

N.M.I.T. 2691

**A GATEWAY TO THE TECHNOLOGICAL
BOOM**

To 2691



SIS Project Report

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FALL 2004

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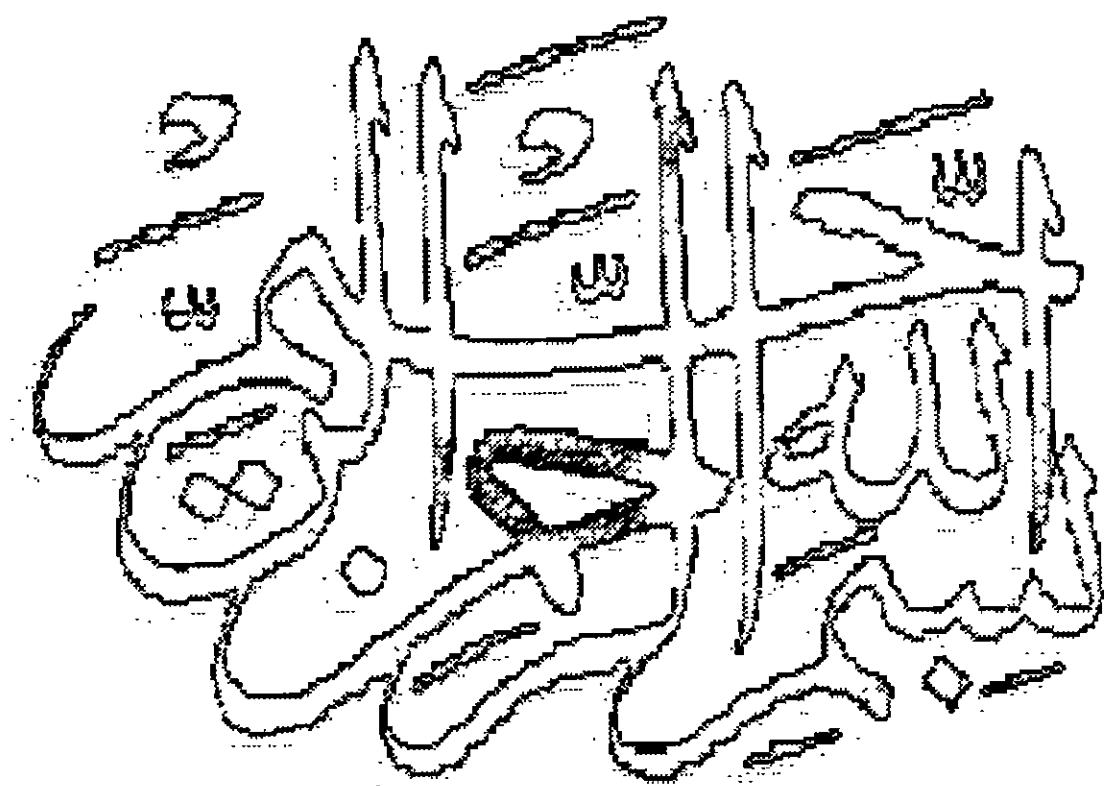
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1- mobile communication systems

2. Cell phone systems

Annotation Tools

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FINAL APPROVAL

This is to certify that we have checked and evaluated the SIS Project Report
"A GATEWAY TO THE TECHNOLOGICAL BOOM" developed by group of
following students

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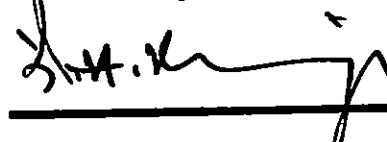
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It is approved that this final Project Report is of optimal standard. To warrant it
acceptance by International Islamic University Islamabad and by the Department
of Technology Management for MBA-ITM degree in Management Sciences.

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We are also thankful to **Mr. Aasif Inam**, Director Commercial Affairs PTA, **Mr. Zeeshan**, Deputy Director Commercial Affairs PTA, **Mr. Farhan** HR Manager (Ufone), **Col Aziz Ahmad**, Manager MIS PTCL, **Syed Naveed Akhtar** Marketing Officer (Mobilink) for their special interest in assisting us in this regard. We would also like to extend our heart felt appreciation to our friends who gave valuable suggestions during our work.

Here we would also like to share a deep sense of appreciation for our friends who also contributed in this project in terms of their though provoking views and comments. We would also like to thank to all those who were part in the completion of this report and whose names may not be mentioned in this report.

Raja Irshad Hussain
Mohsin Iftikhar Abbasi
Muhammad Gulzaib
MBA-ITM 6
February 12, 2005
Rawalpindi

DEDICATION

To

**Our beloved parents who remain a source of inspiration for
all of our endeavors and this project in particular. It was their
prayers that assisted us in the accomplishment of this uphill
task.**

EXECUTIVE SUMMARY

When we talk about MBA in IT management we come across a very special feature of this program which is strategic information system (SIS). It plays a viral role in bringing the best out of students and to give them an opportunity to polish their professional skills and capabilities, especially at the time when they are at the threshold of their professional careers.

We as a group endeavor to make a distinctive contribution by integrating the various fields which we have learned so far. We strongly believe that the way forward in the corporate sector is to blend IT with other disciplines is a way that the strategic decision making gains a competitive edge in current cut throat competition.

Our project has two fold purposes. Firstly it enabled us to utilize and enhance our skills and capabilities and secondly it provided useful analytical information to the companies which are involved in it. We identified four areas, which we focused. It involved thorough market research of the existing operators, including customer satisfaction, promotional tactics being adopted. Secondly we proposed our own market plan for the new entrants to capture the market and make their presence felt.

In the financial phase we focused on the financial aspects of the new and existing operators and their revenues and major spending, budgeting as of course their financial soundness. It comprises of a detailed analysis of their respective annual reports that involve balance sheets, income statements, cash flows etc.

In this HR phase we analyzed the HR policies of the respective companies. Their compensation plans, performance appraisal methods. We also gauged the employee satisfaction level in the companies. The major source of information for this project has been PTA, PTCL, Mobilink and Ufone and also extensive visits, interviews, questionnaires, surveys and online sources as well.

Initially the main constraint in this project was the access to information but this obstacle was resolved through kind consideration and coordination of PTA.

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HISTORY OF TELECOM

We are living in the information age. The world has become the global village. But what has caused this change is technology. In technology the revolution has been brought about by Telecom. It's really the telecom which condenses distances and now there is talk of information war all around. The telecom sector has gone through evolutionary stage but the real stimulus which causes the advancement in the telecom or made the telecom a buzz word is something called "GSM". To know what GSM really is let us exploring it in detail.

During the early 1980s cellular telephone system were experiencing rapid growth in Europe, particular in United Kingdom and also in France and Germany. Each country developed its own system which caused compatibility problems while communicating with other equipment else where this was an undesirable situation, because not only was the mobile equipment limited operation with in national boundaries but there was also a very limited market for each type of equipment. In order to cope with this problem Europeans formed a study group which was named "GSM" (Group Special Mobile) in order to solve this problem. The proposed system was given certain standards to be met. The first and the foremost were good voice quality, low cost, support for international roaming, compatibility and support for range of new services.

As a result of the work done by the group, commercial service of GSM was started in mid 1991 and by 1993 there were 36 GSM networks. Over 200 GSM networks are operational in 110 countries around the world. In the beginning of 1994, there were 1.3 million subscribers worldwide, which had grown to more than 55 million by October 1997.

The developers of GSM chose an unproven (at the time) digital system, as opposed to the then-standard analog cellular systems like AMPS in the United States and TACS in the United Kingdom. They had faith that advancements in compression algorithms and digital signal processors would allow the fulfillment of the original criteria and the continual improvement of the system in terms of

quality and cost. The over 8000 pages of GSM recommendations try to allow flexibility and competitive innovation among suppliers, but provide enough standardization to guarantee proper inter working between the components of the system. This is done by providing functional and interface descriptions for each of the functional entities defined in the system.

HISTORY OF TELECOM IN PAKISTAN

In 1947 Pakistan's Telecom sector inherited the British Post, Telegraph & Telephone [PTT] Departments with a minuscule base of 7000 telephone lines. For 30 years this entity lumbered and slumbered with its old mechanical, analog 'Strouger' switches and analog telephone lines, protected in its monopoly, both local and global. By 1962 this PTT Department was split up into the Telephone & Telegraph Department and the Postal Departments. By 1991 this was further re-organized thorough the PTC Act 1991 opening this public sector to the private sector companies. Licenses were granted for non-basic services where the PTT had no experience base. These were Data Network Services, Paging, and Manufacturing of Small Telephone Exchanges ["Digital Communications being the first company to do so].

Once [1995] the Internet exploded onto the Global Telecom scenario, it was evident that the old Pakistan Telecom monopoly was no longer able to cope with the influx of new revolutionary technologies . As recently as 1994, trained basically in voice telecomm technologies , a Divisional Engineer at a PTCL city exchange could not believe that data could also be sent over a telephone line. By 1995 PTCL General Managers were being advised by private sector telecom companies that Voice Mail and Email should be added to the services offered by PTCL.

The Pakistan Telecommunication Ordinance 1994 provides a legal framework for active participation of the private sector in the development of telecommunication services.

The Act also provides a legal base for the establishment of the Pakistan Telecommunication Authority, whose mandate was to regulate the telecom sector. The Frequency Allocation Board (FAB) was made responsible for frequency spectrum management and its monitoring. National Telecomm Corporation was set up to provide telecommunication services to public sector

(Govt & Defense) organizations. Pakistan Telecommunication Employees Trust (PTET) was created as a trust to takeover statutory function to disburse pension and other benefits to the employees of the PTCL. Pakistan Telecommunication Company Limited (PTCL) was incorporated as a public limited company, with the objective of providing domestic and international telecommunication and related services. About 95% of the assets and liabilities of PTC, at net book value, were transferred to PTCL whereas the remaining 5% assets were vested in PTA, FAB, NTC and PTET. The vesting of assets to new entities took place with effect from 1st January 1996.

By 1996, PTCL management was operating in defense mode trying to play catch-up, which it did well to learn fast. It sent its engineers to various western countries and companies to learn new Data Networking and Internet and Wireless Technologies but the sheer size of this New Wave Technologies was of Tsunami proportions, as the western countries and companies also learned to their discomfort and loss of competitive advantage. It manufactures some basic Microwave technology cards in its factory in Haripur [TIP].

No indigenous PTC digital telephone exchange design or manufacturing capability was built during 1947 to 2003. Some local software expertise was created by Alcatel in its operations in Islamabad. But nothing took place as it did in India during 1985-1990, when Sam Pitroda , a U.S. venture capitalist and telecom entrepreneur[originally from Orissa, India— made his money by selling his telecomm company in 1970's to Rockwell in Chicago, USA . Pitroda found a receptive ear in Rajiv Gandhi. Rajiv Gandhi thanks to his basic telecom exposure as an Airline Pilot was able to see the importance of an Indian Telecomm industry. Against a similar bureaucratic infra structure to Pakistan's PTCL, Sam Pitroda created C-DOT [center for the development of telematics. In doing so the first low-cost, non-air-conditioned, Rural Telephone Exchange [called RAX] of about a 1000 to 5000 lines was made and later its license sold to many Indian companies. It was also exported to about 30 African and Asian countries earning valuable foreign exchange for India.

The subsequent moves by the PTCL management are noticeable in their "creative destruction" strategy. Pakistan Telecom Foundation [PTF] was formed in 1997 to defend the Data Network sector against private sector data network operators. By 1999 **PakNet / Pak Data Comm.** Was split of from Pakistan Telecom Foundation to look after the pure Data Network sector and Pakistan Telecom Foundation was left with retired PTCL engineers to run more mundane and less specialized engineering of Laying Telecom Cables.

More recently [1994-2003] as Private cellular operators [**PakTel, Instaphone, Mobilink**] raced ahead with Mobile Voice Networks [both AMPS and GSM]; PTCL launched their private Mobile Network company **Ufone**. More recently PTCL is trying to enter the area of Hybrid Fiber Cable [HFC] –TV networks after the initial launch of **World Call's** HFC networks in Lahore and Karachi affluent suburbs. By first quarter of 2003 these payphones numbered 21,000. **Arfeen** which started with **Instaphone** Wireless and **Supernet** Data Networks [Frame-Relay Networks] has launched Telecard Pay phone initially using land lines from PTCL. In 2000 it launched fixed wireless [using CDMA technologies] payphones in Karachi under the name "**Foree Fone & Na Taar Na Intizzar**". By first quarter of 2003, these payphones were operating from Karachi, Lahore and Islamabad at a total number of 50,000. By December 2003 PTCL obtained an extension of the De-Regulation of the Telecom sector deadline set by WTO and March 2003 was the new deadline.

NETWORK INFRASTRUCTURE

Mobilink

Mobilink GSM is a subsidiary of ORASCOM TELECOM, an Egyptian company. Mobilink started its operation in Pakistan after getting a GMS license in 1994. The company has approximately an investment of 750 million dollar in Pakistan. It has a customer base of about 4 million which makes it market leader with 58 % market share.

During the last five years mobilink has setup one of the largest cellular networks of the country. Currently they are covering more than 300 cities and towns. The company has invested \$ 750 million to date and it plans to invest \$ 410 million investment in year 2005.

GSM Network Equipment Details

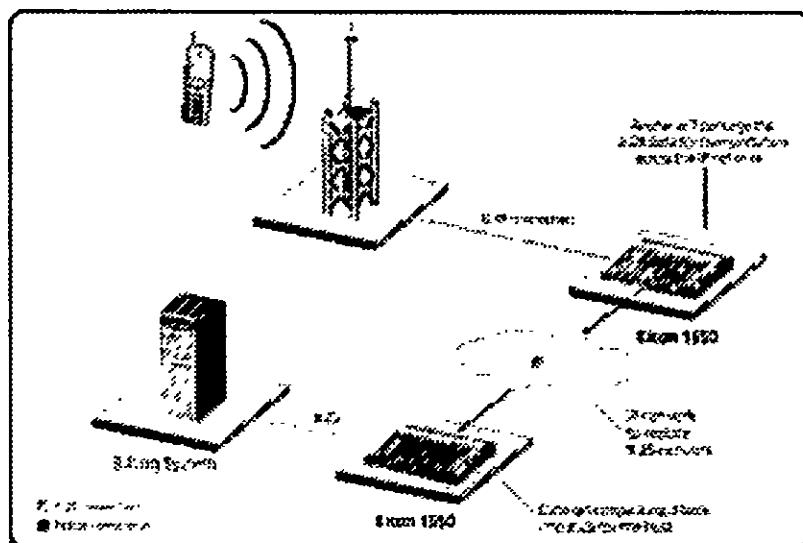
| | |
|-----------------------------|-------------------------------------|
| Switches | Siemens |
| Radio Base Station | Motorola |
| Billing System | Telesens KSCL and Ericson |
| Intelligent Networks | Siemens |
| Microwave Equipment | DMC |
| Operating Frequency | 900 MHz (upgrading 1800 MHz) |
| SMSC | CMG |

Siemens Switches

The Siemens EWSD narrowband switch is the best selling public switching system in the world. There are over 250 million EWSD ports installed in 103 countries today. Surpass as part of the Next Generation Internet solution offers STP's, Virtual Trunking, and Next Generation Local Switch & Multi-Media Applications.

Intelligent Networks

Siemens Intelligent Networks enables the provision of a wide variety of services, ranging from the "standard" IN-services to highly customized multi-media services spanning across several networks



Billing System

Micro Wave Equipment

There are many factors that determine which frequency band will be used. Early microwave links were implemented using lower frequencies, such as 2 GHz and below. Frequencies were easily obtained and equipment was readily available but today these bands are congested. Typical frequency bands now in use in cellular systems are 8, 10, 13, 15, 18, 23 and 38 GHz, though some of these may not even be available in some countries. Cellular operators are usually assigned three or four frequency bands for the design of the transmission network, the most common being 8, 15, 18 and 23 GHz.

For ease of frequency co-ordination, two or three channels from each available band should be secured and allocated so that when assigning frequencies for the microwave link, only interference from within the network has to be considered. Optimally, frequency bands should be matched to the path as follows

- Higher frequencies – shorter paths.
- Lower frequencies – longer paths.

While the disadvantage of using higher frequency bands on longer paths is rain outage, the drawback of using lower frequencies on shorter paths is frequency congestion.

ASSIGNING FREQUENCIES

If these criteria aren't adhered to, the design engineer will almost certainly have frequency congestion problems in the future. For example, if 15 GHz systems are used for a path distance of 1 km, this will use up the 15 GHz frequency band quickly making it unavailable for future path distances of 7-15 km. Practical design considerations require the 18 or 23 GHz band to be used for one KM paths and the 15 GHZ band for longer ones.

Most duplex systems are 'band split' in their use of transmit (T) versus receive (R) frequencies. A radio's transmitter may be broad casting in the higher region of the band with its duplex receiver 'looking' for a signal in the lower region of the band. Conversely, the next site will be reversed such that a HI/LO becomes a LO/HI if the convention of Tx/Rx is taken. A HI/LO convention needs to be established to ensure that a site will not interfere with itself.

Path Distance Frequency Band (GHz)

| Path Distance | Frequency Band GHz |
|--------------------|--------------------|
| Less than 7 Km | 18 or 23 |
| 7 to 20 Km | 13 or 15 |
| Greater than 20 Km | 2,8,10 |

Once the frequency band has been chosen, the proper frequency channel must be assigned to the microwave link. This should be selected so that it will not interfere with other operation systems. In addition, the frequencies must be planned in such a way that there is no HI (high end)/LO (low end) violation

Most duplex systems are 'band split' in their use of transmit (T) versus receive (R) frequencies. A radio's transmitter may be broadcasting in the region of the band with its duplex receiver 'looking' for a signal in the lower region of the band. Conversely, the next site will be reversed such that a HI/LO becomes a LO/HI if the convention of Tx/Rx is taken. A HI/LO convention needs to be established to ensure that a site will not interfere with itself.

This should complete the final system design parameters and the design engineer should have the following information

- Radio type (power output, MHSB, Forward Error Correction, Space Diversity, frequency Diversity, etc.)
- Frequency band
- Antenna size
- Cable type
- Frequency channel.

Now, the cell site can be built the work order should contain all the necessary information to construct the cellular site, including civil cellular and microwave data. The microwave information should include

- Final routing diagram (including frequency plan)
- Path calculations
- Tower profile to indicate antenna heights
- Rack profiles
- Floor plans
- Radio installation information
- Power consumption

- Growth considerations. If all the aspects of the planning outlined here have been followed, the design engineer should have all the necessary resources required for the design of a microwave system within a cellular environment.

| BRAND AND MODEL | DESCRIPTION | FREQUENCY (MHz) | | POWER (W) |
|--|------------------------------------|------------------------|-----------|------------------|
| | | From | To | |
| DMC STRATEX NETWORKS ALTIUM SDH 10/11GHZ STM-1/OC3 | PRIVATE FIXED LINK EQUIPMENT | 10500.00 | 11700.00 | 0.07 |
| DMC STRATEX NETWORKS ALTIUM SDH 15GHZ STM-1 | FIXED STATION TRANSCEIVER / OC3 | 14400.00 | 15350.00 | 0.04 |

SMSC Feature Summary

CMG SMSC

CMG's Short Message Service Center (SMSC) is the only true performing central store and forward facility that accepts, buffers, processes and distributes up to 2,500 short messages per second in a mobile network. It is the business critical device – the heart in fact – of any successful SMS operation. CMG Wireless Data Solutions was the first vendor in the world to deliver a High Performance Short Message Service Center, a single platform far exceeding industry performances.

CMG now offers SMSC solutions for every operator who is serious about growing their messaging traffic, no matter what size.

This Feature Summary highlights some of the key features of the CMG SMSC.

Operator Functionality CMG's SMSC provides the operator with functionality to operate the MSC in a professional environment. Key areas and highlights are

Subscriber related functions

Flexibility in provisioning (or not provisioning) the platform with subscribers

Specific features for subscribers, like distribution lists,(un-)conditional redirection, fax delivery and reporting, wire line access by password, etc. Provisioning interfaces through command line (supports scripting) and X-windows terminals

Ericsson SOG and BGW interfaces, Subscriber profiles

Billing System

Flexible generation of Call Detail Records (CDRs) of all messages, including notifications. The SMSC is capable of assembling these CDRs in billing files, which are made available for retrieval by the operator's billing system. CDRs are in ASN.1 format Specialized PC-based tools available to support a Customer Care helpdesk

Operations and Maintenance

Full support of platform management services, through command lines and X-windows terminals Event management, storing all events, filtering available to tune event notification to system operator's needs Extensive trace and system monitoring tools

CMG helpdesk support is available from CMG engineers around the world, 24 hours per day, 7 days per week Specialized PC-based tool available to support the generation of Statistics reports

Third Parties

Application Programming Interface. The SMSC supports an Application Programming Interface (API) for submission and delivery of Short Messages through UCP (Universal Computer Protocol), a de-facto industry standard for sending and receiving Short Messages. The API supports all functions as defined in UCP. The API is available for UNIX and Windows 95/NT environments

Interworking with CMG's Value Added Services Platform

Provides excellent user-friendly, state-of-the-art services, like Internet Gateway, Information Services, Smart Mobile Gateway, Interactive Voice Response, Over-The-Air activation services, etc. In GSM networks, the SMSC platform and application can easily be combined with an Equipment Identity Register (EIR). Addition of the EIR application does not require additional hardware or system software. SMSC – Short Message Service Centre – Feature Summary

End-user Functionality

CMG's SMSC provides the end-user with a number of attractive functions. The most important ones are described below.

Subscriber Access

The end-user (either as subscriber or non-subscriber) can access the SMSC via one of following access-paths Short Message Service using the Mobile Station Interworking facility with wire line networks (via UCP, TAP, etc) Internet access through email and web-pages "Dumb" terminal Interworking (TTY, VT-type) Mobile Originated Short Messages can be directed to any other well-defined address (ITU-T E.164), a data address (ITU-T X.25), a Short Number, an Alphanumeric number, or an Internet address

Subscriber features (selected)

Notifications (Acknowledgements of receipt, Status reports) indicating the message is buffered in the system, delivered to the end-user or not delivered. The notification can also be redirected to other parties. Command scanning, providing a command structure to

Instruct the SMSC from the handset (e.g. redirection to a fax). Distribution lists (UN) Conditional Redirection Fax delivery and Fax report

Large Account features (selected)

"Large Accounts" are typically systems of service providers, information providers, corporate accounts, etc. Specific features can be enabled for each Large Account

Large Account throughput regulation Access for self-maintenance of the subscriber database (blacklist, white list) multiple access paths for high

performance, redundancy and fail-over. Access security, provided by password protection. Virtual SMSC

SMSC Platform Architecture

Since September 1993, CMG has successfully implemented the SMSC in the largest GSM networks around the world. The SMSC has been designed for application in high throughput and highly reliable networks.

Key design features

The key design principles in this respect are still reflected in the current architecture

CMG's SMSC is still the platform providing the highest throughput rate of all SMSC's in the world. Current benchmarks demonstrate a sustained performance of over **550 SM/s** (Short Messages per second);

COMPUTER NETWORK INFRASTRUCTURE

Mobilink

The network model being deployed by Mobilink is **Server based** and there are about **Fifteen Servers** (Sun, IBM, HP and Unisys). There are about **2250 Workstations** working all over country. **Ethernet 100 base T** architecture is used as LAN connectivity technique. The topology used is **Star** by the Mobilink. Cables are used for different purposes like linking the Server with different departments including Engineering, Equipment and workstations, **UTP CAT V** cables and **Wireless** are used as data transmission media.

They are using **Switches** for connecting different floors with each other and **Routers and ISDN modems** are used for linking with the external networks.

Their specifications are as under;

| DEVICES | DESCRIPTION |
|---------------------|----------------------|
| Routers | CISCO |
| Ext. Modem | U.S. Robotics |
| Protocols | TCP/IP |
| Switch | D-Link |
| Workstations | 2250 |

Security Features

the network security is very critical issue in any network. But in case of cellular networks its importance is even more crucial. This fact is duly recognized by Mobilink therefore it has worked out a very comprehensive and foolproof security mechanism. They have implemented security at two levels.

- Internal level security
- External level security

Internal security

The basic purpose of the internal security is to protect a network from threats that are posed from the organization itself. These include unauthorized access to data, loss of crucial data. In order to cope with these issues a robust security solution is implemented which is as follows.

- Server based network
- Active directory services
- User Accounts

External security

The basic purpose behind implementing the external security in an organization is to save its network from external threats. These threats include unauthorized data traffic, viruses attack, hacking. In order to eliminate and control these issues the strategies adopted are as under by the mobilink;

- Access List
- Firewalls
- Anti viruses.
- PK infrastructure
- Encryption techniques.

UFONE

The Brand name of Pak Telecom Mobile Limited is 'Ufone'; this brand name engulfs the company's core values. The U stands for the people as a whole- the u concept in business, the customer & Fone means a device for communication, thus the brand name of the company say it out loud and clear '**A company providing the services of mobile communications for you**'.

Pak Telecom Mobile Limited (UFONE) as known to us was formed as a 100% subsidiary of PTCL. The company launched its services on the 29th of January 2001. Now U-Fone has subscriber base of 1.9 million and the company intends to expand this to 4 million in the near future. It will add 200 more cities to its network. The total investment so far made by the company is \$350 million. The existing infrastructure of U-Fone is second largest among the cellular companies in Pakistan. During the financial year 2003-04 the company earned revenue of Rs 770 million.

COMPUTER NETWORK INFRASTRUCTURE

Ufone

Nortel Networks has provided Ufone's wireless infrastructure since the beginning and is key to helping them in providing the state of the art services to its customer. The detail specifications of the internal computer network of Ufone is mentioned as follows.

| DEVICES | DESCRIPTION |
|----------------|---------------------------------|
| Routers | CISCO |
| Ext. Modem | U.S. Robotics |
| protocols | TCP/IP |
| Switch | CISCO |
| Servers | DCON SERVER, RACALS, SUN SERVER |
| Workstations | 2200 |
| Domains | 4 |

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- Anti viruses.
- PK infrastructure
- Encryption techniques.

PTML SELECTS NORTEL NETWORKS TO EXPAND UFONE GSM/GPRS NETWORK

To meet accelerating demand for new wireless connections across Pakistan's major cities, Pak Telecom Mobile Limited (PTML) has selected Nortel Networks* [NYSE/TSX NT] to significantly expand its Ufone GSM (Global System for Mobile Communications) / GPRS (General Packet Radio Service) network over the next year under agreements estimated at US\$125 million.

