Telecom Namibia tariffs to associated costs of providing the different services.

Rental tariffs for national leased line services with distances more than 200 km were reduced by 4% effective from 1 October 2008 while installation charges were adjusted upwards by 9.5%. Rental charges for international private leased circuits were reduced by 5% while installation charges were adjusted upwards by 9.5%. Co-location and site-sharing tariffs were increased by 10%.

A new pricing model for internet access was introduced on 1 July 2009. This pricing model entails providing total internet access solutions inclusive of access, customer equipment and international bandwidth all at one price to the customer in an effort to continue simplifying the pricing structure of the different services. Introduction of the new pricing model brought savings for our internet users mainly corporate and wholesale customers as the general internet access tariff structure became more affordable with adjustments made in the process.

A number of pricing promotions were introduced in November 2008 where on-net Switch calls were charged at 1c per second during peak time with an attractive offer of 15c per minute during off-peak time. These initiatives are aimed at giving more value for the end-users.

A number of flat rate packages were introduced for broadband products, including the introduction of unlimited fixed and mobile broadband internet access packages at affordable monthly flat rates for home, SMEs and business users. Another offer was a package consisting of fixed line voice service, fixed broadband and mobile broadband bundled in one at a affordable monthly flat rate. These flat rate packages were introduced on 1 August 2009.

Telecom Namibia reduced the 3G EVDO out of bundle usage tariff from 130c per MB to 50c per MB with the introduction of charging for out of bundle usage from 1 August 2009. An affordable data plus voice package was also introduced in December 2008 for rural customers at a monthly flat rate of N\$199 in an effort to bring affordable internet access through the WiMAX technology to the rural areas.

New pricing models were defined for new services that were introduced during the financial year under review, among others, IP/MPLS VPN with quality of service, Bulk SMS, CLIP/CLIR and point-to-multipoint MetroNET.

### New products & services

Below are the key products and services introduced during the year:

- **MPLS-based VPN services**, known as **Infinitum Plus**. This is a world class state-of-the art offering providing customers with high-quality connectivity designed to fulfill a wide range of business communication requirements.

- **MetroNET Point-to-Multipoint** service consists of a Metro-Ethernet connection between more than two points in one metropolitan area.

- **Broadband Internet Access Professional (Static IP)**: A static IP address is simply a "permanent" address that remains associated with a single computer over an extended period of time.

- **Fax2Email**: The service allows customers to receive traditional faxes as an email attachment into their email inbox. Faxes can be received from anywhere on the globe provided there is access to the internet for reading emails.

- **Prepaid 3G service**: The service is based on the company's 3G-EVDO mobile broadband offering.

- **Caller ID** service allows analogue subscribers to identify the caller before answering the CLI enabled fixed line phone by displaying the number of the calling party.

- **Caller ID restriction** - service prevents the caller's number (A Party) from being displayed when calling B Party.

- **Bulk sms service** to enable sending SMS's in batches (bulk).

- **Ozeki services**: The Ozeki platform provides applications and services such as:

- Database applications, e.g. sms based competitions
- Two way e-mail applications
- HTTP applications
- Script based applications (ASP.NET, PHP, C# etc.)
- File based applications

- **New Switch CPE**: Fixed wireless terminals (FWT) with and without radio were introduced. The FWT can be used as a normal home telephone at fixed line rates.

- **International SMS'**: Switch customers are able to send and receive sms' to the destinations as 2-full way via Belgacom. However, the sending sms' to South Africa is direct with operators (MTN, Vodacom and Cell C) and not via Belgacom.

### Corporate business solutions

Telecom Namibia offers high quality, reliable ICT technical solutions and business systems to corporate customers. The broadband backbone infrastructure and access networks have been expanded to provide a wide portfolio of ICT solutions to customers. These new infrastructure investments included national and regional Internet Protocol (IP) connectivity solutions, such as new points-of-presence (PoPs) and customised corporate solutions.

The solutions focus on data services (Leased line and Metro Ethernet); IP/MPLS VPN services, customer premises equipment (CPE), disaster recovery centre facilities and co-location services. Other solutions are Internet access (Web hosting, Web development, Domain administration and E-mail services), Internet Protocol (IP), video conferencing; structured cabling; e-commerce, LAN, WAN, Intranet & Extranet services, least cost routing, ICT consultancy and other value added ICT products and services.

Telecom Namibia's IP/MPLS backbone is the largest carrier-grade IP backbone in the country, and the company continued to invest in this Next Generation Network (NGN) during the past year, which increased the availability of innovative, new services and applications through a truly converged IP/MPLS offering that provides both data and voice services, with no distinction between fixed and wireless networks.

The IP/MPLS network allows users unfettered, ubiquitous access to other operators' networks, and with capacity for full mobility. The implementation of the IP/MPLS technology enabled Telecom Namibia to introduce further cost reductions on our IP and data product portfolio. The combination of legacy and new services reduced access costs and enabled truly convergence services.

### iWay business

iWay is one of the leading Internet access providers in Namibia, providing dedicated and dial-up Internet services as well as value added services.

In order to grow the portfolio, an opportunity has been identified to develop customised websites for small-medium-enterprises (SMEs) and schools. The iWay customer base has expanded beyond residential customers, service providers and SME's, and now includes many corporate businesses.

### Customer premises equipment

Telecom Namibia sells and rents customer premises equipment (CPE), such as telephones and private branch exchange (PABX)

systems, as well as maintenance thereof. The CPE market is characterised by high competition and low profit margins. However, Telecom Namibia remains committed to this business and believes that the supply and servicing of CPE is an essential part of providing a full end-to-end service to customers.

#### ICT consulting and design

In the area of ICT consulting and design, Telecom Namibia provides such services to business customers, focusing on technical network optimisation, network design, customised solutions and project management to address the ICT needs of current and potential customers.

#### Service delivery & assurance

The launch of new products and value added services is not sufficient to grow the market share. The key to sustain business and streamline the revenue flow lies in the service provider's effectiveness in customer service, the quality and promptness in responding to issues and network faults. In other words, service assurance is very important in today's telecommunications ecosystem.

Telecom Namibia has achieved improvements in the level of quality of service and average efficiency performance statistics for the year are as follows:

The fault rate stands at 287 per 1000 lines, which is an improvement of 6.5% against the target of 307.

Total fault repair time dropped from 2.5 days from October 2008 to 2.1 days at the end of September 2009.

The average installation response time for the year is 8.38 days against the target of 11 days.

#### Conversion to new technologies

Telecom Namibia has been migrating customers from obsolete technologies to its latest generation of access technologies (WiMAX & CDMA). The installation of an IP/MPLS transport network with a softswitch platform supports the migration of the PSTN network towards a full IP infrastructure to deliver next generation, multimedia services for end users.

The first residential customers on the DECT and MGW systems were migrated onto the new networks during the past two years. Some customers connected to old technologies such as magnolia, magneto and SOR-18 were also converted to WiMAX. This process contributed to the recovery of approximately 272 610 kg of copper wires.

The project to retire obsolete technologies is a critical milestone in the multi-year, N\$1.0 billion transition to a totally new network platform that will deliver triple play (voice, data and video bundle) services.