Nortel Networks will upgrade Ufone's existing wireless systems and supply new GSM/GPRS core network and radio access equipment, including Mobile Switching Center, Home Location Register (HLR) and advanced Base Transceiver Stations (BTS).

A key component of the Ufone expansion will be Nortel Networks BTS 12000, designed to deliver additional capacity within a GSM/GPRS network while positioning operators to drive lower costs and to offer advanced wireless services based on third generation (3G) EDGE (Enhanced Data for GSM Evolution) technology. The expansion will also include Nortel Networks Passport Packet Voice Gateway (PVG) for migration of TDM voice Trunking to a packet-based infrastructure.

Nortel Networks has been supplying wireless infrastructure equipment to PTML since 2001.

Nortel Networks has designed, installed and launched more than 300 wireless networks in over 50 countries across the globe. Nortel Networks was the industry's first supplier with wireless networks operating in all advanced radio technologies (GSM/GPRS/EDGE, CDMA2000 1X and 1xEV-DO, UMTS and WLAN), and is the only end-to-end provider of all next generation wireless solutions.

Pak Telecom Mobile Limited (PTML), a wholly owned subsidiary of Pakistan Telecommunications Corporation Limited (PTCL), launched Ufone on January 29, 2001 and, later that year, deployed a GPRS solution to enable a wireless

Internet capability. Since its inception, Ufone has been a highly successful venture both in terms of subscriber uptake and network coverage. In its first four months of operation, it attracted some 100,000 subscribers and its third and most recent expansion, in 2003-4, raised capacity to over 1.5 million subscribers. As a global innovation leader, Nortel Networks enriches consumer and business communications worldwide by offering converged multimedia networks that eliminate the boundaries among voice, data and video. These networks use innovative packet, wireless, voice and optical technologies and are underpinned by high standards of security and reliability. For both carriers and enterprises, these networks help to drive increased profitability and productivity by reducing costs and enabling new business and consumer services opportunities. Nortel Networks does business in more than 150 countries.

NEW ENTRANTS OVERVIEW

Warid Telecom

Warid Telecom is owned by The Abu Dhabi Group which is led by His Highness Sheikh Nahayan Mabarak Al-Nahayan. Abu Dhabi Group apart from having a substantial share holding in Bank Alfalah and United Bank Limited has also other investments internationally in the Telecommunications, Financial Institutions, Hospitality & Property, Oil Exploration Supplies and Automobile Industries.

Warid Telecom intends to launch its nationwide GSM network in the first half of 2005 to cater to the current unmet demand for quality mobile services. With new entrants, customers will be provided with more choices, better quality of services, cheaper rates and many new innovative products, which Warid Telecom wishes to pioneer.

In addition to its mobile services, Warid Telecom will be launching a Long Distance & International and Wireless Local Loop business shortly. This service will provide international termination of traffic into Pakistan, alternative affordable nationwide and international voice telephony and data & value added services. These services also target a market that is highly price competitive and quality conscious.

Warid Telecom also providing the national transmission network ,providing quality connectivity across Pakistan, vertical integration into complimentary markets such as Call Centers and Product Development, and several other options.

Alliances

Sales & Marketing and Business Development are critical for any company's success. Warid Telecom appreciates the importance of strategic partners in creating synergies which allow faster time to market and new avenues to sell. To that extent, Warid Telecom has defined an Alliance Program to provide preferential terms to its key Partners enabling them to sell these services to grow existing business and develop new opportunities. The Alliance Program will encompass new product launches, affinity Sales & Marketing programs, O&M

agreements and value added reseller programs.

Warid Telecom's partnership philosophy encompasses key stakeholders such as

- International Telecom Operators / Carrier Sales Business
- Wholesale and O&M Partners (e.g. Calling Card, Payphones, VoIP resellers and Agents)

Corporate & Retail Partners (Financial Institutions, Hospitality, Oil & Gas, SME/SOHO, Textiles, etc

Nortel and Cisco are key technical partners of Warid Telecom, providing full LDI services across Pakistan.

Ericson

Ericsson is the world's leading GSM supplier, with approximately 40 per cent market share. Ericsson has been instrumental in the creation, development, standardisation, deployment and growth of GSM, the world's most widely deployed mobile standard. Its portfolio of base stations is built for cost-effective implementation and operation, including common platforms, common OSS systems and scalable radio and core network solutions.

Ericsson's WCDMA leadership builds on its GSM strength, and share a common core network, service network and mediation and network management systems. This allows its GSM customers to deploy WCDMA equipment more quickly and less expensively.

Ericsson's Managed Services offering ranges from building, operating and managing day-to-day operations of a customer's network, to hosting service applications and enablers, as well as providing network coverage and capacity on demand. Ericsson has signed 18 major managed services contracts since 2002 and has a proven track record in managing complex multi-technology

systems.

Ericsson is shaping the future of Mobile and Broadband Internet communications through its continuous technology leadership. Providing innovative solutions in more than 140 countries, Ericsson is helping to create the most powerful communication companies in the world.

Ericsson Pakistan has been supporting the telecommunications industry of Pakistan for more than 40 years. Its long-term commitment to the country is underscored by a strong base of highly skilled employees, a number which is expected to grow significantly as a result of the partnership with Warid Telecom.-

NETWORK PROVIDED BY ERICSON

Warid Telecom Pvt Limited (Warid Telecom) has chosen Ericsson to build a green-field nation-wide GSM network in Pakistan. Under the Letter of Intent (LOI) signed between the two parties, Ericsson will provide a complete turnkey GSM solution comprising the supply of core, radio network equipment, professional services covering complete network design, rollout, managed services encompassing full network operations and maintenance.

"By having a leading international leader such as Ericsson as a partner, they will deploy a cost-effective network that provides for scalable coverage, while at the same time is flexible and future-proof to accommodate future capacity expansions and next generation services.

Warid also wants to capitalize on Ericsson's established technology leadership and experience in the evolution of GSM towards 3G, to ensure that Warid is able to quickly offer data centric services to relevant subscriber segments when the demand arises".

Ericsson's expertise in managed services will help Warid Telecom achieve operational efficiencies and allow it to focus on core activities such as sales & marketing and revenue-generating activities to address and maximise the market potential.

Ericsson is chosen by Warid to provide leading-edge solutions and managed services for the establishment of its GSM network to meet the communications needs of Pakistan

As a pioneer of mobile communications in Pakistan Ericsson has a long established local presence will also augur well for the partnership. Ericsson recognised network of contractors and deep understanding of the country's procedures will enable Warid Telecom to stay on track with its aggressive rollout plans.

VOIP SOLUTION PROVIDED BY NORTEL NETWORK NORTEL NETWORK

Nortel Networks is the industry leader and innovator focused on transforming how the world communicates and exchanges information. The Company is supplying its solutions to service providers and enterprise customers with communications technology and infrastructure to enable value-added IP data, voice and multimedia services spanning Wireless Networks, Wire line Networks, Enterprise Networks, and Optical Networks. As a global company, Nortel Networks does business in more than 150 countries. For the entire year of 2003 and the first quarter of 2004, Nortel Networks ranked #1 in the global markets for voice over packet ports shipped and global soft switch revenue, according to Synergy Research Group.

Nortel Networks, which has a proven portfolio of products and services for packet voice services, is providing its Succession voice over packet solutions to a number of leading operators, including Bell Canada, Cable & Wireless Cayman Islands, Charter Communications, China Netcom, China Railcom, Cox Communications, Hong Kong Broadband Network, MCI, Sprint and Verizon Communications.

Nortel Network VoIP Services

Warid Telecom Selects Nortel Networks VoIP Solution to Build Long Distance Network in Pakistan; Four-Year Frame Contract Signed for Procurement of NGN Infrastructure. Arid Telecom has awarded Nortel Networks (NYSE:NT) (TSX:NT) a four-year frame contract to provide a voice over Internet

Protocol (VoIP) next generation network (NGN) in Pakistan. This highly efficient network will allow Warid to deliver high quality National and International Long Distance under license from the Pakistan Telecommunications Authority (PTA).

Under the frame contract, Warid Telecom will deploy Nortel Networks VoIP Long Distance Solution, which includes Nortel Networks Succession Communication Server (CS) 2000-Compact and Nortel Networks Passport Packet Voice Gateway (PVG), to deliver full-featured, carrier-grade telephony and data services. In

Addition to fixed-line long distance traffic, the Nortel Networks backbone will also be capable of carrying wireless traffic and local loop traffic for Warid Telecom's future GSM subscribers.

Warid selected Nortel Networks because of its global leadership in IP telephony and NGN technologies and because of its strong local presence in Pakistan.

The Warid Telecom next generation network will be based on two Nortel Networks Succession

- Communication Server (CS) 2000-Compact super class soft switches, 15 Passport PVGs – including one in the United Kingdom to serve as Warid's first international POP (point of presence) gateway
- Nortel Networks Periphonics Pre-paid Services Platform to provide a pre-paid calling solution capable of supporting unique value added services.

Nortel Networks Succession CS 2000-Compact soft switch enables service providers to deliver the full suite of traditional voice services to business and residential customers on a packetized network, with voice and data traffic sharing the same communications lines to provide more efficient and cost-effective use of existing transmission capacity.

As a trunk gateway, Passport PVG is an integral part of Nortel Networks IP telephony solutions. It offers complete carrier-grade options for long distance, local exchange, and wireless and cable operators.

Telenor Corporation

Mobile is Telenor's business area for development and management of mobile services within voice, data, Internet and content services in Norway and internationally Telenor Mobile has ownership interests in 12 mobile operations and is geographically concentrated in selected countries in Europe and South East Asia. In 2003, 42% of Telenor's external revenues were derived from the mobile operations. Telenor Mobile's international commitments are based on Telenor's acquired experience and skills, and on products and services developed in the Norwegian market. The creation of synergies between the mobile operations, and preparations for further industrialization will be central to Telenor's future strategy.

The Power of Mobile Interactivity

- **CREATE** new audiences and revenues using our interactive mobile solutions.
- **CONNECT** with over 95 million mobile subscribers across the US via our partnerships with the leading US wireless carriers
- **COMMUNICATE** more effectively and efficiently with your target audiences

On April 14, 2004 Telenor acquired a nationwide GSM license in Pakistan. At present this license for mobile operation includes GSM, GPRS and EDGE. Telenor's Pakistani company will launch a world-class mobile service platform including multimedia services in April 1, 2005.

The license terms stipulate that by year 4 we will cover 70 per cent of Pakistan's 297 administrative Tehsil headquarters. Telenor will naturally at least fulfill the license requirements and provide superior quality coverage.

Telenor's Pakistani mobile operator will have headquarters in Islamabad and regional offices in Karachi and Lahore.

Telenor is ranked by the GSM Association among the 12 largest mobile operators in the world, with 34.2 million subscribers at the end of March 2004, based on 100% figures from the operations. Telenor has owner shares in mobile operations in 11 countries across Europe and Asia in addition to the license in Pakistan. The family of mobile operations benefit from economy of scale and sharing of knowledge and best practice initiatives

NETWORK PROVIDED BY SIEMENS

Telenor and Siemens have signed an agreement for the deployment of a cellular network of Telenor in Pakistan; both the companies signed the accord for the supply, installation, commissioning, operation and maintenance of cellular infrastructure all over Pakistan in Islamabad. Telenor plans to invest \$1 billion over the next five years.

Siemens is one of the top 3 players in the global mobile market coming especially strong in the field of products for mobile telecommunication networks. The Siemens Mobile Networks masters nearly all technologies offering a wide range of products and services for GSM, GPRS and UMTS to more than 180 international customers in more than 90 countries in the world. Well established as a supplier of Core and Radio products, Networks demonstrates best-in-class availability and reliability for installations throughout the entire world market.

Distinctive Features of Siemens

- Resorting to long-term experience in and profound knowledge of the telecommunication industry
- Partnering with strong, competent firms, who are as reliable as Siemens.
- Keeping the think tank working to shape the future of the mobile telecommunication world thus anticipating the needs of tomorrow.

Core areas covered by the Siemens;

- Radio Network
- Core Network
- Network Management
- Professional Services
- Microwave Solutions
- Public WLAN Solution
- IMS Products
- Smart Inspire Solution
- HSDPA

T.2691

EXTENDED VALUE ADDED FEATURES

Radio Network

Siemens Base Station Systems (BSS) for GSM900/1800/1900 standards are designed to respond to any market or operator requirements.

The equipment supports all fully standardized open-system interfaces and permits maximum flexibility in network design and convenient adaptation to subscriber density. As our customer, you can choose from a wide range of indoor and outdoor equipment for large or small capacity cells with a variety of transmission media.

Radio Network components by Siemens for every available technology are successfully introduced into the global mobile market.

GSM Portfolio

Mobile Telephony for everybody everywhere. Siemens and GSM are a winning team when it comes to setting standards.

GPRS Portfolio

Higher data rates by saving network resources with a smart coding scheme is the formula of GPRS. Radio Network components by Siemens make sure the formula works.

EDGE Portfolio

Maximum network availability with minimum investment. EDGE by Siemens knows the trick.

W-CDMA Portfolio

Capacity on demand is what W-CDMA promises among many other quality features. Siemens fully addresses this feature-rich technology with UTRAN product family.

TD-SCDMA Portfolio

Gaining access to networks the best

GPRS – the Full Potential

Huge market for mobile data services

With the explosive growth of the Internet, the demand for access on the move is soaring. Today, there are more than 684 million GSM subscribers worldwide (status May 2002), and by 2004 it is estimated there will be more mobile than fixed Internet users. In this maturing market, mobile operators are facing fierce competition to gain new customers and retain existing ones. Mobile applications offer an ideal means to achieve differentiation.

Quicker data transfer via GPRS

With maximum transmission rates of 170 kbit/s, General Packet Radio Services (GPRS) transports data more than fifteen times faster than GSM. GPRS only uses network resources and bandwidth during data transmission, so the operator saves network extension costs. It is therefore well suited for a range of personalized applications and value-added services that require bulky and bursty data transfer such as mobile Internet, electronic banking, and location-based services. With GPRS, networks are loaded more efficiently, ready to face tomorrow's increasing data traffic.

New business opportunities for operators

GPRS opens the door to new business opportunities in a market with tremendous growth potential. It enables you as an operator to push mobile data into the mass market and tap new revenue sources. Additional applications and enabling services can be implemented quickly, enhancing your reputation for innovation and reducing churn. GPRS by Siemens can be introduced economically overnight into existing GSM networks with full coverage.

Low-cost mobile access for subscribers

With GPRS, subscribers are charged for the amount of data they transmit and not for the duration of their call. They benefit from 'always on' Internet access as no dial-up is necessary, making new services such as real-time messaging viable. Since packet-switched GPRS operates alongside existing circuit-switched services in mobile networks, your subscribers have seamless access to both voice and data services.

Siemens' outstanding performance

GPRS hardware made by Siemens offers outstanding performance in a compact form. Our equipment meets the strict interoperability rules laid down by all relevant standardization bodies. We offer a seamless and cost-effective migration strategy from GSM through GPRS to UMTS by mainly reusing hardware modules. This protects your investment, allowing you to focus on the subscriber demands of tomorrow.

WAP – The standard for wireless Internet access

The world's leading network operators, software companies and mobile communication device and equipment manufacturers formed the WAP Forum in 1997. Today, WAP is the de facto standard for wireless access to the Internet, with more than four million WAP sites available to users.

The new standard is bringing mobile data to the mass market by transforming Internet-type applications making them viewable on mobile handsets.

Each handset has been developed according to the WAP standard and is able to support WAP-based applications in the operator network. With this technology in place, a new information service can simply be developed as a web site and then viewed on the screen of a WAP mobile phone.

A special description language – WML (Wireless Markup Language) – was developed to structure information sites. Based on the Extended Markup Language (XML), it offers special features for mobile communication applications in addition to familiar HTML elements. WAP also defines a browser optimized for compact displays and a JavaScript-like language (WML Script) in order to create applications suitable for handheld devices.

Improved data transmission

Since the mid-1999, WAP has provided mobile access to a number of data services on the Internet, such as news, e-mail and e-commerce. The possibilities are endless. GSM's bandwidth and user interface limitations are being addressed by WAP and via SMS data packets for push messages. WAP is also scalable GPRS, EDGE, and UMTS will dramatically increase data rates, bringing you relevant information faster, wherever and whenever you want it.

A complete WAP solution from Siemens

We at Siemens provide you with the integrated business and engineering approach required to succeed in today's market. As an experienced turnkey supplier and systems integrator, we guide you through all the necessary steps for launching your services successfully. All business and engineering aspects are covered in a comprehensive approach that ensures success in every phase of the process.

Mobile Multimedia takes the next step

Mobile data and multimedia services – a growing market

Wireless data and multimedia services both for business and personal customers is now more important than ever. EDGE (Enhanced Data rate for Global Evolution) offers GSM network operators an evolutionary path to mobile data and

multimedia services, increasing data throughput to 384kbit/s (and possibly more) by using an improved modulation scheme within the existing GSM spectrum. EDGE therefore provides an alternative for operators without an UMTS license. EDGE is also suitable for starting in lower density rural areas whereas UMTS is launched in urban areas.

High bandwidth and Quality of Service

EDGE builds on the GSM infrastructure and uses the same 850/900/1800/1900 MHz frequency bands as GSM. Adequate bandwidth for mobile Internet services in GSM is provided by first installing the packet-oriented General Packet Radio Service (GPRS). However, real-time data applications require more bandwidth and Quality of Service (QoS) than can be provided by today's GPRS. By changing the modulation scheme from GMSK (Gaussian Minimum Shift Keying), which uses only part of the phase to 8PSK (8 Phase Shift Keying, making use of the full 360°), this capacity gap can be closed. In this way, EGPRS (EDGE) can offer both high QoS and high bandwidth to each subscriber.

New business opportunities

EDGE represents different opportunities for different operators. New multimedia applications will make mobile data more attractive and, together with better access and high data throughput, EDGE increases the Quality of Service for the end user significantly. For operators without a 3G license, EDGE allows them to maintain competitiveness in delivering high-performance data services. The technology can complement UMTS by offering advanced data services to wider areas, including low-density rural areas.

Secure Investment for mobile operators

EDGE smoothes the way for mobile multimedia applications while offering the maximum investment protection. The evolutionary path from GPRS is simple, as EDGE is supporting the same type of services (except for higher data rates) as GPRS and uses the same GSM spectrum, protocol, carrier structure, and cell planning processes. Siemens' base stations upgraded for GPRS are now EDGE-

compatible so that the required change in modulation scheme can be achieved mainly through software enhancements. EDGE can therefore offer operators the quickest path to the most bandwidth-hungry applications, giving operators a competitive advantage and a faster return of investment.

The Siemens EDGE Solution

EDGE-capable equipment from Siemens is fully GSM/GPRS compatible, so that standardized data rates (up to 384kbit/s) are available in both uplink and downlink and across all frequency bands (850/900/1800 and 1900MHz).

EDGE technology is supported throughout Siemens' BTSplus family (Macro/eMicro/Pico) by fitting one or more EDGE-capable Carrier Units (ECU) together via software upgrade. The ECU is the same size as the GSM-CU and fits in the same BTS slot. To match the BTS, the BSC is replaced by an EDGE Packet Control Unit (EPCU), which offers an increased number of PCM lines and GPRS/EGPRS (EDGE) channels.

Introduction to 3G

3G is a generic term covering a range of future wireless network technologies, including WCDMA, cdma2000, UMTS, GPRS, and EDGE. 3G combines high-speed mobile access with Internet Protocol (IP) based services. This doesn't just mean fast mobile connection to the World Wide Web, 3G will enable new ways to communicate on the go, access information, conduct business and learn.

3G services will add an invaluable mobile dimension to services that are already an integral part of modern business life. These include the Internet, intranets, video-conferencing, and the interactive sharing of office applications to manage sales, appointments and business documents.

Safe, manageable evolution

The good news is that the transition towards this exciting new technology will be safe, manageable and gradual. Partnering with Ericsson, operators can tailor their network evolution towards 3G telecommunications according to their

business needs.

3G is an evolution within the telecommunications industry and not a revolution.

On the one hand, the evolutionary path to 3G will be carefully managed and profitable for operators while on the other, smooth and seamless for users.

Evolve to 3G and maintain original infrastructure

working with Ericsson, operators can keep their core technologies and investments in place, while enhancing their systems for the third generation mobile multi-media services. Operators will have maximum reuse of their original investments while moving towards full 3G services at their own speed, according to their own needs.

A profitable, low-risk, customized evolution

Because WCDMA technology is evolved from existing GSM technology, operators do not have to transform their networks when they move from 2G to 3G, or throw infrastructure away and start from scratch. The move to 3G optimizes operators' existing 2G infrastructure, enabling it to co-exist profitably with the new WCDMA system.

The operators' GSM equipment – incrementally enhanced by GPRS and EDGE – can continue to offer services and generate revenues within the WCDMA 3G network. The old and the new technology complement each other, forming a highly flexible, seamless network system.

Seamless evolution, seamless networks, seamless revenues

WCDMA will dominate 3G and is fully compatible with GSM, but GSM operators can also choose to deploy EDGE in their existing GSM spectrum – alone or together with their WCDMA networks. EDGE is defined as a 3G technology, according to IMT-2000. Most of the world's operators have chosen to use WCDMA as their preferred 3G technology.

TDMA to GSM/WCDMA or CDMA 2000

TDMA operators have two migration paths to choose from. They can migrate to GSM and from there on to WCDMA, or they can go via CDMA to CDMA2000. Ericsson is a proven and experienced partner in TDMA/ CDMA technology as well as GSM.

PDC to WCDMA

PDC networks, used in Japan, will evolve into WCDMA, whereas 2G CDMA One (or IS-95) will progress to CDMA2000. Ericsson is one of only two suppliers in the world who provide PDC infrastructure.

Making evolution safe, making migration easy

all telecom roads lead to 3G. Because Ericsson offers a full range of second and third-generation solutions it can ensure that whatever 2G system operators are using, their core networks and competencies can be updated and retained during migration to 3G.

Operators can implement the capacity they need when they need it, progressing towards 3G safe in the knowledge that their evolutionary path will be smooth and profitable.

FINANCIAL PHASE

FINANCIAL ANALYSIS

INTRODUCTION

Financial analysis of existing cellular operators as well as new entrants like Telenor and Warid Telecom in their home countries is one of the key areas in our project which of course is of paramount importance. The finance department of an organization plays a vital role in the overall performance and efficiency of that firm because such a department is responsible for formulating financial plans and policies in the best interest of the organization. Every new project whether it a merger, acquisition ,joint venture or any other investment project requires financing and the financial manager looks for a number of different ways to meet financial and investment needs of his organization.

The basic purpose of this segment of our project is detailed financial analysis of entities involved, primarily on the basis of their financial statements to know their financial soundness ,strength, weakness, existing and potential risk and returns as well as , opportunities and threats.

From existing operators we have selected Mobilink and Ufone which currently possess a great volume of market share in cellular industry of Pakistan. In addition Mobilink is the top level player that has been declared Significant Mobile Power (SMP) by PTA recently. From new entrants we have selected Telenor Group which is the world's known group.

The overall financial analysis is based on one of the most popularly used technique i.e. ratio analysis.

Basis of Financial Analysis

Annual Reports

It is a document issued by publicly owned companies to their shareholders. It includes audited financial statements for several years, as well as no financial information about the company and its operations. It is a comprehensive document which provides an effective picture of the company as it contains four different types of financial statements. The various financial statements are

Balance Sheet, Income Statement / Profit & Loss Statement, Statement of Owner Equity and Cash Flow Statement.

The basic purpose of a financial statement is to provide information to all the stakeholders involved about the financial position of the company. Thus the persons interested in the financial position of that firm can make effective investment and credit decisions to protect their interests.

Techniques to Analyze Financial Data

The analysis of financial data employs various techniques to emphasize the comparative and relative importance of the data presented and to evaluate the position of the firm. The most important technique to analyse financial data presented in various financial statements is Ratio Analysis. Our analysis of existing cellular operators and new entrants will be based on calculation of financial ratios which is taken as the most popularly used techniques among analysts.

Financial statement analysis is a judgmental process. One of the primary objectives of such an analysis is identification of major changes, turning points, trends, amounts and relationships and investigation of the reasons underlying those changes. Often a turning point may signal an early warning of a significant in the future process or failure of the business. This judgmental process can be improved and by the use of analytical tools

Calculations of Financial Ratios

Financial ratios are usually expressed as a percent or as times per period. As mentioned earlier financial ratios calculation stand as the most significant tool in the overall financial analysis of a company. There are four broad categories of ratio analysis:

Activity, Liquidity, Long-term debt & Solvency and Profitability analysis.

The various types of ratio analysis are interactive and interdependent. One type depends upon the other to communicate effectively on the part of the organization, thus achieving investors' attraction. In order to conduct effective analysis based on financial ratios it is important to have an understanding of the various ratios involved. For this purpose a brief view is given below supported by formulas used in calculations.

Activity Analysis

It evaluates revenue and output generated by the firm's assets. A firm's operating activities require investment in both short-term (inventory and account receivable) and long term (property, plant and equipment) assets.

Activity analysis describes the relationship between the firm's level of operations and the assets needed to sustain operating activities.

The higher the ratio the more the firm's operations as relatively fewer assets are required to maintain a given level of sales. Trends in these ratios indicate potential trouble spots or opportunities. Although activity ratios do not measure profitability or liquidity directly, they are an important factor affecting those performance indicators.

Short-term (operating) Activity Ratios

- Receivable Turnover**

This ratio measures the effectiveness of the firm's credit policies as well as indicates the level of investment in receivable needed to maintain the firm's sales level. Improvement in this ratio indicates the effectiveness of the firm's trade credit policies. It is calculated by using the following formula:

$$\text{Receivable Turnover} = \text{Sales}/\text{Average Trade Receivable}$$

- **Payable Turnover**

Although accounts payable are not liabilities rather than assets their trend is significant as they present an important source of financing for operating activities. The time spread between when suppliers must be paid and when payment is received from customers is critical for companies. It is calculated as:

$$\text{Payable turnover} = \text{Sales}/\text{Average Accounts Payable}$$

- **Working Capital Turnover**

It is a summary ratio that reflects the amount of working capital needed to maintain a given level of sales. It can be worked out as:

$$\text{Working capital turnover} = \text{Sales}/\text{Average Working Capital}$$

Long Term (Investment) Activity Ratios

- **Fixed Assets Turnover**

It reflects the level of sales revenue generated by investment in productive capacity. It is calculated as:

$$\text{Fixed Assets turnover} = \text{Sales}/\text{Average Fixed Assets}$$

- **Total Assets turnover**

This relationship provides a measure of overall investment efficiency by aggregating the joint impact of both short and long term assets. We can calculate this ratio by using this formula:

$$\text{Total Assets Turnover} = \text{Sales}/\text{Average Total Assets}$$

Liquidity Analysis

Liquidity refers to a company's ability to meet its requirements for cash. Liquidity is necessary to meet both expected and unexpected cash demands, so all businesses need liquidity to operate. Too little liquidity can stunt growth and ultimately could lead to bankruptcy if debts cannot be repaid. However, too much liquidity can detract from profits, because liquid assets are low returning investments.

The standard measure of liquidity is the current ratio. Companies, however, should have higher current ratios to meet unexpected cash requirements. The rule of thumb current ratio for small companies is 2:1, indicating the need for a level of safety in the ability to cover unforeseen cash needs from current assets.

Liquidity ratios can be summarized as:

- Current Ratio**

It defines cash resources as all current assets.

$$\text{Current ratio} = \text{Current Assets} / \text{Current Liabilities}$$

- Quick Ratio**

It is a more conservative measure of liquidity. The included assets are quick because they can be quickly converted to cash. It is measured as:

$$\text{Quick ratio} = \text{Current Assets - Inventory} / \text{Current Liabilities}$$

- Cash Ratio**

It is the most conservative of these measures of cash resources as only actual cash and securities easily convertible to cash are used to measure cash resources.

Cash ratio= Cash+ Marketable Securities / Current Liabilities

- Cash Flow Operations**

It measures liquidity by comparing actual cash flows from operations with current liabilities.

Cash flow from operation = Cash flow from Operation/ Current Liabilities

Liquidity analysis measures are not independent of activity analysis. Poor receivable or inventory turnover limits the usefulness of current and quick ratios. Obsolete inventory or uncollectible receivable are unlikely to be the sources of cash.

Long-term Debt and Solvency Analysis

It examines the firm's capital structure in terms of the mix of its financing sources and the ability of the firm to satisfy its long-term debt and investment obligations. The analysis of a firm's capital structure is essential to evaluate its long-term risk and return prospects.

The various solvency ratios are:

- Debt to Equity=Total debt (long and short-term) / Total Shareholder's equity**
- Long term Debt to Equity= Long term Debt / Shareholder's Equity**

There is no rule of thumb to indicate the proper amount of debt for a firm. One major factor is management's willingness to accept financial risk. Some managers are more risk averse than others; consequently they allow only a small amount of debt in their firm. Others see leverage as a means to increase profitability and therefore borrow substantially to expand their firm.

- **Time Interest Earned**

It measures the protection available to creditors as the extent to which earnings available for interest "cover" interest expense.

$$\text{Time Interest earned} = \text{EBIT} / \text{Interest Expense}$$

Profitability Analysis

This category of analysis measures the income of the firm relative to its revenues and invested capital.

Equity investors are concerned with the firm's ability to generate, sustain and increase profits. Profitability can be measured in several differing but interrelated dimension.

There are two sub sections of this category:

Return on Sales

The ratios under this section are:

- **Gross Margin = Gross Profit/Sales**
- **Operating Margin=Operating Income/sales**
- **EBIT Margin =EBIT/Sales**
- **Pretax Margin= EBT/Sales**
- **Profit Margin= Net Income/Sales**

Return on Investment

It can be interpreted in two ways. First it measures management's ability and efficiency in using the firm's assets to generate (operating) profit. Second, it reports the total return accruing to all providers of capital (debt and Equity), independent of the source of capital,

- **Return on Assets (ROA):**

$$\text{ROA} = \text{EBIT}/\text{Average Total Assets}$$

The Return on Assets (ROA) is sometimes called Return on Investment. It indicates the rate of return provided by the book value of the company's assets. The higher the ROA the more profitable the company.

- **Return on Equity (ROE):**

$$\text{ROE} = \text{Net Income}/ \text{Average Stockholder's equity}$$

Others

- **EPS = Net Income/Common Number of shares outstanding**

FINANCIAL ANALYSIS OF MOBILINK

Mobilink Profit & Loss Account December 31, 2003

| | 2003 (Rs.) | 2002 (Rs.) |
|---|-------------------|-----------------|
| REVENUE | | |
| Sales | 11,075,147,522.00 | 6,828,593,788.0 |
| OPERATING COST | | |
| Cost of Equipment | 288,519,057.00 | 326,111,076.0 |
| Salaries, Wages and Benefits | 466,893,968.00 | 356,484,392.0 |
| Consultancy/Technical/Legal/Professional Fess | 459,839,320.00 | 445,488,965.0 |
| Vehicles Expenses& Maintenance | 21,980,506.00 | 24,005,635.00 |
| Travelling and Conveyance | 51,300,204.00 | 38,446,355.00 |
| Rent, Rates & Taxes | 201,104,149.00 | 104,479,551.0 |
| Utilities | 176,949,867.00 | 132,849,884.0 |
| General Repair & Maintenance | 567,359,982.00 | 219,705,516.0 |
| Staff Training | 14,429,656.00 | 13,433,974.00 |
| Office Expenses and Entertainment | 28,719,575.00 | 34,613,953.00 |
| Communication Costs | 18,788,094.00 | 15,750,651.00 |
| Insurance | 26,903,177.00 | 18,182,553.00 |
| Office Security | 67,587,322.00 | 44,488,064.00 |
| Printing and Stationary | 16,379,299.00 | 13,911,298.00 |
| Marketing and Advertisement | 303,675,062.00 | 120,420,117.0 |
| Interconnect Charges | 641,602,761.00 | 214,926,007.0 |
| Provisions | 78,940,486.00 | 66,420,460.00 |
| Auditor's Remuneration | 1,589,803.00 | 333,210.00 |
| Miscellaneous/Billing/Other Expenses | 45,253,860.00 | 46,621,082.00 |

| | | |
|---|-------------------------|-------------------------|
| Royalty Fees – PTA | 234,501,025.00 | 105,216,386.00 |
| Total Operating Cost | 4,012,317,173.00 | 2,341,889,129.00 |
| OPERATING INCOME | 7,062,830,349.00 | 4,486,704,659.00 |
| OTHER INCOME/REVENUE | | |
| (Loss)/Gain on Disposal of Fixed Assets | 738,733.00 | (647,939.00) |
| Profit/Interest on Bank Deposits/Placement | 31,836,928.00 | 51,325,538.00 |
| Miscellaneous/Others | 6,405,231.00 | 2,303,240.00 |
| Total Other Income/Revenue | 38,980,892.00 | 52,980,839.00 |
| EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTIZATION(EBITDA) | 7,101,811,241.00 | 4,539,685,498.00 |
| FINANCIAL CHARGES | | |
| Bank Charges | 56,714,596.00 | 26,040,996.00 |
| Exchange Risk Fee | 411,607,323.00 | 606,662.00 |
| Interest on Long Term Loans | 13,176,217.00 | 415,107,164.00 |
| Interest on short Term Loans | 419,449.00 | 16,000.00 |
| Guarantee Commission | 481,917,585.00 | 441,770,822.00 |
| Total Financial Charges | | |
| DEPRECIATION AND AMORTIZATION | 1,413,153,271.00 | 1,069,985,070.00 |
| FOREIGN CURRENCY DIFF. | 461,932.00 | 36,270,160.00 |
| PROFIT BEFORE TAX (EBT) | 5,207,202,317.00 | 3,064,199,766.00 |
| PROVISION FOR TAXATION | 2,059,141,458.00 | 950,634,929.00 |
| PROFIT AFTER TAXATION /NET INCOME | 3,148,060,859.00 | 2,113,564,837.00 |
| NO OF SHARES | 115,096,598.00 | 115,096,598.00 |
| EARNING/(LOSS) PER SHARE (EPS) | 27.35 | 18.36 |
| NO OF EMPLOYEES | 945.00 | 632.00 |

Mobilink
Balance Sheet
At December 31, 2003

| | 2003 (Rs) | 2002(Rs.) |
|--------------------------------|--------------------------|-------------------------|
| ASSETS | | |
| LONG TERM ASSETS | | |
| Fixed Assets (Net) | 11,015,036,316.00 | 8,015,692,147.00 |
| Assets under Construction | 9,702,160,569.00 | 1,843,694,031.00 |
| Deferred Expenses(Net) | ... | .. |
| Rent&Other Deposits | 14,364,749.00 | 8,456,599.00 |
| Total Long Term Assets | 20,731,561,634.00 | 9,867,842,777.00 |
| CURRENT ASSETS | | |
| Inventories | 133,088,643.00 | 88,611,648.00 |
| Account Receivable (Net) | 1,370,471,266.00 | 629,248,477.00 |
| Other Debit Balances | 552,752,422.00 | 434,351,766.00 |
| Prepaid Expenses | 278,008,300.00 | 102,775,651.00 |
| Cash & Bank Balance | 2,283,380,839.00 | 2,211,069,744.00 |

| | | |
|-----------------------------|-------------------------|-------------------------|
| Total Current Assets | 4,617,701,470.00 | 3,466,057,286.00 |
|-----------------------------|-------------------------|-------------------------|

LIABILITIES

CURRENT LIABILITIES

| | | |
|---|--------------------------|-------------------------|
| Unearned Income | 567,784,795.00 | 322,086,954.00 |
| Creditors | 2,777,683,408.00 | 2,774,354,998.00 |
| Current Portion of Long Term Loans | 1,235,831,221.00 | 1,103,142,939.00 |
| Short Term Finance – Secured | 67,441,575.00 | - |
| Other Credit Balance | 2,497,432,912.00 | 1,199,687,009.00 |
| Accrued Expenses including | | |
| Accrued Interest | 3,839,295,692.00 | 1,169,152,619.00 |
| Total Current Liabilities | 10,985,469,603.00 | 6,568,424,519.00 |

| | | |
|------------------------|---------------------------|---------------------------|
| WORKING CAPITAL | (6,367,768,133.00) | (3,012,367,233.00) |
|------------------------|---------------------------|---------------------------|

| | | |
|-------------------------------|--------------------------|-------------------------|
| Total Invested Capital | 14,363,793,501.00 | 6,765,475,544.00 |
|-------------------------------|--------------------------|-------------------------|

SHAREHOLDERS' EQUITY:

| | | |
|---------------------------|-------------------------|-------------------------|
| Share Capital | 1,150,965,980.00 | 1,150,965,980.00 |
| Deposit For Shares | 82,959,046.00 | 207,778,330.00 |

| | | |
|--|--------------------------|-------------------------|
| Accumulated Profit/(Loss) | 4,915,380,792.00 | 1,767,319,933.00 |
| Total Shareholders' Equity | 6,149,305,818.00 | 3,126,064,243.00 |
| REDEEMABLE CAPITAL – SECURED | 2,487,365,000.00 | - |
| LONG TERM LIABILITIES | | |
| Security Deposit | 499,466,145.00 | 451,332,062.00 |
| Long Term Loans | 2,875,395,836.00 | 2,247,196,596.00 |
| Deferred Tax Liability | 2,325,409,450.00 | 913,053,929.00 |
| Deferred Liability for Staff | | |
| Retirement Gratuity | 26,851,252.00 | 27,828,714.00 |
| Total Long Term Liabilities | 57,271,226,863.00 | 3,639,411,301.00 |
| Total Shareholders' Equity and Long Term Debt | 14,363,793,501.00 | 6,765,475,544.00 |

Mobilink
Summary of Financial Ratios
At December 31, 2003

| Categories | 2003 | 2002 |
|----------------------------------|-------------|-------------|
| Activity Ratios: | | |
| Receivable Turnover | 8.08t | 10.85t |
| Payable Turnover | 3.98t | 2.46t |
| Fixed Assets Turnover | 1.0t | 0.85t |
| Total Assets Turnover | 0.77t | 1.0t |
| Liquidity Ratios: | | |
| Current Ratio | 0.42:1 | 0.53:1 |
| Quick Ratio | 0.41:1 | 0.52:1 |
| Cash Ratio | 0.21:1 | 0.34:1 |
| Profitability Ratios: | | |
| Operating Margin | 63.77% | 65.70% |
| EBIT Margin | 51.36% | 51.34% |
| EBT Margin | 47.02% | 44.87% |
| Net Income Margin | 28.42% | 30.95% |
| ROA | 39.61% | 51.82% |
| ROE | 51.19% | 67.61% |
| Debt and Solvency Ratios: | | |
| Debt to Equity | 88.31% | 71.88% |
| Long-term Debt to Equity | 87.21% | 71.88% |
| Time Interest Earned | 11.81t | 7.94t |

ANALYSIS OF FINANCIAL POSITION OF MOBILINK

Activity Analysis

The Receivable Turnover ratio of Mobilink has declined over the year. The main cause of such a decline is ineffectiveness in short-term trade credit management of the company. It seems that sales revenue involves a great amount of sales on credit. Due to this, ratio has a downward trend. In order to improve this ratio, the company should make maximum of its revenue on cash which would cause a decline in credit sales.

The Payable Turnover has also increased over the year. This means that more cash payments have been made to suppliers during the year. This does not mean that it is something good in overall benefits of the company. The company should decrease cash payment to maintain a reasonable level of cash in order to meet other cash obligations.

Fixed Assets Turnover ratio of Mobilink has increased over the year. This turnover which is 1.0 shows an excellent return on the company's fixed assets.

Total Assets Turnover is an important measure in a company's activity analysis. Here this ratio has declined for Mobilink. This ratio was at peak in the previous year but declined from its existing level over the course of this year. Such a turnover clearly demonstrates that total assets have not been managed well to maintain its excellent previous level of turnover.

Looking at all activity ratios of Mobilink, we come to the conclusion that it has also a bad position in terms of its activity ratios except fixed assets turnover. The output generated is not good or satisfactory. One main cause for such a declining trend is sales revenue. It shows that the company is not using its assets properly except fixed assets to generate efficient output. Some other reasons behind poor activity ratios are ineffective inventories management and trade credit policies. Due to cumulative effect of these reasons, the company could not improve its operating cycle. Conversely, it is paying more to its short-term creditors which

means that it has improved its cash cycle over the year. Thus it needs to properly plan to increase its sales revenue, to generate high turnovers.

Liquidity Analysis

The current ratio that is considered a standard ratio of liquidity has a declining trend over the year. In 2002 the current ratio of Mobilink was 0.53:1. But in spite of increasing to reach a standard level, it has decreased from its existing level. This means that current assets of the company are not sufficient to meet an increasing trend of short-term liabilities. Although there has been an increasing trend in both the total current assets and current liabilities, but current liabilities have been grown at a comparatively rapid pace. This decline has also affected the other measures of liquidity because all are involving current assets and liabilities in their respective sense of measure. Thus the basic reason behind this decline is comparatively lower increase in current assets. This does not show any effectiveness on part of the company in terms of its communication to short-term creditors.

The quick ratio which is a more conservative measure of liquidity has also declined over the year. It means that ineffective management of current assets and liabilities has also made this ratio deteriorated. It has decreased from its previous year's level.

The cash ratio which is the most conservative measure of short-term liquidity has a declining trend too. This shows that currently no enough cash is available to meet short-term liabilities.

Summing up, the liquidity position of Mobilink is very bad especially current ratio which is considered the standard ratio of short-term liquidity. This ratio should be 2:1. The company is not maintaining enough resources to meet short-term cash obligations. This is not an effective picture of its liquidity to various parties having an interest in company's liquidity like short-term lenders and trade creditors or suppliers etc. In order to run operations, the company needs short-term credit

and it can be the most serious concern if it does not improve its current liquidity position. This is because of the fact that creditors have to protect their own interests. Thus the company cannot get enough trade credit compensation based on such a liquidity position because this does not boost up the confidence of investors. The company needs to reduce down its short-term liabilities and increase further its current assets so that a reasonable level can be maintained. The poor liquidity has also affected some activity ratios because of their interdependence and integration.

Profitability Analysis

The Operating Margin which is the basic measure of profitability has declined slightly over the year. The main cause for such a decline is increasing operating expenses. This means that it has not performed well to decrease its operating expenses with an increase in sales revenue.

The EBIT Margin has improved just a bit in comparison with the previous year. This shows that the other sources of revenue/ income of the company did not increase much to cause an increase in the company's earnings before interest and taxes.

The EBT Margin has increased over the year. The main reason for such an improvement is financial charges/interest expense of Mobilink. This shows that the company has paid comparatively less for its financial charges during the year. A lower interest expense has resulted in an increase in total taxable income of the company.

The Net Profit Margin which is the standard measure of profitability has declined over the year. It is because of declining trend of other profitability ratios like operating profit. But the main reason for such a trend is provision for taxes. In 2002 Mobilink had a great amount for tax provision. On the other hand, though, it has a smaller provision this year; it could not result in high income margin because of the cumulative bad effect of other profitability measures.

The ROA is also a deteriorated measure in Mobilink's overall profitability. This ratio has decreased to a greater extent over the year. Like all other profitability ratios ROE has also a declining trend over the year. This is the most important ratio to company's owners. Thus such a decreasing trend does not provide an effective picture of return to shareholders on their invested capital. So they might switch their investment to comparatively profitable projects.

The year 2002 has been a profitable year for Mobilink as all major ratios had an increasing trend. But conversely, during 2003, the company could not maintain that profitability level and faced some serious declines in almost all profitability ratios. Because equity investors are primarily interested in the company's ability to generate, sustain and increase profits, but such a position does not attract their investment. For this purpose, the company needs to improve its current level of profitability. It should decrease its operating expenses, increase the various sources of revenues, should maintain a proper provision for taxes.

Long-term Debt and Solvency Analysis

The debt ratio of Mobilink has increased over the year. In 2002 the company had zero balance of short-term loans and did not obtain funds by issuing any debt instrument. But in 2003 there is a significant contribution of much of short-term loans and redeemable capital in the total debt of the company. The company did not raise its capital by issuing any further stock. Instead it has relied on debt financing. That is why due to heavy amount of debt this ratio has increased. This is a not good sign on part of its solvency.

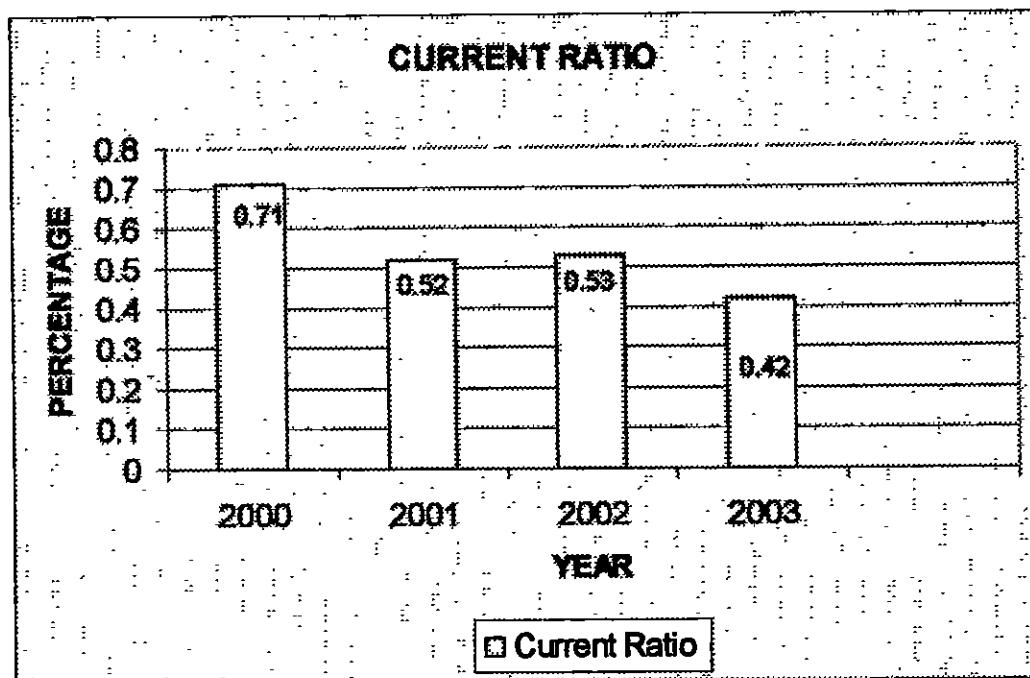
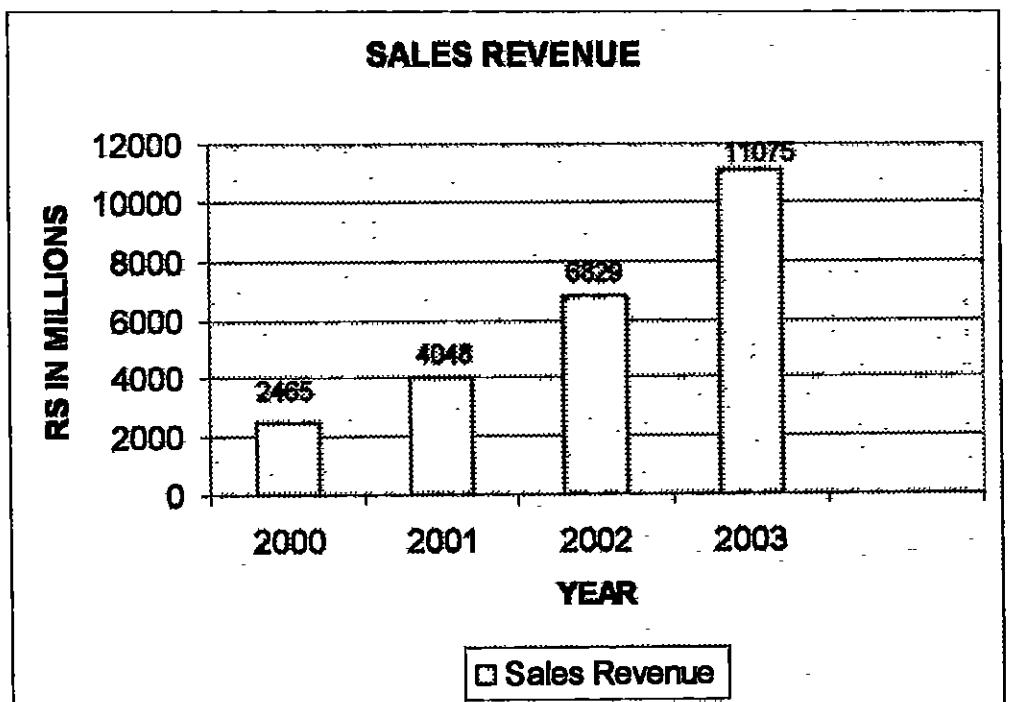
The long-term debt ratio has also increased over the year. The main cause for such an upward trend is of course redeemable capital which has been raised during the year.

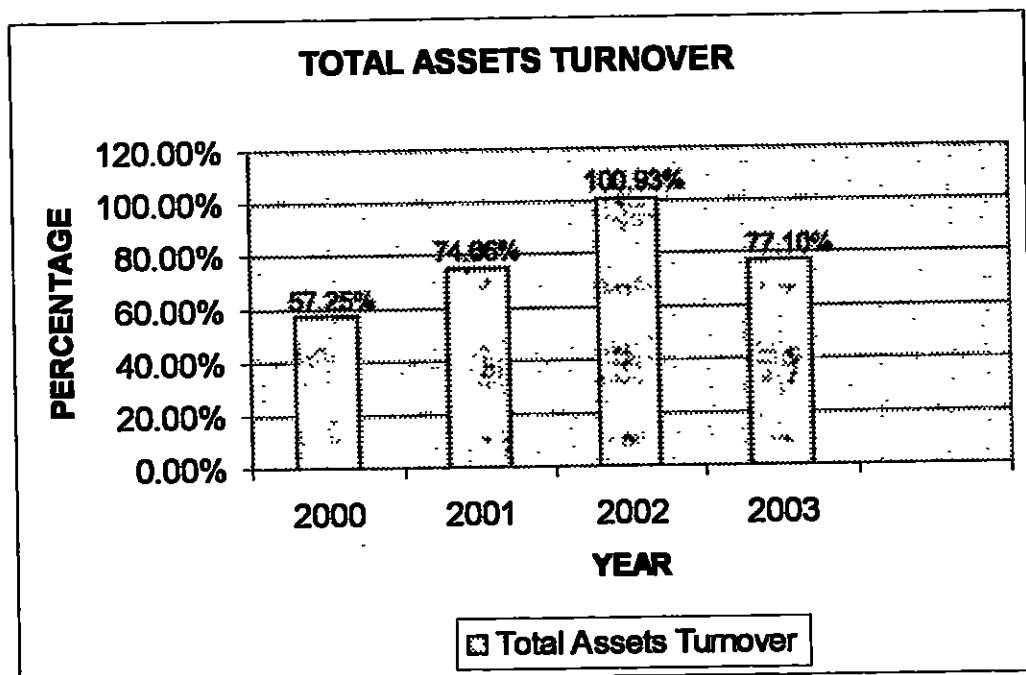
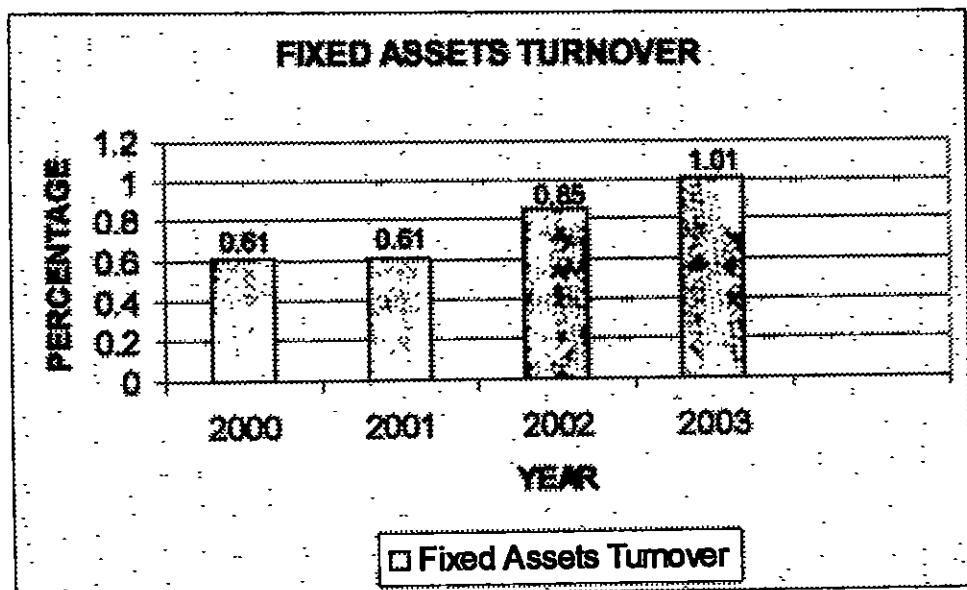
From long-term solvency perspective, it is necessary for any organization to maintain a standard debt ratio of 60:40. In case of Mobilink, the debt ratios have an increasing trend. Although such a position is bad from long-term debt providers' point of view, such as banks, individuals and financial institutions. But

debt financing might have a number of different benefits for Mobilink such as lower taxable income due to increased financial charges. So it has gained tax shield through debt financing. The company should reduce its heavy reliance on debt, so that debt ratio can be reduced down to a standard level.

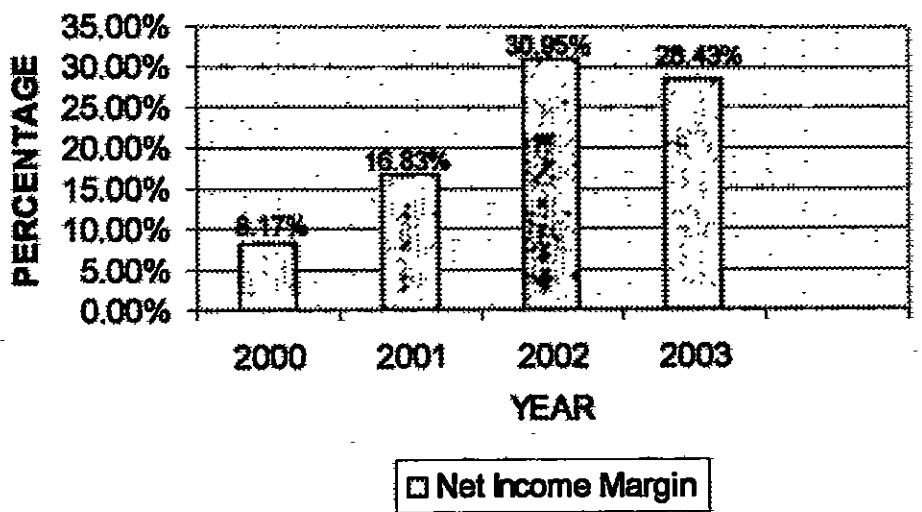
The TIE ratio has improved over the year. That means to protect interest expense, sufficient earnings are available

FINANCIAL RATIOS OF MOBILINK (2000-2003)

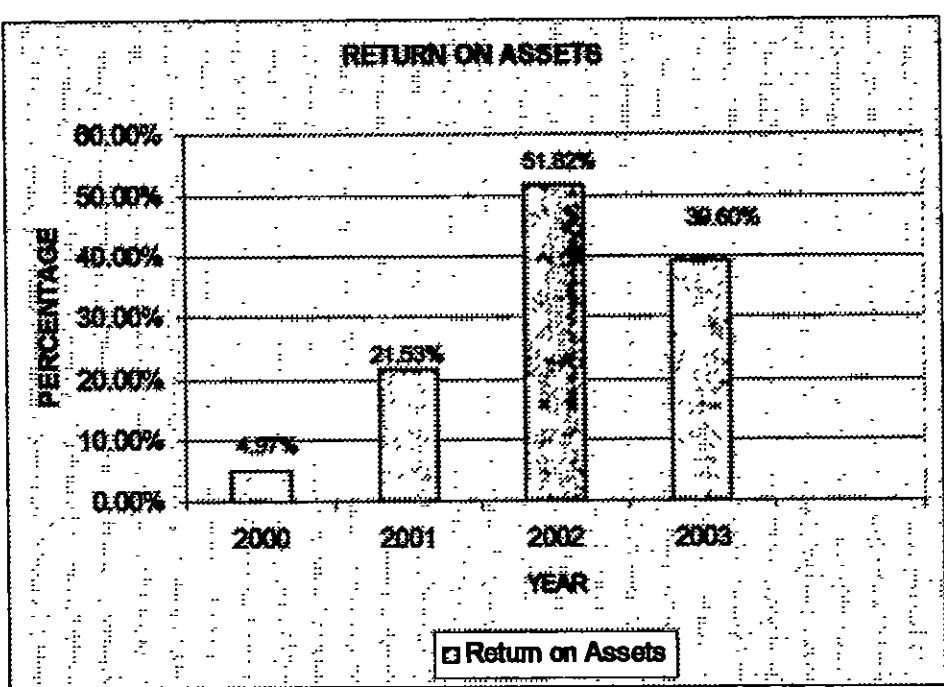




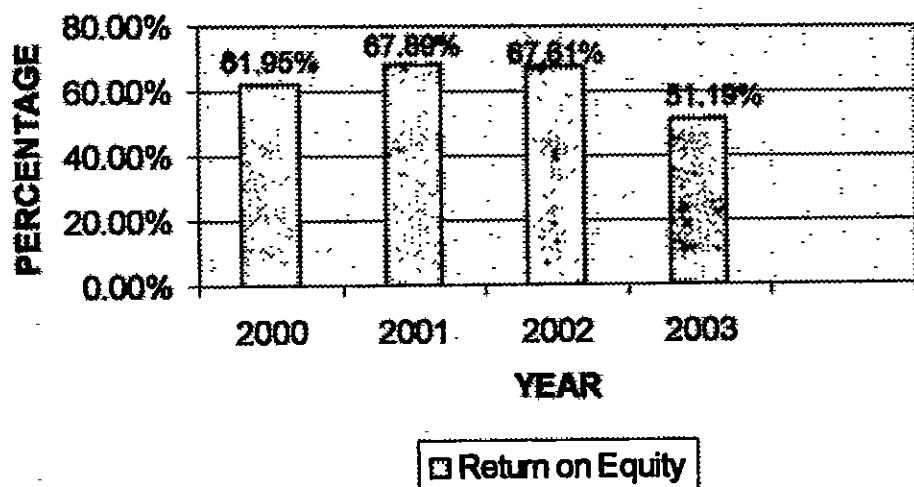
NET INCOME MARGIN



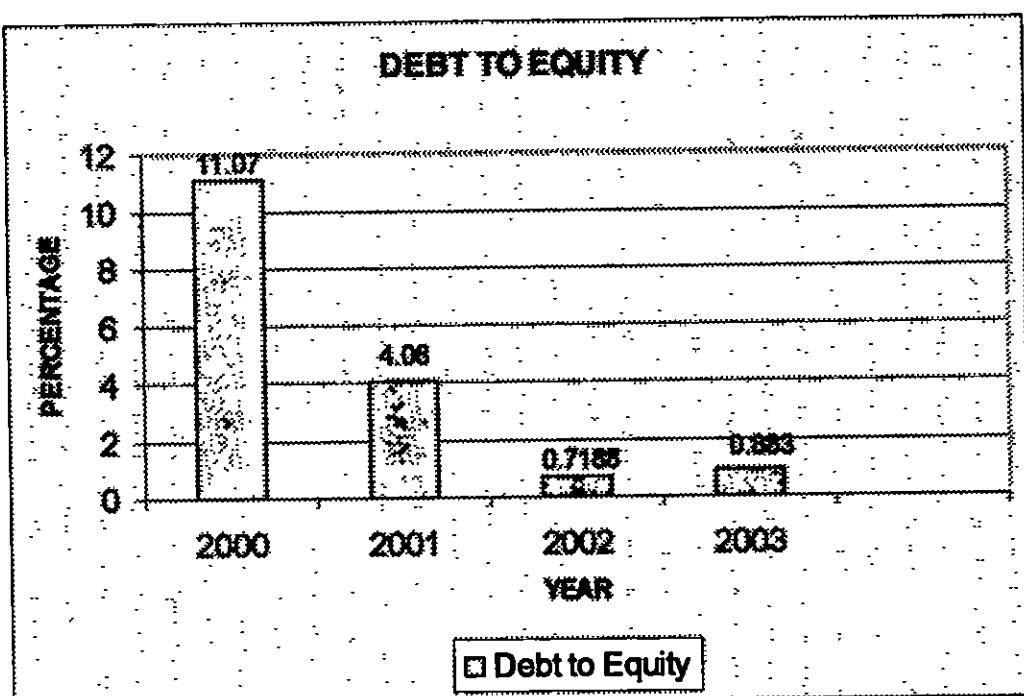
RETURN ON ASSETS

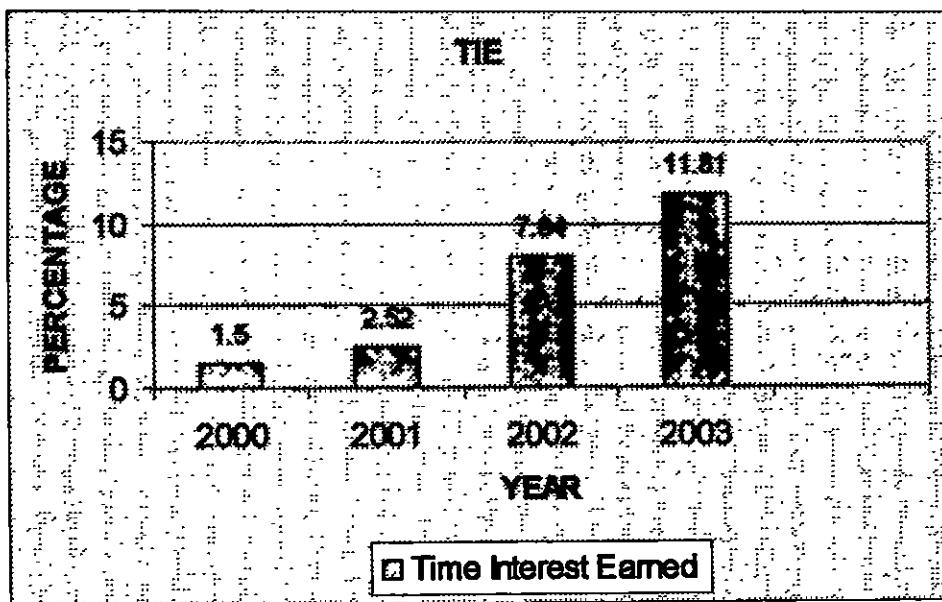


RETURN ON EQUITY



DEBT TO EQUITY





FINANCIAL ANALYSIS OF UFONE

Pak Telecom Mobile Limited

Balance Sheet

For the year ended June 2004

| | 2004 (Rs.) | 2003(Rs.) |
|---|----------------------|---------------------|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Stocks | 98,202.00 | 51,711.00 |
| Trade Debts | 648,721.00 | 371,206.00 |
| Advaces, Repayments and other receivables | 411,655.00 | 214,055.00 |
| Advance income tax | 50,257.00 | 27,079.00 |
| Cash and bank balances | 3,339,805.00 | 2,832,574.00 |
| TOTAL CURRENT ASSETS | 4,548,640 | 3,496,625 |
| FIXED CAPITAL EXPENDITURE: | | |
| Operating fixed assets | 8,452,716.00 | 5,425,079.00 |
| Capital work in progress | 625,424.00 | 469,984.00 |
| DEFERED COSTS | 369,320.00 | 452,058.00 |
| TOTAL ASSETS | 13,996,100.00 | 9,843,746.00 |
| LIABILITIES&SAHREHOLDER'S EQUITY: | | |
| SAHREHOLDER'S EQUITY: | 4,000,000.00 | 4,000,000.00 |
| Share Capital | | |
| Authorized capital | | |
| 400000000 (2003:400000000) ordinary shares of | | |
| Rs.10 each. | 3,500,000.00 | 3,000,000.00 |
| Advance against shares to be issued | - | 500,000.00 |

| | | |
|---|----------------------|---------------------|
| Unappropriated profit | 292,523.00 | 41,623.00 |
| LONG TERM LOANS AND DEFERRED LIABILITIES | | |
| Long term loans | 4,606,755.00 | 2,901,902.00 |
| Deferred income tax liability | 574,000.00 | 119,000.00 |
| Employes' retirement benefits | 20,213.00 | 16,272.00 |
| CURRENT LIABILITIES: | | |
| Current portion of long term loans | 649,049.00 | 400,000.00 |
| Short term finance | 1,498,636.00 | 1,350,951.00 |
| Creditors, accrued and other liabilities | 2,329,924.00 | 1,363,998.00 |
| Proposed divided | 525,000.00 | 150,000.00 |
| TOTAL CURRENT LIABILITIES | 5,002,609 | 3,949,264 |
| TOTAL LIABILITIES & OWNER'S EQUITY | 13,996,100.00 | 9,843,746.00 |

Pak Telecom Mobile Limited
Profit & Loss Account
For the year ended June 2004

| | 2004(Rs in thousand) | 2003(Rs in thousand) |
|--|-----------------------------|-----------------------------|
| REVENUE-net of sales tax Rs. 415,067 million (2003:Rs 245,225 million) | 4,374,016.00 | 2,709,774.00 |
| Operating Expenses: | | |
| PSTN Charges | 498,290.00 | 363,680.00 |
| Cost of prepaid cards | 33,285.00 | 21,829.00 |
| Discount on prepaid cards | 125,539.00 | 64,601.00 |
| Royalty | 54,484.00 | 31,991.00 |
| Spectrum charges | 2,400.00 | 2,400.00 |
| Marketing and Promotional costs | 256,438.00 | 162,405.00 |
| Customer acquisition costs | 315,436.00 | 321,233.00 |
| Network operating costs | 435,966.00 | 294,982.00 |
| Other operating costs | 409,343.00 | 313,773.00 |
| Operating profit before financial charges, taxation, depreciation and amortization (EBITDA) | 2,242,835.00 | 1,132,880.00 |
| Less: Depreciation and amortization | 823,286.00 | 589,471.00 |
| Financial Charges | 189,202.00 | 190,170.00 |
| Add: Other Income | 23,961.00 | 34,472.00 |
| Profit before taxation (EBT) | 1,254,308.00 | 387,711.00 |
| Taxation Current – for the year | 21,242.00 | 132,226.00 |
| for prior years | 2,166.00 | - |
| Deferred- for the year | 455,000.00 | 138,720.00 |
| for prior years | - | (19,720.00) |

| | | |
|---|-------------------|--------------------|
| Profit after taxation | 775,900.00 | 255,485.00 |
| Accumulated Profit/ (loss) brought forward | 41,623.00 | (63,862.00) |
| Profit available for appropriation | 817,523.00 | 191,623.00 |
| Less: proposed divided @ 15% (2003: 5%) | 525,000.00 | 150,000.00 |
| Unappropriated profit carried forward | 292,523.00 | 41,623.00 |
| Earnings per share – Rupees | 2.30 | 0.85 |

Pak Telecom Mobile Limited
Cash Flow Statement
for the year ended June 2004

| | 2004 | 2003 |
|---|----------------|--------------|
| CASH FLOW FORM OPERATING ACTIVITIES: | | |
| Profit before taxation | 1,254,308.00 | 387,711.00 |
| Adjustment for non cash charges and other items: | | |
| Depreciation and amortization | 823,286.00 | 589,471.00 |
| Financial charges | 189,202.00 | 190,170.00 |
| Income on bank deposits | (23,273.00) | (26,665.00) |
| Profit on sales of fixed assets | (75.00) | (15.00) |
| Employees' retirement benefits | 14,254.00 | 3,617.00 |
| (Increase)/Decrease in trade Debts | (277,515.00) | (44,608.00) |
| (Increase) in stocks | (46,491.00) | (25,541.00) |
| (Increase)/Decrease in advances. Prepayments and other receivable | (199,363.00) | 25,928.00 |
| Increase / (Decrease) in creditors, accrued and other liabilities | 307,904.00 | (216,291.00) |
| Employees' retirement Benefits paid | (10,313.00) | (844.00) |
| Taxes paid | (46,586.00) | (21,008.00) |
| Cash provided by Operating Activities | 1,985,338.00 | 951,141.00 |
| CASH FLOW FROM INVESTING ACTIVITIES: | | |
| Fixed capital expenditure | (3,309,356.00) | 2,024,550.00 |
| Deferred costs | - | 7,778.00 |

| | | |
|------------------------------------|----------------|----------------|
| Proceeds from sale of fixed assets | 321.00 | 24.00 |
| Income received on bank deposits | 25,035.00 | 29,831.00 |
| Cash used in investing activities | (3,284,000.00) | (1,986,917.00) |

CASH FLOW FROM FINANCING ACTIVITIES:

| | | |
|---------------------------------------|--------------|--------------|
| Loans term loan received | 2,152,000.00 | 1,987,825.00 |
| Loans term loan paid | (198,098.00) | (198,098.00) |
| Financial charges paid | (145,694.00) | (183,790.00) |
| Divided paid | 150,000.00 | - |
| Cash provided by financing activities | 1,658,208.00 | 1,605,937.00 |

| | | |
|---|---------------------|---------------------|
| INCREASE IN CASH AND CASH EQUIVLENTS | 359,546.00 | 570,161.00 |
| CASH AND CASH EQUIVALENATS AT BEGINNIG OF THE YEAR | 1,481,623.00 | 911,462.00 |
| CASH AND CASH EQUIVALENATS AT END OF YEAR | 1,841,169.00 | 1,481,623.00 |
| CASH AND CASH EQUIVALENATS COMPRISE: | | |
| Cash and bank balances | 3,339,805.00 | 2,832,574.00 |
| Short term finance | (1,498,636.00) | (1,350,951.00) |
| TOTAL | 1,841,169.00 | 1,481,623.00 |

Pak Telecom Mobile Limited

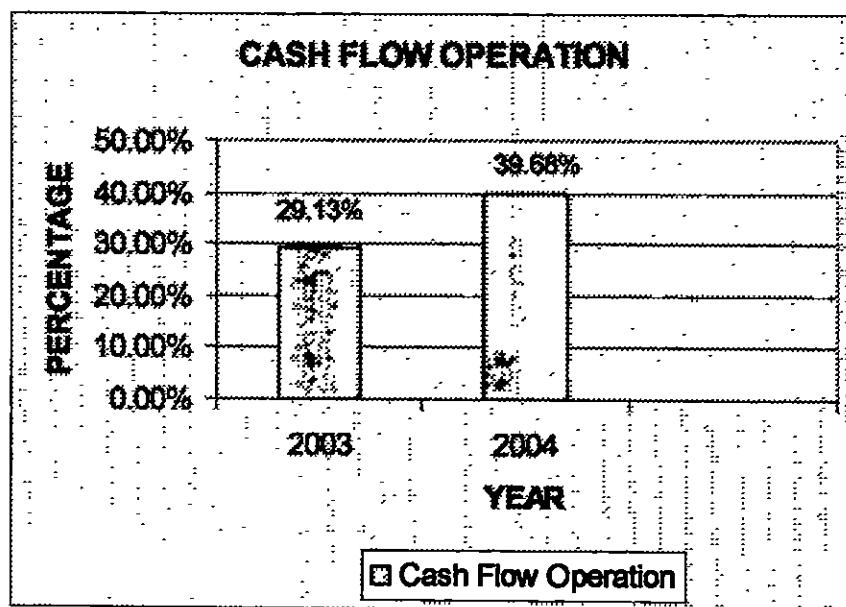
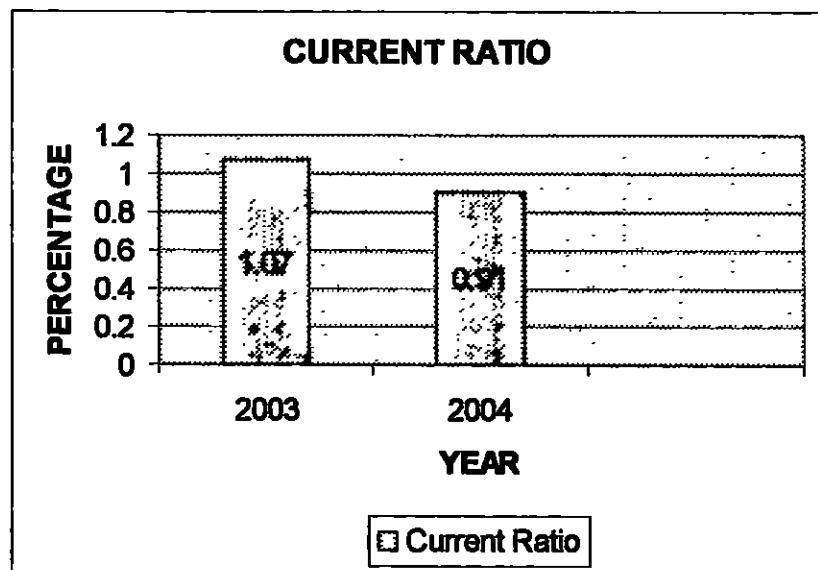
Summary of Financial Ratios

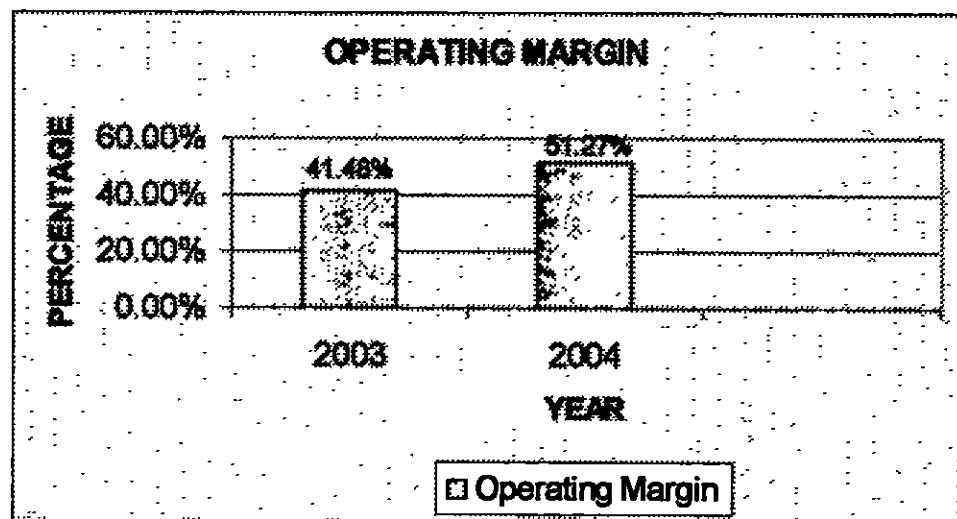
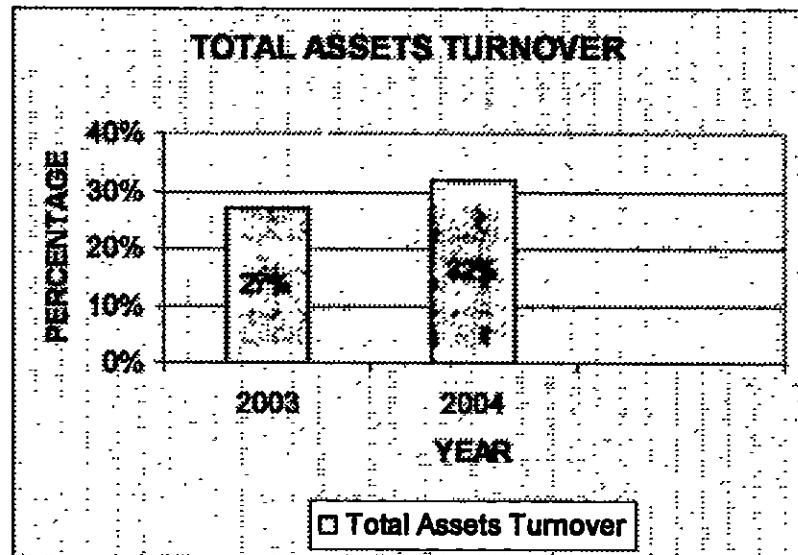
For the year ended June 30, 2004

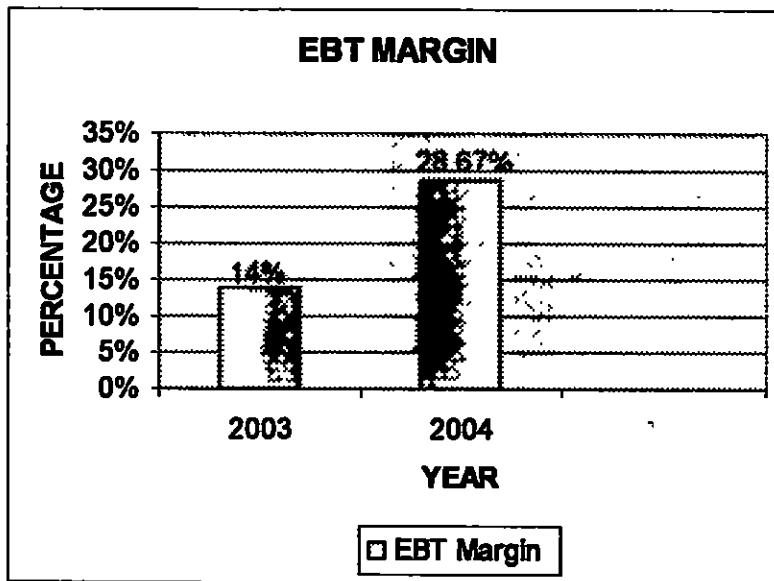
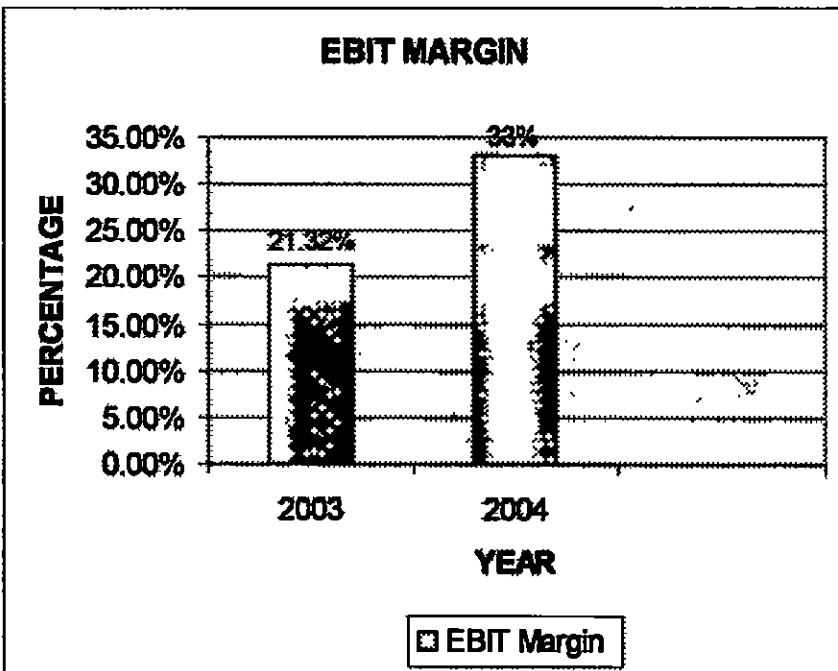
| Categories | 2003 | 2002 |
|------------------------------|-------------|-------------|
| Activity Ratios: | | |
| Receivable Turnover | 6.74t | 7.29t |
| Payable Turnover | 1.87t | 1.98t |
| Fixed Assets Turnover | 0.52t | 0.49t |
| Total Assets Turnover | 0.32t | 0.27t |
| Liquidity Ratios: | | |
| Current Ratio | 0.91:1 | 1.07:1 |
| Quick Ratio | 0.88:1 | 1.05:1 |
| Cash Ratio | 0.66:1 | 0.86:1 |
| Cash flow Operation | 39.38% | 29.13% |
| Liquidity Ratios: | | |
| Current Ratio | 0.91:1 | 1.07:1 |
| Quick Ratio | 0.88:1 | 1.05:1 |
| Cash Ratio | 0.66:1 | 0.86:1 |
| Cash flow Operation | 39.38% | 29.13% |
| Profitability Ratios: | | |
| Operating Margin | 51.27% | 41.48% |
| EBIT Margin | 33% | 21.32% |
| EBT Margin | 28.67% | 14.31% |
| Net Income Margin | 17.74% | 9.43% |
| ROA | 10.32% | 5.87% |
| ROE | 20.45% | 7.22% |
| Debt and Solvency | | |

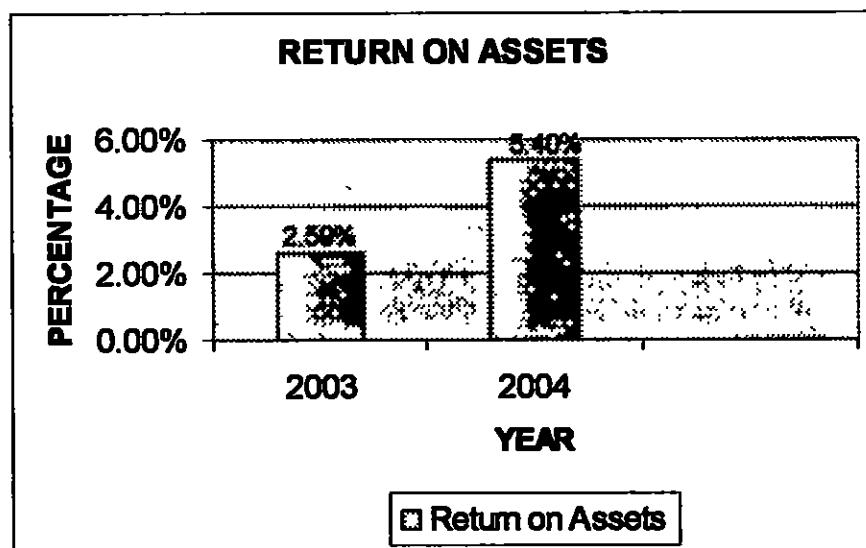
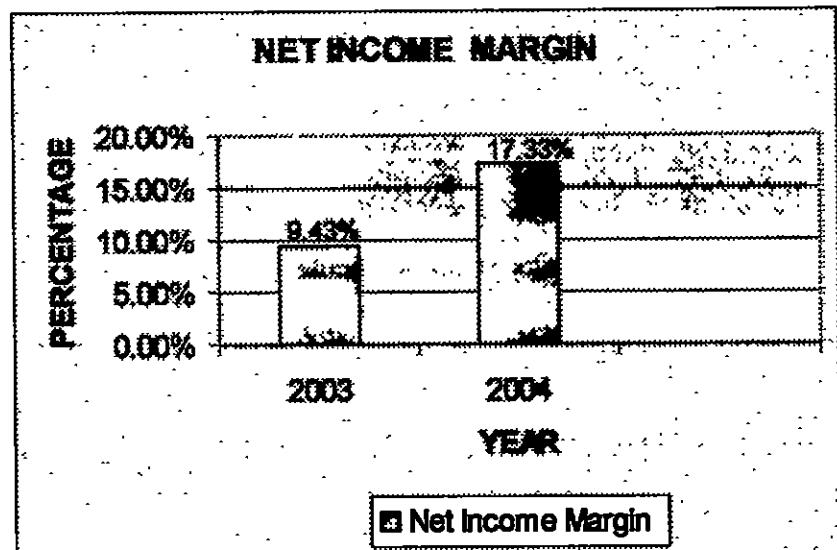
| Ratios: | | |
|-----------------------------|--------|--------|
| Debt to Equity | 88.31% | 71.88% |
| Long-term Debt to Equity | 87.21% | 71.88% |
| Time Interest Earned | 11.81t | 7.94t |

FINANCIAL RATIOS OF UFONE (2003-2004)

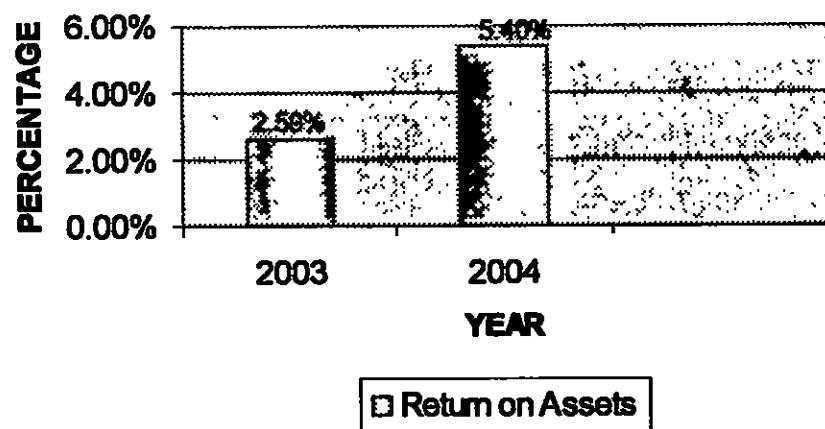




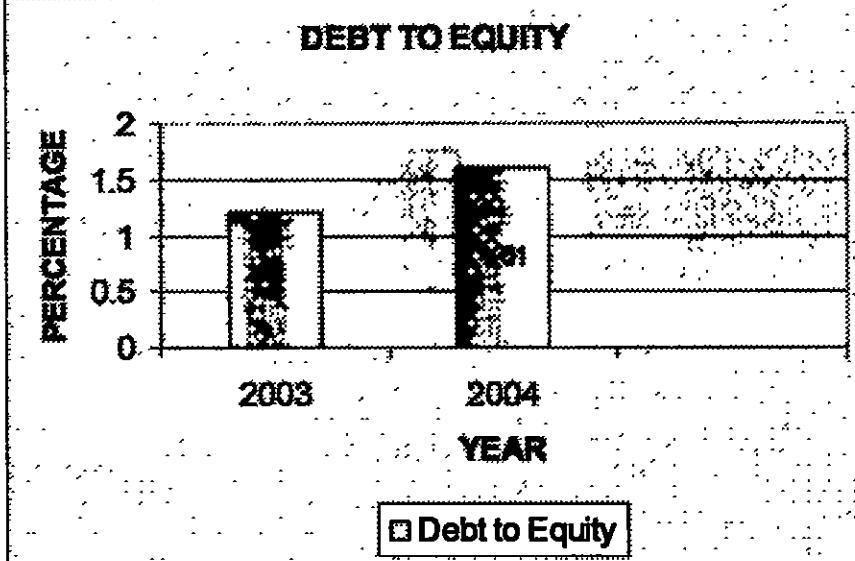


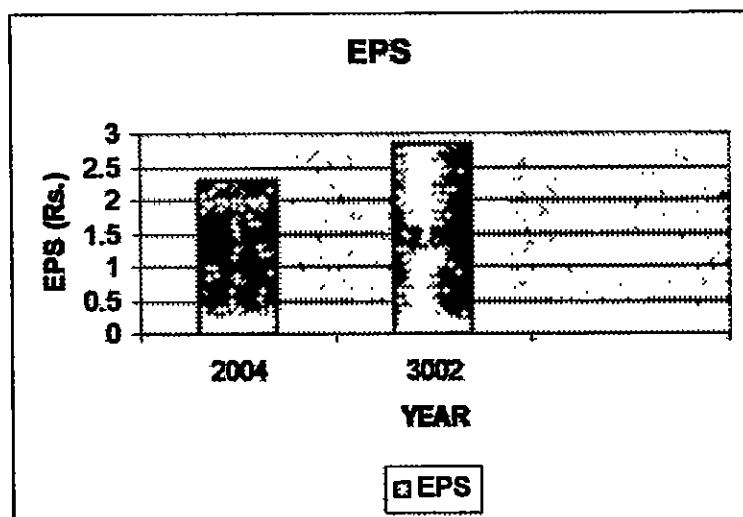


RETURN ON ASSETS



DEBT TO EQUITY





ANALYSIS OF FINANCIAL RATIOS OF UFONE

Activity Analysis

The Receivable Turnover ratio of Ufone has a slightly declining trend over the year. The main reason for such a trend is high amount of sales on credit that shows ineffectiveness of the company in managing its trade credit policies.

The Payable Turnover that is an important source of financing for the company to run its operating activities has also decreased over the year. It shows that suppliers are paid less in comparison with the previous. It is beneficial for the company, because paying less cash to suppliers paves a number of different ways to utilize cash in its best interest.

The Fixed Assets Turnover has slightly increased over the year that is quite a good sign from Activity perspective of Ufone. It shows that fixed assets have been utilized effectively. The total assets turnover has also increased which is another positive sign of activity ratios.

Summing up, activity ratios have a mixed trend over the course of year. Some measures of activity have increased while others have moved down due to their respective reasons.

The activity position is just ok because declining trend in some ratios has been compensated by relative increase in other ratios in the same category. Increase in sales volume that is numerator in the in all activity ratios shown above in summary has resulted in upward movement in total and fixed assets turnover.

While poor credit management has caused an increase in total trade receivable. The company needs to manage its trade credit policies more effectively. On the other hand, total sales revenue should be raised to generate high activity turnovers.

Liquidity Analysis

All the major short-term liquidity measures (current, quick and cash) are showing a declining trend for the company over the year. Such a declining liquidity position shows that the firm is not effectively utilizing its current assets and short-

term liabilities. It means that assets are lower and insufficient to meet current cash obligations against them. One reason for this is dividend payout. The company has paid divided in cash that has resulted in lower level of cash asset. This is of course not a healthy sign from its short-term liquidity perspective because the company is far behind the standard liquidity level that is 2:1.

Despite this decreasing trend in basic liquidity measures Cash flow from Operation (CFO) has increased significantly. It shows that the company is generating cash considerably well but, other current assets have not resulted in good turnover. Thus it has resulted in lower level of liquidity for Ufone. Moreover it tells that increase in CFO is not sufficient to meet rapidly increasing trend of short-term liabilities over the course of year. To meet the standard level of liquidity the company should increase its current assets with the relative decrease in short term liabilities. Such a level of liquidity does not boost up the confidence of short-term lenders and creditors such as banks, individuals, suppliers and various other financial institutions.

Profitability Analysis

The year 2003 has been a wonderfully well and excellent year for Ufone because in this year it has enjoyed high profitability. All profitability ratios have an upward trend over the year.

The Operating Margin, the basic measure of profitability has increased by 10% from its last year level, which can be considered quite a healthy increase for Ufone. It shows that operating expenses have been reduced over the year to generate an increasing level of sales.

The EBIT Margin has climbed up also which is another positive sign of profitability.

The EBT margin has also an upward trend like all other measures. The EBT margin has climbed up resulting in a cent percent increase in the margin, in comparison with the previous year. Such an increase can be considered an

extraordinary good increase, which is mainly due to lower financial charges over the year.

The Net Income Margin of the company has also a significant increase. Although the company paid comparatively more taxes in the current year but its earnings before taxes are quit high, so even heavy tax burden could not affect this measure that much.

The ROA and ROE have also improved over the year because the company enjoys a great profit this year. The ROE has significantly increased from 7.22% to 20.45%.

This is of course a wonderful increase that boosts up the confidence of shareholders of the company who are its real owners.

The cumulative effect of profitability ratios is quite much encouraging that is beneficial for the company in order to effectively demonstrate its position to its stakeholders like equity investors who are primarily interested in the company's ability to generate, sustain and increase profits.

Solvency Analysis

Both the Total debt and Long-term debt to Equity measures of Ufone have an increasing trend over the year. The debt ratio has a significantly upward trend that is mainly due to high portion of long-term debt in the numerator of the ratio. The long-term debt to Equity ratio has also increased over the year because of this very reason.

The TIE has also improved significantly over the course of year that shows that due to high profitability the company is in a better position to meet its interest expenses

The solvency position of Ufone is quite alarming because it is too much above than a standard level of debt to equity. This is not an effective demonstration on part of the company while negotiating with long term creditors such as investment banks and various financial institutions. Any company with such a

solvency picture can face some serious problems while increasing its equity through debt financing.

But because Ufone is subsidiary of PTCL which currently enjoys a great reputation and a significantly upward trend in its earring per share (EPS) and price per share (P/E). So we can say that it might not face problems as such to deal with long-term debt providers just because of PTCL. Although debt financing provides a number of different benefits, but this level should not be so high that it would result in some major issues for the company in future to deal with its stakeholders.

To avoid any serious potential hurdle the management of the company should take some measures so that heavy reliance on debt could be minimized.

FINANCIAL ANALYSIS OF NEW ENTRANTS

Financial Analysis of Telenor Group

Telenor Group
Consolidated Balance Sheet
At December 31, 2003

| In NOK millions | 2003 | 2002 |
|--|---------------|---------------|
| Assets: | | |
| Deferred tax assets | 3,850 | 4,866 |
| Goodwill | 9,224 | 10,100 |
| Other intangible assets | 5,536 | 6,682 |
| Tangible assets | 35,722 | 39,265 |
| Financial assets | 14,014 | 13,249 |
| Total fixed assets | 68,346 | 74,162 |
| Inventories | 504 | 632 |
| Current receivables, etc. | 9,232 | 8,868 |
| Short-term investments | 384 | 532 |
| Cash and cash equivalents | 7,644 | 5,264 |
| Total current assets | 17,764 | 15,296 |
| Total assets | 86,110 | 89,458 |
| Equity and Liabilities: | | |
| Shareholder's equity: | | |
| Minority interests | 3,646 | 3,603 |
| Total equity and minority interests | 40,883 | 37,288 |
| Liabilities: | | |
| Provisions | 1,645 | 1,176 |
| Long-term interest-bearing liabilities | 25,376 | 28,805 |

| | | |
|--|--------|--------|
| Long-term non-interest-bearing liabilities | 754 | 473 |
| Total long-term liabilities | 26,130 | 29,278 |
| Short-term interest-bearing liabilities | 386 | 3,591 |
| Short-term non-interest-bearing liabilities | 17,066 | 18,125 |
| Total short-term liabilities | 17,452 | 21,716 |
| Total equity and liabilities | 86,110 | 89,458 |

Telenor Group
Consolidated Profit & Loss Account
At December 31, 2003

| In NOK millions | 2003 | 2002 |
|--|---------------|---------------|
| Revenues | 52,889 | 48,668 |
| Gains on disposal of fixed assets and operations | 232 | 158 |
| Total revenues | 53,121 | 48,826 |
| Operating expenses: | | |
| Costs of materials and traffic charges | 13,094 | 12,485 |
| Own work capitalized | -571 | -567 |
| Salaries and personnel costs | 9,561 | 10,104 |
| Other operating expenses | 12,506 | 13,188 |
| Losses on disposal of fixed assets and operations | 229 | 147 |
| Depreciation and amortization | 10,597 | 10,236 |
| Write-downs | 145 | 3,553 |
| Total operating expenses | 45,561 | 49,146 |

| | | |
|--|---------------|---------------|
| Operating profit (loss) | 7,560 | -320 |
| Associated companies | 1,231 | -2,450 |
| Financial income and expenses: | | |
| Financial income | 586 | 567 |
| Financial expenses | -2,023 | -1,833 |
| Net currency loss | -1 | -311 |
| Net gain (loss) and write-downs of financial items | 73 | -789 |
| Net financial items | -1,365 | -2,366 |
| Profit (loss) before taxes and minority interests-EBT | 7,426 | -5,136 |
| Taxes | -2,376 | 480 |
| Profit (loss) before minority interests | 5,050 | -4,656 |
| Minority interests | -490 | 358 |
| Net income (loss) | 4,560 | -4,298 |
| Net income (loss) per share | 2.57 | -2.42 |

Telenor Group
Consolidated Cash Flow Statement
At December 31, 2003

| In NOK millions | 2003 | 2002 |
|---|---------------|----------------|
| Proceeds from sale of goods and services | 53,208 | 50,480 |
| Payments to suppliers of goods and services and of other operating expenses | -25,714 | -25,056 |
| Payments to employees, pensions, social security tax, tax deductions | -9,400 | -9,643 |
| Interest etc. received | 1,318 | 796 |
| Interest etc. paid | -2,494 | -1,629 |
| Other proceeds and payments related to operating activities | -131 | -142 |
| Payment of taxes and public duties | -3,111 | -1,948 |
| Net cash flow from operating activities | 13,676 | 12,858 |
| Proceeds from sale of tangible and intangible assets | 523 | 210 |
| Purchase of tangible and intangible assets | -6,536 | -9,098 |
| Cash receipts from sale of subsidiaries and associated companies, net of cash transferred | 2,327 | 191 |
| Cash payments on purchase of subsidiaries and associated companies, net of cash received | -506 | -12,232 |
| Proceeds from sale of other investments | 1,072 | 271 |
| Payments for other investments | -334 | -1,069 |
| Net cash flow from investment activities | -3,454 | -21,727 |
| Proceeds from long-term liabilities | 779 | 19,567 |
| Proceeds from short-term liabilities | 311 | 184 |
| Payments on long-term liabilities | -4,990 | -10,140 |
| Payments on short-term liabilities | -3,122 | -549 |

| | | |
|--|---------------|--------------|
| Proceeds from issuance of shares to minorities in subsidiaries | 32 | 181 |
| Proceeds from issuance of shares | - | 19 |
| Purchase of own shares from and dividend paid to minorities in subsidiaries | -7 | - |
| Payment of dividends | -890 | -621 |
| Net cash flow from financing activities | -7,887 | 8,641 |
| Effect on cash and cash equivalents of changes in foreign exchange rates | 45 | -347 |
| Net change in cash and cash equivalents | 2,380 | -575 |
| Cash and cash equivalents at 1 January | 5,264 | 5,839 |
| Cash and cash equivalents at 31 December | 7,644 | 5,264 |

| Profit and loss (In NOK Millions) | 2003 | 2002 | 2001 | 2000 | 1999 |
|---|---------------|---------------|---------------|---------------|---------------|
| Revenues | 52,889 | 48,668 | 40,604 | 36,530 | 32,784 |
| Gains on disposal of fixed assets and operations | 232 | 158 | 5,436 | 1,042 | 783 |
| Total revenues | 53,121 | 48,826 | 46,040 | 37,572 | 33,567 |
| Operating expenses | 45,561 | 49,146 | 42,863 | 33,943 | 29,565 |
| Operating profit (loss) | 7,560 | -320 | 3,177 | 3,629 | 4,002 |
| Associated companies | 1,231 | -2,450 | 8,237 | -692 | -1,239 |
| Net income (loss) | 4,560 | -4,298 | 7,079 | 1,076 | 2,035 |
| Net income (loss) per share in NOK – basic | 2.57 | -2.42 | 3.99 | 0.75 | 1.45 |

Balance at 31 December

| | | | | | |
|---------------------------|---------------|---------------|---------------|---------------|---------------|
| Total fixed assets | 68,346 | 74,162 | 66,095 | 80,881 | 37,617 |
|---------------------------|---------------|---------------|---------------|---------------|---------------|

| | | | | | |
|---|--------|--------|--------|--------|--------|
| Total current assets | 17,764 | 15,296 | 16,528 | 12,804 | 10,409 |
| Total assets | 86,110 | 89,458 | 82,623 | 93,685 | 48,026 |
| Shareholder's equity | 37,237 | 33,685 | 42,144 | 35,474 | 20,033 |
| Minority interests | 3,646 | 3,603 | 3,539 | 2,706 | 1,232 |
| Total equity and minority interests | 40,883 | 37,288 | 45,683 | 38,180 | 21,265 |
| Total long-term liabilities and provisions | 27,775 | 30,454 | 19,646 | 42,908 | 15,962 |
| Total short-term liabilities | 17,452 | 21,716 | 17,294 | 12,597 | 10,799 |
| Total liabilities | 45,227 | 52,170 | 36,940 | 55,505 | 26,761 |
| Total liabilities | 86,110 | 89,458 | 82,623 | 93,685 | 48,026 |
| Total long-term interest-bearing liabilities | 34,782 | 33,957 | 24,758 | 46,972 | 19,252 |
| Shareholder's equity | 42,535 | 35,799 | 42,944 | 36,304 | 21,035 |

Cash flow

| | | | | | |
|---|--------|---------|---------|--------|--------|
| Net cash flow from operating activities | 13,676 | 12,858 | 6,993 | 5,915 | 7,052 |
| Net cash flow from investment activities | -3,454 | -21,727 | 20,891 | 47,308 | -8,887 |
| Net cash flow from financing activities | -7,887 | 8,641 | -24,366 | 41,558 | 2,914 |

Telenor Group

Summary of Financial Ratios

For the year ended December 31, 2003.

| Categories | 2003 | 2002 |
|----------------------------------|-------------|-------------|
| Activity Ratios: | | |
| Receivable turnover | 5.73t | 5.48t |
| Payable Turnover | 3.09t | 2.68t |
| Fixed Assets turnover | 0.77t | 0.65t |
| Total Assets Turnover | 0.62t | 0.54t |
| Liquidity Ratios: | | |
| Current Ratio | 1.02:1 | 0.71:1 |
| Quick Ratio | 0.98:1 | 0.67:1 |
| Cash Ratio | 0.44:1 | 0.24:1 |
| Cash Flow Operation | 78.36% | 59.20% |
| Profitability Ratios: | | |
| Operating Margin | 14.29% | - 0.0065% |
| Pre Tax Margin(EBT) | 14.04% | -10.55% |
| Net Income margin | 8.62% | -8.83% |
| Return on Assets | 10.97% | -7.79% |
| Return on Equity | | |
| Debt and Solvency Ratios: | | |

| | | |
|---------------------------------------|---------------|---------------|
| Debt to Equity | 69.18% | 96.17% |
| Long Term Debt to Equity | 68.15% | 85.52% |
| Time Interest Earned (TIE) | 4.67t | -3.80t |
| | | |

ANALYSIS OF FINANCIAL HEALTH OF TELENO

GROUP

Activity Analysis

The Receivable Turnover ratio has slightly improved over the year which shows better credit policies of the Group. In order to improve this ratio more the company should make maximum of its revenue on cash which would cause a decline in credit sales.

Payable Turnover ratio has also an increasing trend which means that suppliers are paid in time more than previous year as a result of quick cash payment received from customers. Increase in this ratio is much encouraging from creditors' point of view. But from the Group's perspective it should reduce cash payments to its short-term creditors so that its short-term liquidity could get improved.

The fixed and total asset turnovers of Telenor have slightly improved over the year. It shows that the total assets of Group are being utilized reasonably well to generate an effective output over the course of this year.

The activity ratios for the year 2003 in comparison with the previous year have an increasing trend overall. These depict that the Group is using its assets properly. The output generated by the firm's assets is good and satisfactory. To improve this level of activity ratios, Telenor should target its sales revenue because all the activity ratios shown above involve sales in numerator. It should invest more in assets or make efficient use of its existing assets, and manage more effectively its current credit policies so that its operating cycle and cash cycle could be further improved.

Liquidity Analyses

The current ratio which is the standard measure of liquidity has increased over the year. This means that Telenor has improved its short-term liquidity.

Previously this standard measure was even below 1 which meant that the company was lacking much in current assets to meet its current liabilities. But during this year, the Telenor has efficiently utilized its current assets. Now it is a reasonable picture to short-term lenders and trade creditors as this measure is just above 1. This means that current assets are just above current liabilities. Although this ratio is improved over the year considerably well but the Group needs to improve further to meet its standard measure which is 2:1. Such a position boosts up the confidence of the short-term lenders and investors to a smaller extent.

The quick and cash ratios have also been improved slightly over the year. Again though there is an improvement but to meet the standard measure of liquidity the company needs to improve its cash and quick assets more from its current position.

The cash flow from operations (CFO) is the short-term liquidity measure that avoids the issue of actual convertibility of current assets to cash. Over the year this ratio has considerably improved which means that operations have been managed effectively. Thus sufficient cash is generated from operations in comparison with the previous year in which the company did not perform well.

The liquidity analysis of Telenor reveals that it has much improved in term of its short-term liquidity. All the various liquidity ratios in 2002 reflected a bad position of Telenor. But during 2003 the group has performed effectively well so all ratios have an increasing trend. The main reasons for such an increasing trend are reduction in the short-term liabilities, improvement in cash assets and effectiveness of the Group's trade credit policies.

Telenor should further improve its current level of liquidity by increasing its short-term assets and decreasing its short-term liabilities in order to show a better picture of liquidity for various purposes in its best interest.

Profitability Analysis

The year 2002 was a worst year for Telenor Group as it presented a destructive picture of group's profitability. All the profitability ratios had a much more declining trend. During that year, the Telenor group faced a serious net loss of \$4,298 millions. But conversely, 2003 has been a highly profitable year for the Group. All the various profitability measures for 2003 are showing an upward trend.

The operating margin which is of paramount importance in profitability has tremendously increased over the year. In 2002 The Group has an operating loss of \$320 million. But during 2003 it performed wonderfully well and this huge loss turned into a profit of \$7,560 million. One main reason for such an upward trend is decreasing operating expenses. It reflects that group has generated more sales with comparatively lower operating expenses.

The EBT margin has also much improved over the year. In the previous year this margin was in loss. But increase in operating margin during 2003 had a positive impact on the ratios below it, so all the ratios have an upward trend.

The net income margin which is a true representative of Group's profitability has improved from a Loss of 8.83% to a profit of 8.62%. During 2002 because the Group suffered a loss so a small amount was paid for taxes. On the other hand, a great amount of taxes has been paid for 2003. Despite this heavy tax burden the group still remained profitable as reflected by net income margin. The main causes for this increasing trend are lower operating expenses and financial expenses of the Group.

The ROA has also improved over the course of this year. This is due to increase in net income (numerator of the ratio) during 2003.

The ROE is the most important measure of profitability from shareholders point of view who are the real owners of a company or group. This ratio has significantly improved over the year. Again the reason is increasing trend of net income. Such a return provides an attraction to owner who can bring more capital to group. As a result the group may further grow and touch peaks of returns for its owners.

Looking at all profitability ratios, we can say that this year has been much more beneficial for Telenor Group. The group should continue to make effective plans

and strategies to achieve higher margins in future in order to sustain and improve its current margins of profit.

Debt and Solvency Analysis

In 2002 the group made immense use of debt which resulted in highly spoiled debt ratios and the group's bad debt position. But during this year the Telenor Group relied less on using more debt. During this year the solvency of Telenor has improved as reflected by its long-term debt and solvency measures. Both the total Debt and Long-term Debt to Equity ratios have shown a declining trend over the year. Such a declining trend reveals that the Group is relying less on debt and making more use of equity financing. Although debt financing has a number of potential benefits for any group or company but it should not be too high to demonstrate a reasonable solvency position. During 2003 the group has tried to bring the higher debt ratios down to a reasonable level which it should continue in future to present a better picture of solvency to its long-term lenders.

The TIE ratio shows that although the Group has higher debt ratios, it has sufficient earnings available to cover interest expense.

Key Figures of Telenor Group for Last 5 Years at 31 December:

| Profit and loss (In NOK Millions) | 2003 | 2002 | 2001 | 2000 | 1999 |
|--|-------------|-------------|-------------|-------------|-------------|
| Revenues | 52,889 | 48,668 | 40,604 | 36,530 | 32,784 |
| Gains on disposal of fixed assets and operations | 232 | 158 | 5,436 | 1,042 | 783 |
| Total revenues | 53,121 | 48,826 | 46,040 | 37,572 | 33,567 |
| Operating expenses | 45,561 | 49,146 | 42,863 | 33,943 | 29,565 |
| Operating profit (loss) | 7,560 | -320 | 3,177 | 3,629 | 4,002 |
| Associated companies | 1,231 | -2,450 | 8,237 | -692 | -1,239 |
| Net income (loss) | 4,560 | -4,298 | 7,079 | 1,076 | 2,035 |

Net income (loss) per share in NOK –

| | | | | | |
|-------|------|-------|------|------|------|
| basic | 2.57 | -2.42 | 3.99 | 0.75 | 1.45 |
|-------|------|-------|------|------|------|

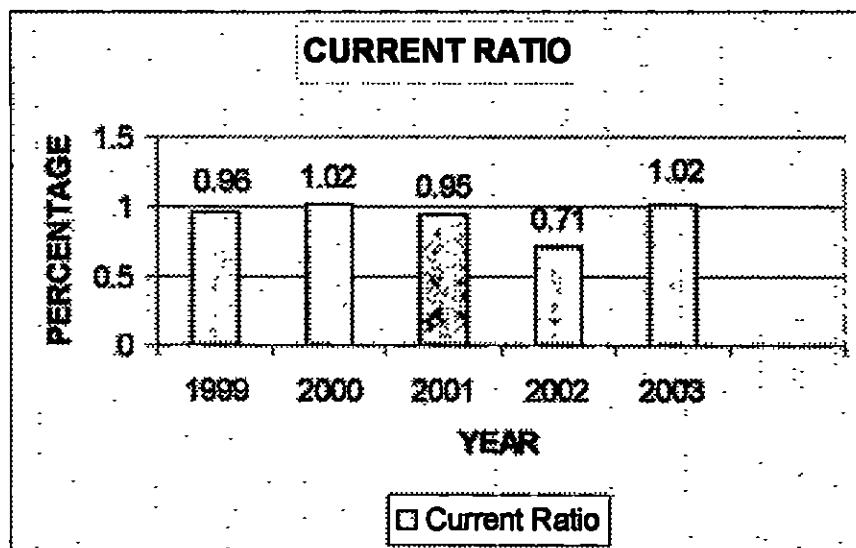
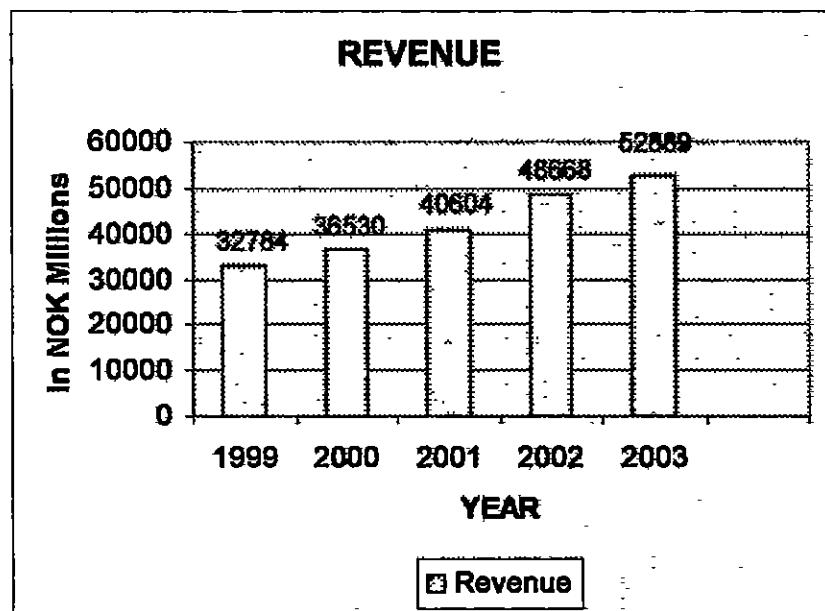
Balance Sheet Figures

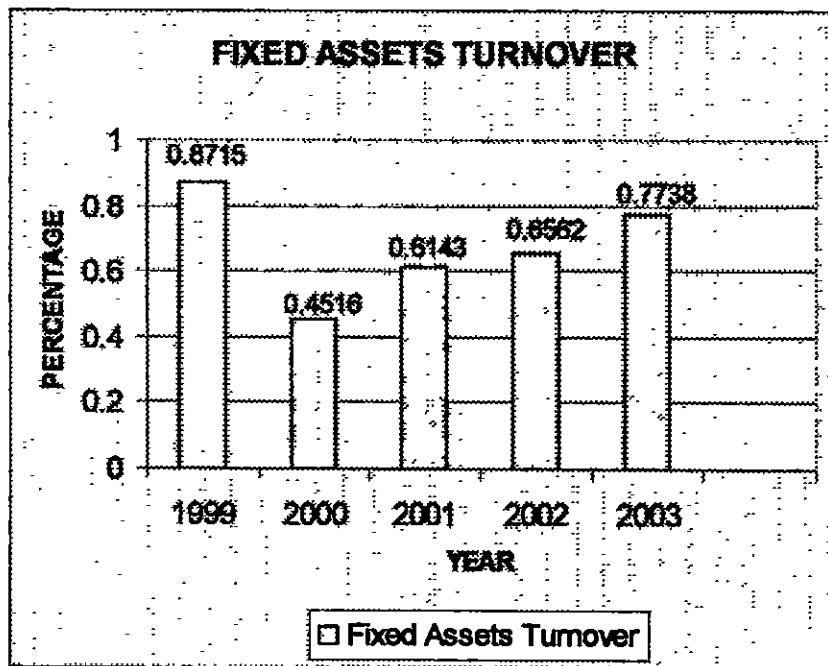
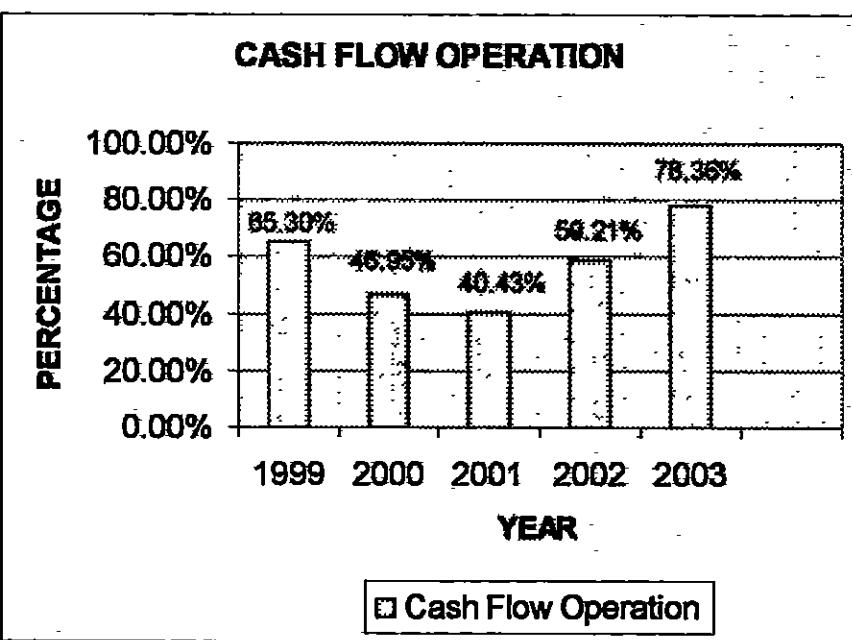
| | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|
| Total fixed assets | 68,346 | 74,162 | 66,095 | 80,881 | 37,617 |
| Total current assets | 17,764 | 15,296 | 16,528 | 12,804 | 10,409 |
| Total assets | 86,110 | 89,458 | 82,623 | 93,685 | 48,026 |
| Shareholder's equity | 37,237 | 33,685 | 42,144 | 35,474 | 20,033 |
| Minority interests | 3,646 | 3,603 | 3,539 | 2,706 | 1,232 |
| Total equity and minority interests | 40,883 | 37,288 | 45,683 | 38,180 | 21,265 |
| Total long-term liabilities and provisions | 27,775 | 30,454 | 19,646 | 42,908 | 15,962 |
| Total short-term liabilities | 17,452 | 21,716 | 17,294 | 12,597 | 10,799 |
| Total liabilities | 45,227 | 52,170 | 36,940 | 55,505 | 26,761 |
| Total liabilities | 86,110 | 89,458 | 82,623 | 93,685 | 48,026 |
| Total long-term interest-bearing liabilities | 34,782 | 33,957 | 24,758 | 46,972 | 19,252 |
| Shareholder's equity | 42,535 | 35,799 | 42,944 | 36,304 | 21,035 |

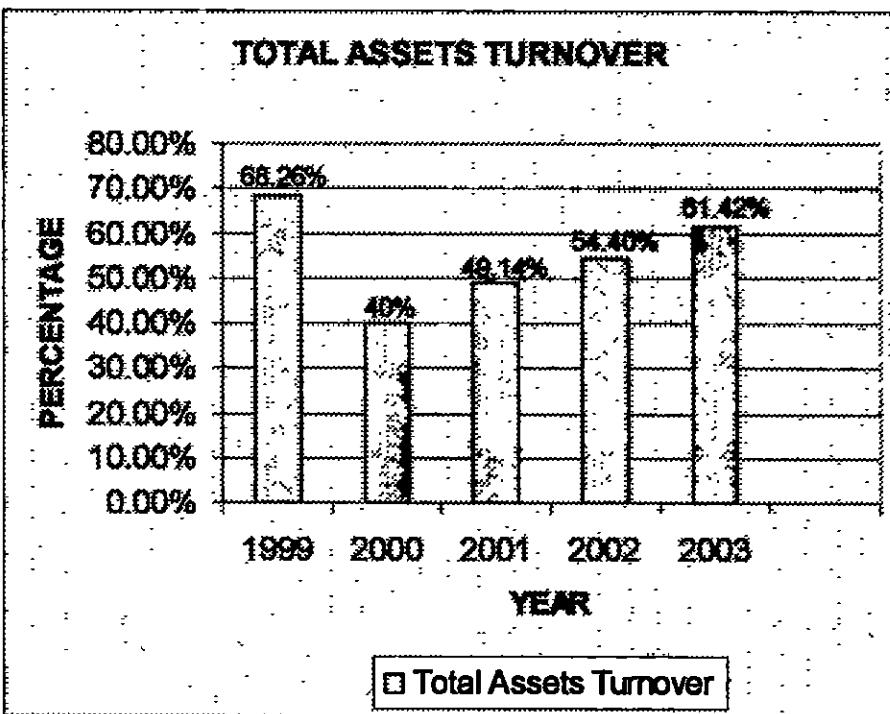
Cash flow Figures

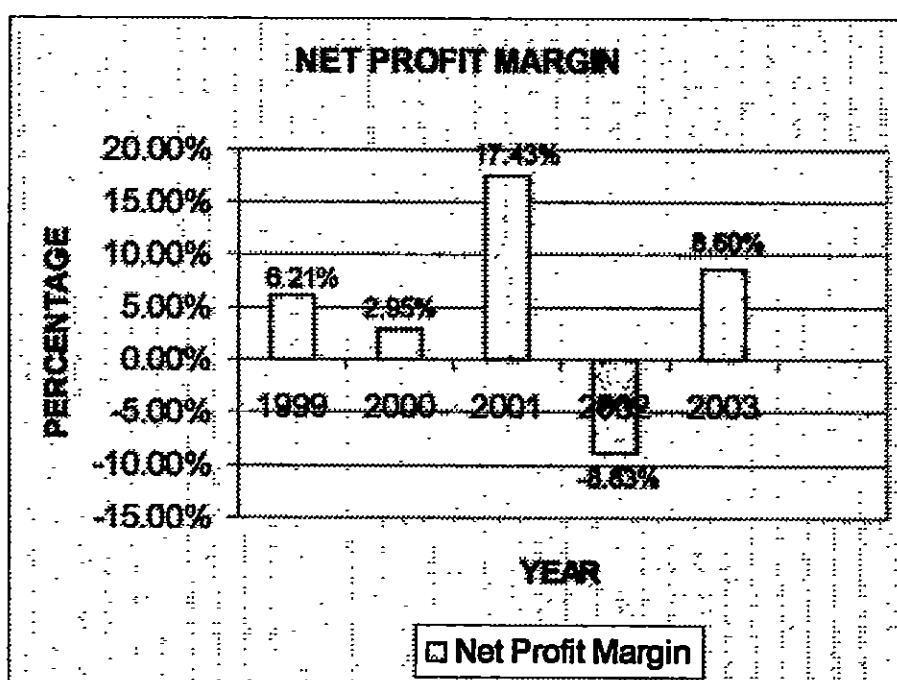
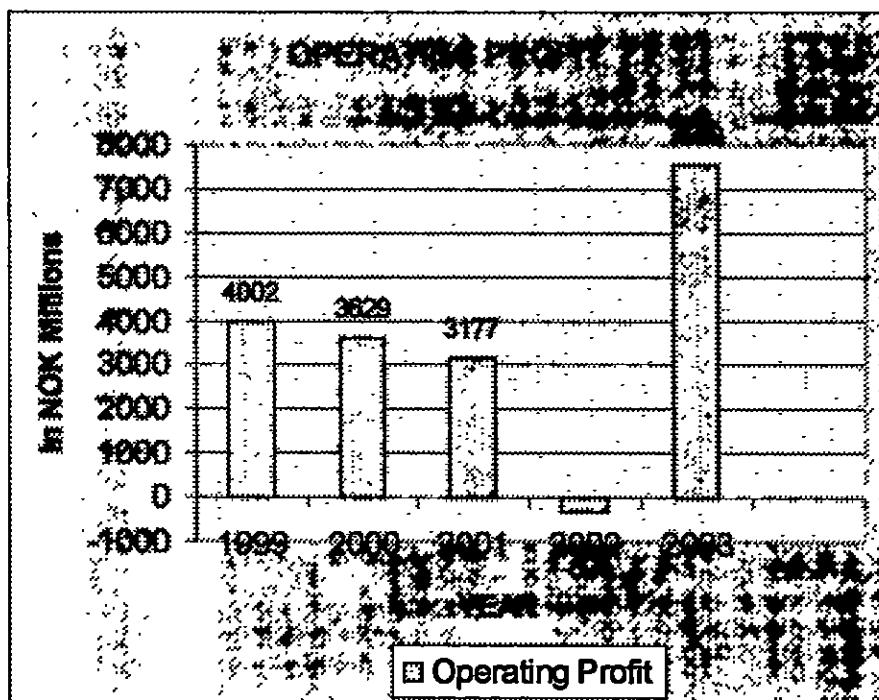
| | | | | | |
|--|---------------|----------------|----------------|----------------|---------------|
| Net cash flow from operating activities | 13,676 | 12,858 | 6,993 | 5,915 | 7,052 |
| Net cash flow from investment | -3,454 | -21,727 | 20,891 | -47,308 | -8,887 |
| Net cash flow from financing activities | -7,887 | 8,641 | -24,366 | 41,558 | 2,914 |

FINANCIAL RATIOS OF TELENO (1999-2003)

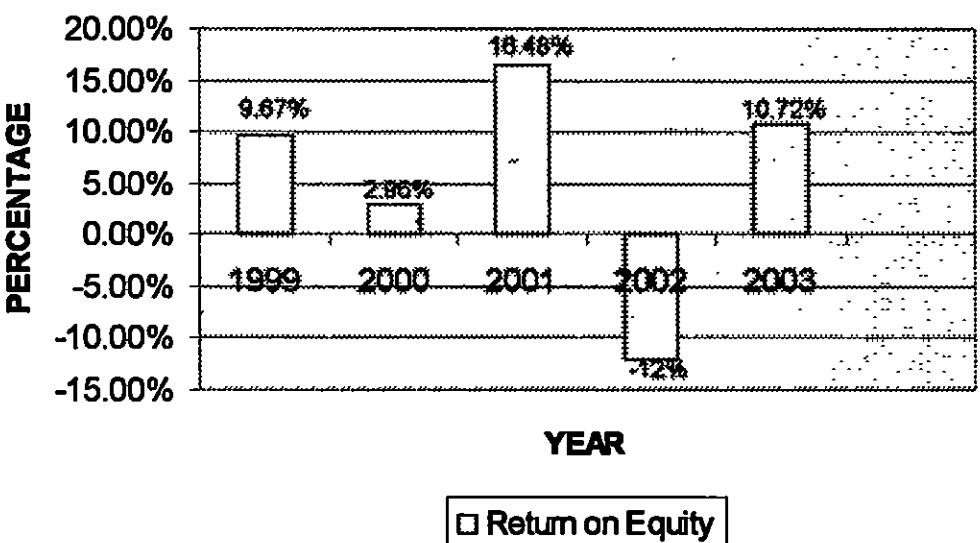




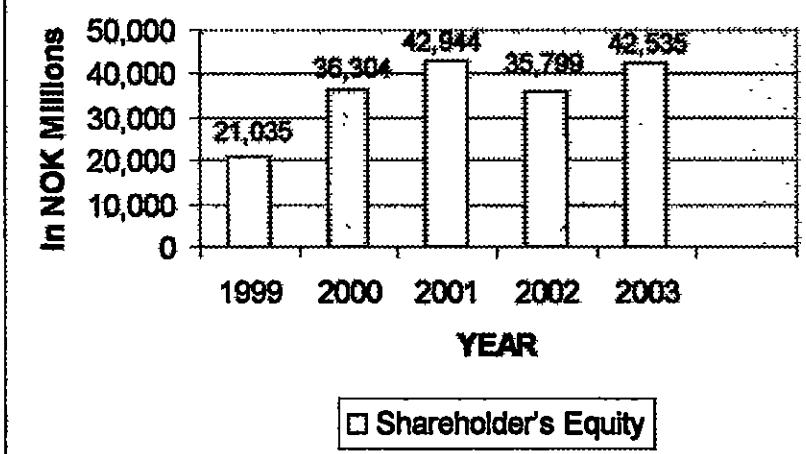


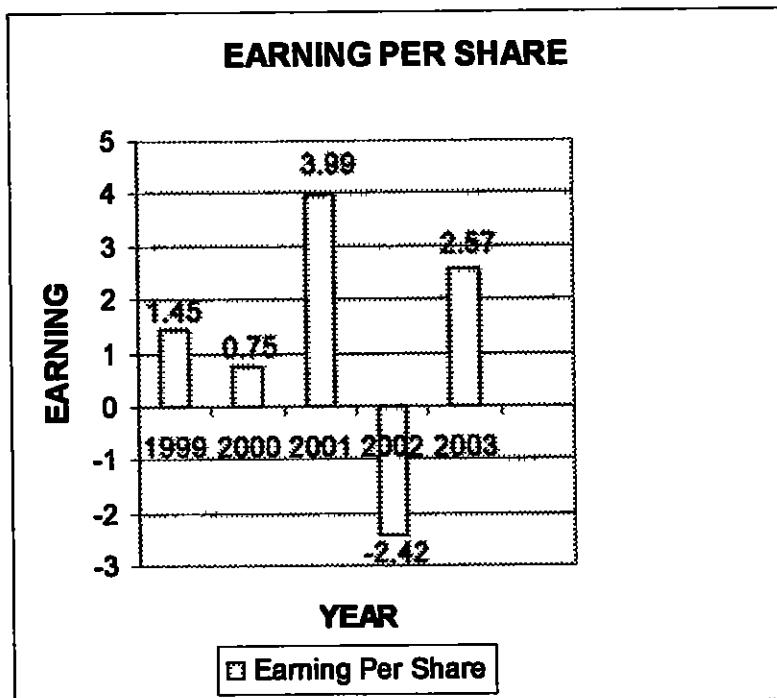


RETURN ON EQUITY



SHAREHOLDER'S EQUITY





CONCLUSION

Mobilink, Ufone and Telenor Group have been analyzed in the finance section in order to know their financial soundness. Mobilink which is the Pakistan's most favorite cellular phone service has faced downward trend in its almost all ratios calculated on the basis on its annual Report 2003. It might face a number of different problems such as difficulty in obtaining debt. Moreover the company cannot invest in any profitable project due to its bad financial position. In Addition, it cannot offer compensation programs to its employees and customers. But the graphical view of last four year ratios provide an effective and efficient picture of the company in terms of its financial position. It shows that it has been enjoying high return. The year 2004 has been an excellent year for Ufone which is the second major operator in Mobile Industry. It has enjoyed heavy returns over the years. But when we compare assets of Ufone and Mobilink, we come to know that Ufone is far too low. The major and of course key player is Mobilink which has the potential to take any creative step to any time. Companies might have their own interests to show a weaker financial position and that might be the

case with Mobilink. So the major threat for new entrants is Mobilink. They need to carefully analyse it and adopt some preemptive strategies.

On the other hand Telenor Group has a much stronger position as indicated by various financial ratio calculations. Such a sound position would help Telenor to invest in any profitable project for the Group. So investing in Pakistan's cellular market possessing a severe competition can be considered a great opportunity as well as threat for Telenor. Though greater amount of risk is involved in Mobile Industry, but higher risks always generate higher return. So with a financial position of this kind, Telenor would certainly grow as greater amount of funds are available to offer any innovative services, features to its target market.

While working on this section, we have faced some hurdles like data collection and analysis. But due to admirable coordination among the group, we have solved every problem and enjoyed mental stress and tension. It was a critical portion of our project because it involved advance level financial statement analysis. For this purpose we had to go through different finance books by own selves. It has resulted in great learning for us, and improved our analytical skills.

MARKETING PHASE

Existing Cellular Companies

MOBILINK

Mobilink GSM is a subsidiary of ORASMCOM TELECOM; an Egyptian company.

Mobilink started its operation in Pakistan after getting a GSM license in 1994.

The company has approximately and investment of 750 million dollar in Pakistan.

It has a customer based of about 4 million which makes it market leader with 63 % market share. Now let us analyze mobilink GSM in detail

PRODUCT

The product which mobilink sells is a communication service or commonly called mobile or cellular service. The physical product involved in this offering is a mobilink GSM SIM. This on buying enables customer to enjoy the services of mobilink GSM. In product range they have two major categories the first is jazz and the other one is indigo.

JAZZ

The major customer base belongs to this genre which is a prepaid service. The main theme of this service is to enable you to get hold of your mobile expenses and freedom from the fuss of monthly bills this solution has been a big success especially in the younger generation.

INDIGO

This is a postpaid connection offering of mobilink. It has been renamed from star to indigo with a re launching of mobilink. Mobilink has relied heavily on indigo for its revenues. It has now over 125000 indigo accounts. With average revenue per user (ARPU) of \$ 45. Which makes 2610 in Pakistani Rs. Mobilink is a way ahead of its competitors in the postpaid area.

PRICE

Mobilink has given tariff competitive to the market. It has separate rates for prepaid and postpaid.

JAZZ TARIFF (Rs)

| | |
|--------------------------------------|------|
| Daily charges | Zero |
| Incoming calls | Free |
| Outgoing calls | 4.75 |
| SMS | 2.00 |
| On call services (CLI, Call waiting) | Free |

Recently mobilink has rescheduled its tariff and has given relief to its customer in the following ways.

- 1 .No roaming charges nation wide.
2. All mobilink to mobilink calls charged as local calls.
3. Reduction of call charges by Rs 1.
4. No connection charges. (Govt taxes apply)
5. SIM replacement charges reduced.

INDIGO

Charges of indigo vary with your nature of connection.

INDIGO TARIFF (Rs)

| | | | | | | |
|--------------------------------------|--------------|-----------|------------|------------|------------|-------------|
| Indigo airtime charges | Indigo basic | Indigo 50 | Indigo 100 | Indigo 200 | Indigo 400 | Indigo 2000 |
| Line rent | 300 | 600 | 850 | 1300 | 1850 | 3900 |
| Free minutes | - | 50 | 100 | 200 | 400 | 2000 |
| Outgoing calls- peak(0700 2130) | 3.50 | 2.90 | 2.60 | 1.90 | 1.00 | 1.00 |
| Outgoing calls- off peak(21300700) | 3.00 | 2.20 | 1.80 | 1.50 | 1.00 | 0.50 |
| SMS | 1.50 | 1.50 | 1.50 | 1.50 | 1.00 | 1.00 |
| On call services (CLI, call waiting) | Free | free | Free | free | free | Free |

Important information

1. Free minutes apply to indigo airtime only. However other charges apply.
2. Refundable security deposit starts from Rs1500 for local Rs 4000 for NWD Rs 8000 for ISD and Rs 20000 for International roaming services

the call rates of mobilink has often been criticized for being on the higher side and in this regard recently mobilink announced a Rs 1 cut on its mobilink to mobilink call rate and no more roaming charges nation wide.

PLACE

Mobilink is operating on national level in more than 300 cities and towns across Pakistan. It is following a very aggressive and expansion strategy. Even now it captures 90 % of urban population.

PEOPLE

The target market of mobilink is people of Pakistan who want to be connected with others regardless of time and place. But the focus has been on the younger people who have budget constraints and want freedom from paying monthly bills.

PROMOTION

Promotion is one area which has been emphasized duly by a mobilink. They understand the importance of effective marketing strategy to grab their market share and continue as market leader in a very competitive cellular market. In the recent past huge investment has been made and a re launch of mobilink which includes new logo and a one liner "RESHAPING COMMUNICATION". This has given a fresh look to mobilink and has been accepted immediately by the masses. Mobilink is enjoying the services of Orient McCann Erickson as their advertising company which is doing a wonderful job in promoting the brand. In

this context an ad. Of CALL AND CONTROL being run on electronic media is very popular amongst the viewers. In the promotion area mobilink seems to be clearly distinctive and effective compared to its competitors. Some of the promotional techniques being used are electronic and print media, huge hoardings and billboards in major areas.

Now let us examine the strength and weakness of mobilink and find out how it can convert its threats to its opportunities.

STRENGTHS

Coverage

The major strength of mobilink is its nation wide coverage which spans in more than 300 cities and towns. This strength makes mobilink market leader with market share of 63 %.

Service Quality

The quality of service (QoS) of mobilink is much better than its competitors specially U-Fone despite its huge subscriber base. In the recent past there were some concerns regarding the (QoS). But this was due to expansion activities in which mobilink is working on project of switching from 900 MHz to 1800 MHz frequency band. This is likely to be completed by the end of January 2005. After this the QoS will be much better than the existing

International Roaming

Mobilink has made agreement with over 150 cellular operators in 60 countries which allows mobilink customer to communicate globally.

ISO Certification

Mobilink got ISO9002 quality management system certification for billing and engineering departments.

Prepaid Connections

Huge portion of mobilink customer based has got prepaid JAZZ connection which is the key factor in mobilink success.

Customer Service

Mobilink provide 24 hour helpline for its customers. This has played an important role in resolving customer complaints.

Skilled Employee Base

Mobilink has a base of 1800 trained and skilled workforce which is an asset to mobilink. Apart from this they also have about 10,000 indirect employees.

SMP (Significant market power) Status

Mobilink has been given the status of SMP by PTA (Pakistan Telecom Authority) in acceptance of its market leadership. But with this comes more responsibility and accountability which mobilink is fulfilling.

WEAKNESSES

High Tariff

This is a weak area for mobilink. Its call rates and other charges are quite high than what they should be. This has already gone against mobilink due to introduction of two more cellular operators by PTA.

Service

There are growing complaints about connectivity in some densely populated areas and also on special occasions like EID, national days and New Years Eve etc.

THREATS

New Entrants

High tariff of MNOs (mobile network operators) has forced PTA to give licenses to two more operators. Telenor, a Norwegian Base Company and UAE based company Warid Telecom. This has posed serious threats to mobilink specially Telenor which is establish company and is ranked among top twelve cellular companies of the world and it can give a real tough time to mobilink.

Aggressive Marketing Strategies of Competitors

U-Fone recently launched a free connection to the users on occasions of National Day for promoting their advertising strategy; such marketing tactics by the competitors can create threats for mobilink.

OPPORTUNITIES

Potential Market

It is estimated that current market has a potential to grow from 6 million to 25 million in the next decade (2015). This tremendous opportunity for mobilink to further consolidate its leadership in the market.

RECOMMENDATIONS

1. Tariff

First and foremost recommendation as a result of our analysis is that mobilink should cut down its tariff. This is vital for further satisfaction of its customer. The existing competitors of mobilink are offering as low as 0.99 per minute late night call charges. So mobilink should react promptly and radically in this response. Secondly if mobilink wants to retain its leadership it also needs to benefit its customers on SMS. Rate of Rs 2 is higher compared to other operator's charges.

2. Customer orientation of staff

This is another area where mobilink needs to improve. In response to feed back from existing customers of mobilink, it is recommended that the dealing of customer services representatives be improved. It has been observed that their attitude is quite discouraging and also rude in some franchises/outlets.

1. QoS Improvement

Despite good service quality of mobilink there is decline in service quality in some rural areas which includes call dropping, disruption in sounds, failure of networks etc. so mobilink should first improve the service in those areas before expanding to new cities and towns.

U-FONE

Pak Telecom Mobile Limited (UFONE) as known to us was formed as a 100% subsidiary of PTCL. The company launched its services on the 29th of January 2001. Now U-Fone has subscriber base of 1.9 million and the company intends to expand this to 3 million in the next six months. It will add 200 more cities to its network. The total investment so far made by the company is \$350 million. The existing infrastructure of U-Fone is second largest among the cellular companies in Pakistan. During the financial year 2003-04 the company earned revenue of Rs 770 million.

The Brand name of Pak Telecom Mobile Limited is '*Ufone*'; this brand name engulfs the company's core values. The U stands for the people as a whole- the u concept in business, the customer & Fone means a device for communication, thus the brand name of the company say it out loud and clear '**A company providing the services of mobile communications for you**'.

The company claims to have added 1 million customers in the last four months alone which also includes 300,000 new subscribers when U-Fone was distributing connections free of charge on 14th August. Now U-Fone enjoys a market share of 24 %.

PRODUCT MIX

PRODUCT

The product which U-Fone sells is a communication service or commonly called mobile or cellular service. The physical product involved in this offering is a U-Fone SIM. Which on buying enables customer to enjoy the services of U-Fone? Their product offering is only based on prepaid connections. The features which set U-Fone apart from its competitors is its enhanced value added services which include

- **GPRS (Global Packet Radio Service)** which offers increase bandwidth for the transfer of data services.

- **WAP** (Wireless Application Protocol)
- **AKD Pocket Stocks**, GPRS based financial service aimed at corporate users. Provide U-Fone user with up to date stock indexes from Karachi Stock Exchange.
- **MMS**. During the last India Pak cricket series U-Fone introduce "U-Fone Action Replay". MMS service through which user could receive animated video clips of falling wickets.
- **OTA** (over the air) payment via credit card or post paid accounts in collaboration with Citibank, Parcel tracking and selected Air fare info via SMS.
- **VPN** (virtual private network). Secure connectivity solution for corporate users.

PRICE

U-Fone has given tariff competitive to the market. Their rates are as follows;

U-Fone Prepaid TARIFF (Rs)

| | |
|--------------------------------------|------|
| Daily charges | Zero |
| Incoming calls | Free |
| Outgoing calls | 5.0 |
| SMS | 1.50 |
| On call services (CLI, Call waiting) | Free |
| Balance enquiry charges | 0.50 |

Post Paid Tariff (Rs)

| | Package 1 | Package 2 | Package 3 |
|--|-----------|-----------|-----------|
| Line Rent | 300 | 750 | 1750 |
| Free minutes | 0 | 70 | 300 |
| Peak Outgoing Calls(600 AM -900 PM) | 3.50 | 2.75 | 1.0 |
| Off Peak Outgoing Calls (600AM -900 PM) | 3.0 | 2.0 | 1.0 |
| SMS | 1.50 | 1.50 | 1.50 |

Note All nationwide calls from Ufone to Ufone are charged at local airtime charges only.

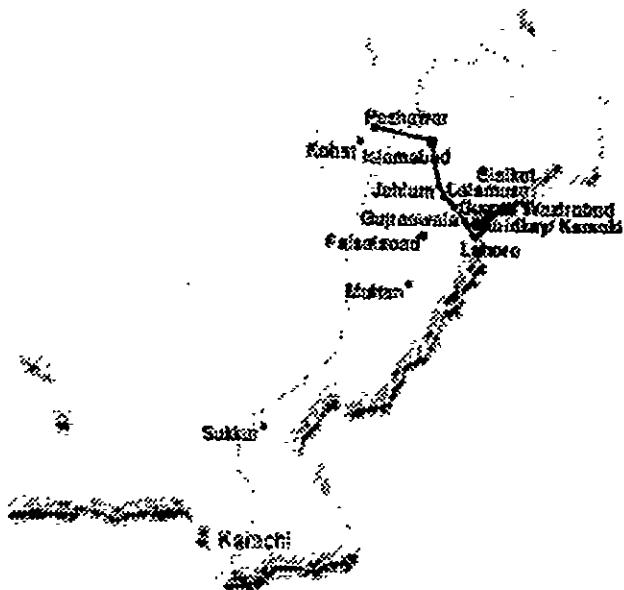
*All prices are exclusive of 15% govt. tax & PTCL charges

For all Ufone postpaid customers, all nationwide Ufone to Ufone calls have no nationwide access charges. Out of city calls made to any other number have nationwide access charges of Rs. 2 only.

Security Deposit starts from Rs. 1500 for local, Rs. 2500 for NWD, Rs. 5000 for IDD 7 Rs. 20000 for International Roaming

PLACE

U-Fone is operating on national level in more than 80 cities and town across Pakistan. It is following a slow and steady expansion strategy. The coverage of area of U-Fone is very limited as compared to its competitors



With the passage of time the coverage is expanding but still its presence in main areas is absent and it is hurting U-Fone reputation.

PEOPLE

The target market of U-Fone was the corporate sector initially but with the passage of time they have trickled down to the middle and lower middle class as well.

PROMOTION

The marketing objective of the U-Fone is to grasp the maximum market share in a competitive telecom market and secondly to promote the U image of U-Fone which is a hall mark of U-Fone. Initially U-Fone emphasizes on humour element in its promotional campaign and it was warmly accepted by the viewers. In the recent time U-Fone has reshaped its promotional tactics which includes change in logo and as well as change in one liner of U-Fone to "Its All about U". If we compare the ads of U-Fone with its competitors especially with mobilink then we observe that the appeal of ads. Is not so strong and nor catchy

In the promotional arena another tactic adopted by U-Fone recently was offering of free SIMs to its customers on the eve of 14th August the National Day of Pakistan. This tactic gave a real boost to the sales of U-Fone. Approximately 300.000 new subscribers were added in the existing list.

SWOT ANALYSIS

Now let us examine the strength and weakness of U-Fone and find out ways and means of overcoming any loop holes in the business strategies.

STRENGTHS

- Backed by PTCL(Govt.)
- ISO certified.
- Lower prices than its key competitor (Mobilink).
- A number of customer facilitating packages.
- Easy to use services/along with customer help hotline 24 hour a day.
- A skilled work force.

WEAKNESSES

- Its QoS (quality of service) has deteriorated immensely.
- Its advertising campaigns are less penetrating than its competitors.
- Lesser area converge as compared to competitors
- Congestion
- Limited Dealers
- Small Distribution network
- International Roaming in few countries
- Employee turnover
- Failed to Develop Customer Loyalty

OPPORTUNITIES

- A large potential market is still unexplored.
- Global expansion
- Diversification

THREATS

- New entrants in the cellular market like Warid Telecom and Telenor.
- Government Regulations
- Competitors have Better coverage
- Privatization of PTCL
- Extensive Distribution Network of competitors
- Global Network Coverage of Competitors
- Competitors have established Brand Loyalty

RECOMMENDATIONS

1. Improve the service quality.
2. Increase coverage in more areas.
3. Nation wide free roaming as adopted by mobilink.
4. Re launch advertising campaign and design ads with an appeal.
5. Give a new look to its franchises/outlets.
6. Review its tariff and give relief to its customer.
7. Free balance inquiry service.
8. Upgrade the technological equipment to meet the future challenges.

PROPOSED MARKETING PLAN FOR NEW ENTRANTS

BACKGROUND

The telecom sector of Pakistan is going through the phase of turbulence after years of stability. The most recent stimulus in this regard has been initiated by the Pakistan telecom authority (PTA) by issuing licenses to two new cellular operators to launch their services in Pakistan. This is a transition phase and new market entrants are taking their positions to take off and the old operators are trying their level best to exploit the existing untapped markets before the entry of new operators. PTA's decision to introduce new companies in a Pakistan may not sound very feasible as has been argued by many telecom gurus. The PTA's view point in this regard is that this step is taken due to tough competition in the existing market and failure of the existing cellular companies to provide mobile services to the masses at a low and affordable cost along with good service quality.

PTA charged a license fee of \$291 Million from each of the new companies. In this regard an open bidding took place Islamabad in April, 2004, as result of which a Norwegian based company M/s Telenor and a UAE based company Al-Warid succeeded in getting the GSM nation wide license.

Now let's have an overview of these new entrants in the telecom sector and how they play a role in development of telecom sector of Pakistan and in the long run how benefits the economy of Pakistan in general.

TELENOR, A COMPANY PROFILE

Telenor is ranked by the GSM Association among the 12 largest mobile operators in the world with over 39 million subscribers. Telenor's origins go all the way back to 1855, and for 150 years the company has been Norway's leading telecoms player. In the 1990s, Telenor went from being a state monopoly to become a commercial enterprise and the company is today positioned as an innovative player in international mobile communications.

Telenor is a pioneer in mobile communications. Its digital successor, GSM, was introduced in 1993, and third generation mobile network, UMTS, is scheduled for commercial use within 2004.

Although Telenor is of European origin it rolled out cellular networks in over 12 countries and they have experienced in our regional neighborhood, Bangladesh, Malaysia and Thailand. This Asian experience will put Telenor in an excellent position as far as knowledge of local cultural trends is concerned. Hence less "Hit and Miss" campaigns from this season player. Moreover Telenor has set clear goals for establishing its business in South Asian Region. They are likely to correctly gauge market demand in Pakistan, create a niche if required and provide serious competition to existing MNOs (mobile network operators).

With regard to its launching of mobile services in Pakistan Telenor has decided to invest \$1 billion in Pakistan the next five years and launch its mobile service by April 2005. Telenor would initially install 170 towers in Lahore.

WARID TELECOM, A COMPANY PROFILE

Warid Telecom is owned by The Abu Dhabi Group which is led by His Highness Sheikh Nahayan Mabarak Al-Nahayan. Abu Dhabi Group apart from having a substantial share holding in Bank Alfalah and United Bank Limited has also other investments internationally in the Telecommunications, Financial Institutions, Hospitality & Property, Oil Exploration Supplies and Automobile Industries.

Warid Telecom intends to launch its nationwide GSM network in the first half of 2005 to cater to the current unmet demand for quality mobile services. With new entrants, customers will be provided with more choices, better quality of services, cheaper rates and many new innovative products, which Warid Telecom wishes to pioneer.

In addition to its mobile services, Warid Telecom will be launching a Long Distance & International and Wireless Local Loop business shortly. This service will provide international termination of traffic into Pakistan, alternative affordable nationwide and international voice telephony and data & value added services. These services also target a market that is highly price competitive and quality conscious.

Warid Telecom also providing the national transmission network ,providing quality connectivity across Pakistan, vertical integration into complimentary markets such as Call Centers and Product Development, and several other options.

MACRO ENVIRONMENTAL ANALYSIS

PEST ANALYSIS

POLITICAL ANALYSIS

- Political stability**

The political scenario of Pakistan has not been very promising and sustainable in the past. This had a very adverse effect on the business in two aspects. Firstly the economic and fiscal policies were abruptly changed with introduction of every new political setup and secondly the law and order situation of the country posed very serious threats to the investors. But the circumstances have considerably improved since last five years. The government has taken number of steps to provide an investor- friendly environment to the businessmen and to reduce the cost of business in Pakistan. One of the most recent steps is reduction in the power tariff. Government has also taken concrete steps to improve the law and order situation in the country. After having a close look at the political scenario of the country we feel that it is the right time for new companies to make inroads in the business in Pakistan.

- Legal framework for contract enforcement**

It is the already defined framework for all the investors. Government already mentioned the important aspect of these laws regarding the ethics, social matters etc. as being the owner of Warid Telecom, His Excellency Sheikh Nayyan Mubarak Al Nayyan and his management is well aware of the customs, values and ethical aspect of this region, so they need not worry about this concern. It will be welcome and accepted by the people immediately.

Taxation – tax rates and incentives

As the government has taken the certain steps to promote the foreign investment in the country. Especially in IT sector, in this respect foreign investors have been provided certain relief regarding the taxation rates as well. So this will attract more and more investors to invest in the market. Warid Telecom will also enjoy this incentive provided by the Pakistani government.

ECONOMIC ANALYSIS

- Type of economic system in country of operation**

The national economy of Pakistan has been developing since independence. It has showed a pace in development for the last five years. Pakistan's economic growth not only remained relatively resilient but improved over last few years. The pickup of growth was mainly contributed by manufacturing and services.

- Macro Economic Indicators**

All the major macro economic indicators show positive trend. The Forex reserves of the country are touching \$13 Billion first time in the history. Growth rate is 5.1% higher than India and only below South Korea, inflation is low, balance of trade and payment is stable and the Pak Rupee is strong.

- Sustainable and Investor Friendly Economic Policies**

Most important of all aspects is that the economic policies have been mapped in the right direction and especially in telecom sector the government has worked out a wonderful deregulation policy which has gathered investors' confidence and FDI (Foreign Direct Investment) is on the rise. The most important factor in this regard is that government has vowed to sustain the policies.

- **Labor costs**

Labor cost is another factor in the economic factors. As the labors are not so costly in the Asian countries like Pakistan and they have the set standard of amount based on the daily wages according to the labor act defined

SOCIAL ANALYSIS

- **Demographics**

Demographics include the study of human population in terms of size, density, location, age, genders, race, occupation and other statistics. In this regard the new entrants have already procured the services of notable research and marketing agencies to find for themselves the values, norms and the culture of Pakistan .But Warid Telecom being owned by a Muslim state has really an edge over Telenor Telecom that they are well aware of the local culture, values and customs of the country. On the other hand Telenor are not far behind, they also have this Asian experience and specifically South Asian experience because they are already operating in our Neighborhood, Bangladesh .this will surely help them in getting used to the culture here.

- **Class structure**

Class structure is another important aspect of the social factor. If we talk regarding the different regions of Pakistan .Warid and Telenor telecom have to adopt different strategies and different packages according to the area and requirements. Like they can offer less cost and affordable prepaid connections to the common people and post paid connections with value added features with little bit more cost. To those from affluent background.

- **Education**

Education is the factor which really plays an important role for the service promotion and progress. Education creates awareness. The literacy rate of Pakistan is improving day by day. So it will really help out the new entrants to launch their service and create the awareness to the common people. But they have to adopt such strategies that the common person of the country can understand and is influenced by their message. In this way effective campaigns can be launched through effective marketing strategies.

TECHNOLOGICAL ANALYSIS

- **Recent technological developments**

As being in the technological business, Telenor and Warid telecom are well aware of this aspect. How to make use of it and how effectively can it be utilized. Due to the great boom in the technological sector in the recent time severe competition in the telecom sector has made the environment very interesting and tough for the new entrants, that they not only have to capture the existing market of the existing companies but also become the leader in the existing market. The new entrants have the workforce backed by the strong financial muscle which can make it possible in quick time, provided they work out a distinctive and effective strategy. In the communication sector there has been an advancement at a very fast pace. In GSM technology, there are number of auxiliary technologies like GPRS, EDGE, VoIP, and HSCSD, Blue Tooth etc. So the new entrants are well aware of these aspects and in fact they have already made agreements for the procurement of these services.

- **Impact on cost structure**

Quality and cost will be one of the most important aspects for Telenor and Warid telecom's existence in this Pakistani market. They are launching the

new cellular operations in the country with the aim of providing high quality services at low cost which is the demand of the market and which people are thriving for.

COMPETITORS SWOT ANALYSIS

Mobilink

After having the detail analysis of the mobilink we have come to the conclusion that mobilink is enjoying a firm grip in the market and its future is looking bright and healthy. The strengths of mobilink outweigh its weaknesses. This view of mobilink's strength is also recognized duly by the PTA which has awarded mobilink the status of significant market power (SMP). It is awarded to those players who contribute significantly in the market and have market share of more than 25 %. One of the major strength of mobilink is its wide coverage to more than 300 cities and towns across Pakistan and is growing day by day fast. Mobilink has a distinctive edge over its competitors in terms of quality of service, which is likely to be further improved by switching over from 900 MHz frequency band to 1800 MHz by the end of February 2005. Another salient feature which sets mobilink apart is its 24 hours help line service for its customers to ensure customer satisfaction. One area which really hurts mobilink's cause is its high tariff. If we look at the future prospects of mobilink, we see that there is an apparent threat for the mobilink with the entrance of two new cellular operators. But we assert that this potential threat can become an opportunity due to strong grip of mobilink in the cellular market and its ability to grow fast with the help of its effective marketing and promotional strategies.

We, in a nut shell can say that though a rigorous competition is just round the corner, mobilink can anticipate further growth and prosperity.

Ufone

If we have a closer look at this, significant market player we come to know some interesting findings. The major strength of Ufone is its strong government backing as being a 100% subsidiary of PTCL. This has helped Ufone do wonders in the past especially at the time of its launch. But with the passage of time and with increasing competition, Ufone has not been able to fully capitalize this strength. In terms of its offering to its customers, what puts Ufone ahead is its Values Added Services which created a buzz in the market and has forced competitors to follow its footsteps and hence mark its innovation in providing state of the art communication services. Another customer friendly step taken by Ufone is its economical call rates and other services.

Now there are areas which really let Ufone down and inhibit from growing fast is coverage areas in which Ufone operates. Despite tremendous potential in the telecom market, it has failed to operate nation wide. Another weak link in Ufone's offering is its advertising campaign which is not so successful as compared to its start. In terms of future Ufone is very much there in the competition and it can touch the untapped market segment. We also want to share our apprehensions regarding the future performance of Ufone. It is a fact that PTCL, which is the parent company of Ufone, is going to be privatized in near future. So Ufone is going to lose the patronage of PTCL which will be a big set back for the Ufone.

CONCLUSION DRAWN FROM SWOT ANALYSIS

After the detail analysis of the two great players of cellular markets in Pakistan we can conclude some suggestion for the new entrants Warid and Telenor Telecom that they have to analyze their competitors in depth and find out what strong points they have and how their weakness can be converted in to opportunities and how the opportunities can be converted to the success. As mobilink being the market leader in the cellular market having larger share, has strong grip. What makes mobilink strong is its quality service and further shifting from 900 MHz frequency band to 1800 MHz band. Which Warid and Telenor have to acknowledge and plan how they can adopt the latest technology for providing the fastest and smooth service? With the increase in the number of subscribers mobilink is facing the problem of network failure or busy network which Telenor and Warid have to look closely. Now coming to the tariff, mobilink has high tariff rate which really can become the great opportunity for Telenor and Warid to provide the latest technology service and at lesser cost. That can really effect the sale of the service and as well as selling of the existing products as well. With the passage of time the new entrants can have better knowledge of customer desires and how that can be achieved. Ufone and Mobilink are the two major competitors in the existing market for Telenor and Warid telecom which they have to compete, while talking about the Paktel GSM which is also gaining the share of market due to the low connection charges and less call charges and they are adopting the strong and effective marketing strategies. But people are still not satisfied with their service quality, so it has really become the negative point for the Paktel's growth. When talking about the new entrants, the stronger competitor Telenor, a Norwegian based company having strong telecom background and is among the twelve best cellular companies in the world. So that can be a really threat for the Warid telecom, but they are at the initial stage and they have to capture the market first, if Warid telecom grasps the market in no time that can be a big advantage for them and that can only be made possible by having the strong marketing campaigns. The religious factor can also be

adopted by the market. Warid telecom a company owned by our Muslim brother country UAE. This factor can really play a vital role in the current circumstances as well for the promotional campaign of the Warid Telecom.

RECOMMENDED MARKETING MIX

General Marketing Strategies

TARGET MARKET DESCRIPTION

The new entrants basically will target the masses who can not afford to have the connection or mobile sets. They will be provided an opportunity to take this facility at affordable cost. This will be part of the market and selling strategy of the new entrants. In this regard it has been observed that nowadays the cost of getting a cellular connection is really easy but the stumbling stone lies in buying the mobile or hand set. So the new entrants should work out a comprehensive strategy to facilitate people in this regard.

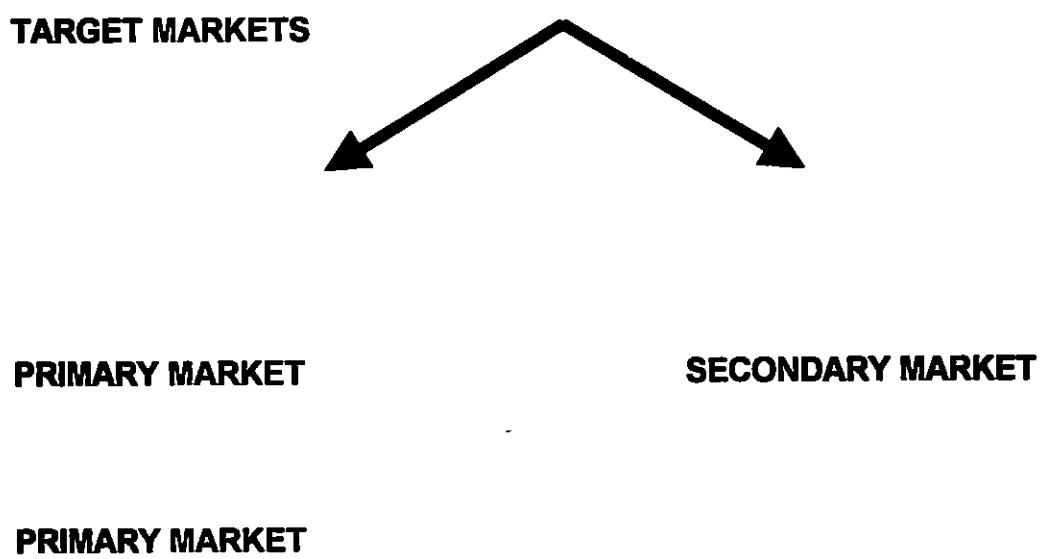
Warid and Telenor telecom have to make most of this opportunity which has not been adopted by the existing players. In our view following are the steps which the new entrants should consider while stepping in the market.

- Identify and profile distinct groups of buyers who will require separate products or marketing mix (market segmentation)
- Select one or more market segments to enter (market targeting)
- Establish and communicate Warid Telecom and Telenor's key distinctive benefits in the market (market positioning). Let the people know about the reason of existence of these operators in the market and what satisfaction they can provide to the end user.

In order to exactly target the market the new entrants have to divide the target market in different parts. One segment is of corporate sector, who desires high quality services, value added services at cost comparatively lower than the existing operators and the second target market will be of the customers who can not afford to buy the cellular service. Making strategies or plans how to provide them the facility or opportunity to use this service at an economical cost and with ease. This target market will be the main target of every new entrant because corporate sector is already controlled by the mobilink and ufone. So the special

attention must be given to this part, because still there is still a big market which needs to be tapped.

DIVISON OF TARGET MARKET TO BE FOLLOWED BY TELENOR AND WARID TELECOM



PRIMARY MARKET

The masses mainly belonging to the middle and lower middle class of Pakistan are

The primary target of the new entrants. Warid and Telenor telecom being new in The market has to facilitate its potential customers in monitory and quality terms.

SECONDARY MARKET

Corporate sector will be another target market for the new entrants who are already the subscribers of the existing cellular operators, will be one of the

achievements for the Warid and Telenor to snatch this share from the existing operators by strong marketing strategies and business tactics.

2. MARKET SEGEMETATION / BASIS FOR SEGMENTATION

Any market segment consists of a large identifiable group within a market with similar wants, purchasing power, geographical location and buying attitude or buying habits.

The new entrants have to target the niche market segment; because this is the only part where they can grasp the maximum share because this part of market is still left to be explored and this can be a big opportunity for the new entrants.

They have to create the niche due to the following reasons;

- Mobile phone is now for everyone it is more of a necessity than a luxury.
- Warid and Telenor telecom are adopting the strategies of providing services at an affordable cost.
- Target the market which still needs to be explored or which was not targeted before.

2. BASIS FOR MARKET SEGMENTATION

A number of segments will have to be taken by the Warid and Telenor Telecom, which include

- Geographic segmentation.
- Psychographics segmentation.
- Social segmentation.

GEOGRAPHIC SEGMENTATION

One of the major bases of segmentation is geographic basis which focuses on division on the basis of nations, states, regions, or cities for the new entrants it is necessary to start from one base from where they could grow and spread with ease all around. Their master plan includes areas defined as prime target and reaching out to other various geographic potentials. In case of the new entrants as the target market is Pakistan, so they should divide the whole country into different segments based on divisions and provinces of the whole country. Because the income, life style, occupation and education in various provinces are matters of great distinction, so they must base their marketing strategies on various divisional and provincial differences. This will help them to effectively target their potential customers.

1. PSYCHOGRAPHICS

Psychographics help describe the market on the basis of various factors, but the most important factors are

- **Perceptions**
- **Attitudes**

These factors play an important role in order to determine people's satisfaction, emotional attachment, and service loyalty.

• PERCEPTIONS

For easier understanding and to develop a link between everything the new entrant will have to get the real insight of what the people feel, how they perceive the communication needs today.

• ATTITUDES

Attitudes are positive or negative feelings developed towards a product, idea or a service. Broadly stated there are usually five attitude groups that can be found in a market

- Enthusiastic
- Positive
- Indifferent
- Negative
- Hostile

The management of Telenor and Warid is very much aware of the fact that the prevailing attitude in the market is quite encouraging and positive towards a mobile service. The people in general have realized the importance of communication regardless of time and place. This is going to help the cause of the new entrants as they will not have to waste their energies on need recognition of cellular communication which has already been done by the existing players of the market.

What ideally should be the focal point of the new entrants is the attractive and Affordable marketing packages that will determine their success in making serious inroads in the telecommunication market of Pakistan.

2. SOCIAL / CULTURAL FACTORS

For the new entrants segmentation will be based on a number of social or cultural factors, which govern its target market. Two of the most important considerations are

- Income group
- Field/occupation

INCOME GROUP

The new entrants are planning to create a splash by becoming the mobile phone of the masses still untapped therefore it is not surprising that their segmentation will chiefly revolve around the following.

- Social stratification of our society
- The segment that could be converted from nil users to all time users
- The secondary market, which too would revert to Telenor or Warid as an additional sideline service alongside what services, they are currently using.

We have created a customer profile of what the actual situation can be and although it may not be right to the point of perfection our long discussion with Mr. Salman leave us confident of our direction of thoughts.

CUTOMER PROFILE OF TARGETED INCOME GROUPS

From this stratification it is now no longer difficult to mark out the target market of the new entrants.

- They intend to target the lower middle class and lower class which are rare users the mobile services and the upper middle class who although use mobile services but still needs motivation to shift to all time users, in short this class is still not saturated. Therefore will become their primary target market.

- As a secondary market they identified the upper class of our society who is already user of this service however they seek to attract them as a secondary preference through lower pricing.

FIELD/OCCUPATION

This is another source of targeting that the new entrants should try to determine their target market. In the past only the corporate sector was rated as the occupation or field where mobile services were common or simple the mobile was created for them. But now the pendulum has swung the big time. And cellular companies differentiate themselves in this regard by deciding to cater to varied fields and occupations, which has brought a complete overhaul to the perception of mobile phones.

- Their primary target market should be the students and the professionals
- Whereas the secondary market has to be the all time user which is the corporate sector.

SPECIFIC MARKETING STRATEGY

- **The company**

In designing marketing plans, marketing management takes other company groups into account-group such as top management, finance, research and development, purchasing, manufacturing and accounting. All these interrelated form the internal environment of the company. New Entrants are also aware of this fact so they will develop the strategies for meeting these demands and making the marketing plans by evaluating all these factors mentioned above. These are the companies starting their operations to overcome the dominance created by the market leader Mobilink and Ufone in the telecom sector and providing the quality services at low price to the consumers.

- **Suppliers**

As suppliers play a vital role in the resource allocation of the resources needed by the company to run its operation. Whether in the form of raw material or the final product delivery to the final consumers, because the shortage or delays and other events can create hurdles for the smooth running of the operation.

Warid Telecom's agreements with suppliers

Agreement with Ericson

Warid telecom has signed an agreement with Ericson who will not only develop the network infrastructure for Warid telecom but also take the responsibility of looking after it as well. Under this strategic alliance agreement, Ericsson would provide Warid Telecom a complete turnkey state of the art network GSM solution, which encompasses the supply of core and radio network equipment , network design, rollout as well as professional services like full network operations and maintenance.

Warid agreement with Nortel Networks

Warid telecom selects Nortel Networks VoIP solution to build long distance network system in Pakistan. Four year frame contract signed for procurement of NGN (new generation network) infrastructure. Warid telecom has awarded Nortel Network a four year contract to provide a voice over internet protocol (VoIP), new generation network (NGN) in Pakistan. Under the frame contract Warid telecom will deploy Nortel Networks VoIP long distance solution which includes Nortel Networks Succession Communication Server (CS), 2000-Compact and Nortel Network Passport Packet Voice Gateway. (PVG) to deliver full feature, carrier grade telephony and data services. In addition to fix line long distance traffic Nortel Networks backbone will also be capable of carrying wireless traffic and local loop traffic for Warid Telecom's future GSM subscribers.

The details of these agreements provide evidence that the Warid Telecom understands the importance of long term agreement with its suppliers to ensure uninterrupted services to its customers.

Telenor Agreements with its Suppliers

Telenor's agreement with Siemens

Telenor and Siemens have signed an agreement for the deployment of a cellular network of Telenor in Pakistan. Top executives of both the companies signed the accord for the supply, installation, commissioning, operation and maintenance of cellular infrastructure all over Pakistan. Telenor plans to invest \$1 billion over the next five years. Siemens is a German manufacturer of telecom equipment and it is the large telecom solution provider in Pakistan.

Marketing intermediaries

They will help the company in distributing the product to the final consumers. These include physical distribution firms. They help the company to store and move goods from the point of origin to the point of destination.

Marketing services agencies include research firms, advertising agencies, media firms, consulting firms etc. financial intermediaries include banks, credit institutions etc that help the company to maintain its financial resources.

Today the companies' success depends on them greatly. In order to ensure smooth distribution of Warid telecom's services to end consumer it has planned a huge network of franchises and distributors.

Similarly Telenor has also worked on this aspect and being an established telecom company it has already sold distribution of Telenor's services to the businessmen and also has laid out the design of its franchises and the facilities in the outlets.

Customers

To achieve the success, the New Entrants have to look closely about its customer behavior, attitudes, preferences and demands so that there demands can be met. The customers' markets are of five types which they have to target including;

- Consumer market
- Business market
- Reseller market
- Government market
- International market.

Competitors

The company should provide best form of the products as compared to its competitors are providing in the market. To achieve it the company has to develop the marketing strategy and have a detail analysis of the competitors' weaknesses and the opportunities in the market. Telenor and Warid telecom for this purpose conducted a detail research regarding the existing market scenario and the existing operators in the market. So to compete them effectively and to enter in the competitive market is very tough and to get the share from the existing market is really an uphill task and requires strategic planning.

BRAND AND PRODUCT LINES

PRODUCT LEVELS

Core Product

The core product is to provide the "communication service".

Basic Product

New Entrants will provide two different connections, postpaid and prepaid including the value added features.

Expected Product

Customers want good quality service, affordable cost, customer support services availability of new connections.

Augmented Product

Special packages that can include free handsets, on easy installations or hand set with connection at reasonable price.

CHANNEL MANAGEMENT DECISION

1. SELECTION OF CHANNEL MEMBERS

Warid and Telenor are in the process of selecting the channels members with following considerations.

- Their financial strength
- Reputation
- Number of years in the business
- Sales record.

2. MOTIVATING CHANNEL MEMBERS

Warid and Telenor shall be providing training programs, market research programs and other capability to improve their overall performance.

Considering channel members as partners in the joint effort to satisfy end users. Rewards shall also be given to motivate their channels members

3. EVALUATING CHANNEL MEMBERS

Warid and Telenor should evaluate channel members on the basis of their sales, by checking their performance on quarterly basis, the profits to that relation schemes.

RECOMMENDED MARKET MIX

PRODUCT

New Entrants are targeting a market where there is already a severe competition. The existing operators like mobilink, Ufone, Insta and Paktel have a strong presence in the market. They are struggling hard to retain their market share and are trying to satisfy the customers for improvement of their sales. So the new entrants need to make such strategies which could attract the user or that can be a catchy solution. What the most desirable thing from the customer point of view is the cost and quality factor. Basically the masses of Pakistan belong to a lower income class, so they prefer such product or service which is economical and gives maximum utility. Only by fulfilling this desire of the customers, new entrants can make serious inroads in the telecom market. In the product area the new entrants can offer two categories of their service, first one is the prepaid connection and the second one is the post paid. In order to enrich their services they will have to add some distinctive features that could fascinate and attract the customers.

PRICE

The most important thing in this cut-throat competitive sector is the price factor. Providing the state of the art service at low cost is what the new entrants should be targeting at. It is the packages of new entrants which will determine to a greater extent the market share of each of them. The price factor can play a vital role in switching customer loyalty from one service provider to another. Therefore the new entrants must be very careful in designing the tariff and other service packages. The first thing in this regard is the connection charges to attract maximum subscribers at the time of their launching. They should offer the connections at the minimal or unbelievable price.

PLACE

The new entrants should launch their service in all major cities simultaneously in Pakistan, so that they can attract the maximum user at the beginning. By doing this they will also be able to gauge the feed back and the response of the users regarding this service and the company's presentation of their service, second area will be the places of franchises and the outlets of this company. In each city they should select such places which are well known among the public.

PROMOTION

The most important aspect of the marketing mix is the promotional strategy. The new entrants need to promote and advertise their product/service well before their launching and create hype for the service among the people so that they become really curious and enthusiastic about this particular product. There can be number of ways that can be applied for the promotion of the service of new entrants.

- Offering special packages for the students like low price prepaid cards.
- Offer number portability, i.e give the options to their new users of retaining their existing numbers but just change the code of Telenor or Warid telecom.
- Offering new call rates by late night or free late night service at the beginning to make the service popular among its users..
- Offering free SMS to the user.
- Offering low charges when calling to other cellular operators across country.
- Offering connections with mobile sets at economical rates(Bundle Offers)
- Organizing the social welfare activities with their brand name.
- Using the strong media campaign.

- The new entrants should target the young generation because they are the major portion of the population.
- Exploit the weaknesses of competitors by using them in their favor like
 - Congestion problems
 - High cost
 - Quality of service
 - Technology flaws
 - Customer support service

HUMAN RESOURCE PHASE

INTRODUCTION

To grow and thrive in today's competitive environment organizations must deal with several major challenges. First they must provide value. Traditionally the concept of value has been considered as a function of finance or accounting, however, the way HR is managed is crucial to the long term value of the company and ultimately to its survival. The value includes not only profits but employee growth and satisfaction, additional employment opportunities, protection of the environment and contribution to community programs.

Nowadays, value has become even more critical, organizational resources are stretched tighter than ever and allocating these resources wisely is imperative. For that reason all functions in an organization must work together to contribute wherever they can, and all functions particularly human resources, are increasingly being scrutinized for the value they add.

All aspects of human resource management, including how companies interact with environment; acquire, prepare, develop and compensate human resources; and design and measure work-can help companies meet their competitive challenges and create value.

Meeting challenges is necessary to create value and to gain competitive advantages; these challenges can be grouped into three categories:

- The global challenge
- The meeting stakeholder needs challenge
- The high performance work systems challenge

IMPORTANCE OF HRM IN THE TELECOM SECTOR

Nobody can negate the importance of human resource management in any type of business in the modern world. Its importance in the today technological world has increased too much due to the greater expansion in the technology. It's a big job for the manager to provide the IT facilities to the end user with the proper management. So its really a hard task for the companies to look after this aspect of the organization to manage their human resources and properly handled them for the maximum output. The employees of the organization are the total assets of any organization and they are the means to get the maximum utilization of the resources. If the employee of the organization are satisfied with the organization their output will be increased a lot which will increase the overall performance of the organization as well.

So if we talk about suggesting the human resource management to the new entrants, there are some important aspects of the HRM which they need to look after in order to get the maximum performance from their task force. Now onwards we will briefly explain some of the important aspects of the HRM which Warid Telecom and Telenor need to consider for their success.

MEETING COMPETITIVE CHALLENGES THROUGH HRM PRACTICES

The research has shown that companies that attempt to increase their competitiveness by investing in new technology and becoming involved in the quality movement also make investment in state of the art staffing, training and compensation practices. HRM practices that will help the new entrants deal with three competitive challenges can be grouped into four dimensions, as given below:

HRM Environment

The environment plays a vital role in the overall productivity of the organization. If the internal as well external environment has a positive affect on the employees of the organization, and its overall contribution towards the organization productivity will be high. The new entrants have to follow the following steps for creating a positive environment for human resources involves:

- Linking HRM practices to the company's business objectives that is, strategic human resource management.
- Ensuring that HRM practices comply with federal, state, and local laws.
- Designing work that is motivational and satisfactory to the employee as well as maximizes customer service, quality, and productivity.

Acquiring and Preparing Human Resources

The success of any business totally relies on the satisfaction of its customers, in the Japanese's market the customer is considered to be God, so the importance of the customer satisfaction is very clear from it. In order to make the customer satisfied there need a strong workforce who could judge the market and customer requirement at the proper time. In case of any termination, promotion and retirements also influence human resource requirements.

Managers need to predict the number and type of employees who are needed to meet customer demands for products and services. Managers must also identify current or potential employees who can successfully deliver products and services.

So by this Warid Telecom and Telenor have to acquire such a Work force that is well trained and having the market knowledge and ups and downs of the market as well. There should be least changes at the beginning in these areas because at the start of the business it requires time to adjust in the certain market and to be the part of any environment, because changes in these areas really effect the sales of the product of the new entrants as well.

Assessment and Development of Human Resources

In the modern type the companies are redesigning their work forces in order to meet the present and future requirement of the business. The restructuring of the organization can really affect the overall productivity of the organization. So in order to cope with this problem the new entrants have to deeply look into this aspect and they have to take the preemptive measures in order to minimize the future problems. The new entrants have to make sure that the people they are hiring are skilled enough to meet their future needs and can handle the present situation as well. This area of human resource management deals with

- Time to time analyzing the performance of the employees.
- Trained the work force to meet the present and future requirement of the market.
- Creating positive relationship between the organization and the employee s in order to be more effective and productive.

Compensating Human Resources

Besides interesting work, pay and benefits are the most important incentives that companies can offer employees in exchange for contributing to productivity, quality, and customer service. Also, pay and benefits are used to reward employees' membership in the company and attract new employees. The positive influence of new work designs, new technology, and the quality movement on productivity can be damaged if employees are not satisfied with the level of pay and benefits or believe and benefits are unfairly distributed. This area of human resource management deals with

- Establish an effective pay system.
- Employees should be awarded on the outstanding performances.
- Employees should be provided all the require benefits as according to the labor Act.

HRM STRATEGIES FOR NEW ENTRANTS

HRM is a function in the organization which is concerned with the staffing, training and development, motivation and maintenance of the employees

Following are the steps involved in the HRM of the new entrants;

- Recruitment
- Selection
- Orientation
- Training and development
- Performance appraisal
- Promotion/demotion/transfer/termination

Challenges Faced by the New Entrants

The new entrants have to face the external as well internal challenges in the new cellular market. These challenges can be further defined as;

External challenges

- **Work force diversity**

One the challenges faced in the today world is that of the work force diversity. This term refers to the meaning the people of different civilization working in a single organization. It can really cause a problem for the people as well as the organization. People from different culture working the same organization in the same environment having different attitudes toward the work. Some time it can be a problem for the worker to adjust in the diverse environment. So the important point for such organization is to train the people and hire such work force which has the ability to work in such diverse environment

- **Technological challenges**

Being the cellular operator the new entrants have to hire such people who are skilled enough to manage the technology. In order to cope with the technological challenges the only objective taken by the new entrants should be to hire a skilled work force and then train them according the environment

of the organization and polish their skills for the maximum utilization and enhanced productivity of the individuals.

- **Economic challenges**

The economy of the country really plays a vital role in any form of the business progress and prosperity. The boost in the existing Pakistani economy really makes the environment suitable for the foreign investor to invest in the Pakistani market. That's one of the reasons which stimulated the Warid telecom and Telenor to take the big steps of launching their product in the Pakistani cellular market. In order to meet the future challenges regarding economic the new entrants have to make preemptive strategies. So that any future challenges can be met in time and with effectiveness.

- **Government challenges**

In the current Pakistani environment government has taken such steps which really encourage the investors to invest with out any hesitation in the existing market and provide them certain benefits in this regard to encourage the foreign as well as local investors. The new entrants are also enjoying these benefits of stable environment as well as great government support for them. The HR department has to ensure that the rules regulations are properly implemented and followed by the organization. Being the cellular operators these two new entrants have to follow the rules, policies and standards set by the Pakistan telecommunication authority. These all should be adopted by these new entrants in order to be the part of the current existing market.

Organizational Challenges

- **Information systems**

- ✓ **Duties and responsibilities**

It is the responsibility of the HR department to assign the duties to the relevant employee and make the clear view of their responsibilities.

Time to time monitoring of their productivity and effectiveness is very important for the future planning. In case of any failure of performing

the certain task the HR department has to take the certain steps to get the maximum output from the employee and in time operation as well. Being the new entrants the Warid telecom and Telenor have to make the duties and responsibility chart of every employee and take the monitoring of their results as well so that the efficiency of the organization must not be decline at any stage.

✓ **Skills**

The new entrants have to hire the skilled force instead of hiring such people who need training. The skilled force can be provided a short on job training to tell them about the present environment of the organization and how they can achieve their objectives effectively. It is the duty of HR department to hire the skilled work force for the effective operation of the organization.

✓ **Future HR needs**

HR department must be aware of its future need. What strategies they have to adopt and what are the alternatives in case of failure of the currents strategies. What tools they should use and what will be their future requirement regarding work force, resources, employees satisfaction, organization overall output and number of the other issues which HR department of the new entrants have to take special care of it.

✓ **Current trends**

It's the responsibility of the HR department of the new entrants that they have to follow the current trends prevailing in the current environment. What rules and regulations regarding the workforces and what policies are followed in the different organizations, what benefits are provided by the organization to its employees and what type of the techniques are followed by the HR departments of the different organizations?

- **Unions**

In the current businesses the word "union" is becoming the threatening word for any business operators and they have to take note of this aspect. This can cause a great problem for any operator in any environment in any part of the world. The strength of unions can affect the overall productivity of the organization. The new entrants have to make such strategies for the unions that they can make relation among the unions and the organization for the maximum out put from the individuals. In order to make the employee satisfied they have to provide the special rewards and benefits to the employees and labor forces. This can cause increase in the productivity and effectiveness up to the great extent.

HR PLANNING

HR planning is one of the key factors for the successive operations of the business. By proper planning the achievement of targets can be made easy to many folds. What are the resources required and forecast the future demands all included in successful HR planning. When done well, HR planning can enhance the success of the organization while minimizing the human suffering resulting from poorly anticipated labor surpluses or shortages.

HR PLANNING TO BE CARRIED BY THE NEW ENTRANTS

Effective Scanning of the Market

The new entrants have to effectively scan the existing market. Their success can be up to hiring a skilled employees and as well as retaining "star" employees as well as ensuring that key positions are filled. In addition to identifying critical positions and any gaps in the corporate structure the new entrants have to concentrate heavily on matching star employees' talents and interests to available opportunities. Succession planning ensures employee development and progress toward meeting evolving business needs.

The Human Resource Department should provide the strategic planners and executives with the information about HR capabilities in the telecom sector, and takes the requirements of strategic planners and keep adjusting their activities accordingly.

Evaluate key leadership.

The human resources integration team should know all the candidates for the job, their current job descriptions, and where they fit in the company through an organizational chart.

Evaluate structure.

The integration team should know who the key players are, from the "inside" perspective. "Who runs the show?" The integration team should make sure that the new entrants have the structure in place that they want to move forward with, and that its structure will not leave any leadership or management loop holes in the new organization.

Evaluate people for jobs.

Staffing decisions should be made carefully with consideration of all factors. The people who are really capable of the specific jobs and they are meeting all the requirements of the specific job. This is the most important aspect of the HR that is hiring suitable person for suitable job. Because any fault at this stage can cause lot of damage to the organization in the long run. So these points are strictly to be followed by the new entrants.

Evaluate job descriptions for the new structure.

The job description and the job specification should be defined by the recruiting authority of the new entrants. Because when every individual will be assigned the specific job he is well aware of his job in the organization. So at the time of any decision one can be held responsible for his poor performance or can be rewarded in the form of incentives or promotions in case of extra ordinary performance. So it can be considered as an important aspect of any type of the business in any part of the world.

RECRUITMENT & SELECTION

The quality of an organization's human resources depends on the quality of its recruits. The recruitment is the process of finding and attracting the capable applicants for the employment. The process begins when new recruits are sought and ends when their applications are submitted. The result is a pool of applicants from which new employees are selected.

Recruitment Procedure

The recruitment procedure starts after having the detail planning and job analysis of the specific jobs and advertising in the daily news papers. The jobs can be offered through number of mediums. These include news papers, online hiring, telephonic, emails etc. after advertising the jobs the applicants are short listed and the selected candidates are called for the test or interview.

Constraints and challenges

- Strategic and human resource plans**

Strategic plans point out the direction of the organization and suggest the type of tasks and jobs that need to be undertaken. The strategic plans also include the internal as well external recruitment processes and analysis of the cost benefits in this scenario as well. Being the new entrants Warid telecom and Telenor have to recruit the whole work team externally and there exist no internal work team other than the owner or board of directors which can be the partner in any other business as well. But for the higher level jobs the new entrants have to hire the people from the existing market who are well aware of the current market and who are having the prior experience in such type of environment. This can be the great challenge for the new entrants to hire such a skilled work force.

- **EEO legislation and affirmative action plans**

Equal employment opportunity legislation prohibits discrimination in all phases of employment, including recruitment. It means that the new entrants have to follow these rules too. That is providing the opportunities to every one with out any discrimination of color, cast, nationality or any disability cause as well.

- **Recruiter habits**

The recruiter habits really have a great impact in the recruitment process. And the new entrants have to watch out this aspect as well, this can cause a greater problem for the organization in the long run as well.

- **Job requirements**

The basic requirement of the job must be specified. It is one of the problem in the modern days, only person considered with higher experience are preferred, but the new entrants have to analyze this aspect that what the job requirement is and what the basic qualification and how much skill level is required. These all the factors need to be kept in mind while recruiting by the new entrants.

- **Costs**

The recruiting cost is the big issue in the modern world. Sometimes it really reaches up to the greater limit. So for controlling such issues there need to be proper planning and management is required.

Internal Recruitment channels

Warid telecom and Telenor are the two new entrants in the market and they are first time launching their product/service in the Pakistani market. The high level jobs can be recruited internally. By posting a person who is working in the same organization at the different station in the different country can be appointed here in Pakistan. Because such person must be having a lot of experience in the same market and such person must be well aware of the organization policies, rules and be used –to the environmental impacts. He can better lead the team.

External recruitment channels

There can be number of ways that can be adopted by the new entrants for the recruitment. This recruitment is normally based on the people belong to the area where is company is marketing or launching its product or service. Warid telecom and Telenor will adopt the following number of ways for the external recruitment;

- ✓ Walks in and write ins
- ✓ Employee referrals
- ✓ Advertising
- ✓ State employment security agencies
- ✓ Private placement agencies
- ✓ Professional search firms
- ✓ Educational institutions
- ✓ Professional associations

Selection Process

The selection process relies on three inputs; job analysis information yields, the description of the jobs, the human specifications and the performance standards each job requires.

The steps involved in the selection process of the new entrants should be as follow;

- ✓ Preliminary reception
- ✓ Employment tests
- ✓ Selection interviews
- ✓ References and background checks
- ✓ Medical evaluation
- ✓ Supervisory interview
- ✓ Realistic job previews
- ✓ Hiring decision

Competencies Required for the Recruitment Process

After the clearance of these following tests, an applicant must carry eight of these mentioned competencies to have a proper command to carry on their jobs and to deal with different circumstances.

❖ Building Positive Working Relationships

Building and positive working relationship is using collaborative relationship to facilitate the accomplishment of working goals.

❖ Building Trust

Building trust is interaction with others in a way that gives them confidence in one's intentions and those of the organizations. This includes treating people with dignity, respect and fairness; give proper credit to others.

❖ Coaching

Coaching is providing timely guidance and feed back to help others strengthen specific knowledge/ skill areas needed to accomplish a task or solve a problem.

❖ Continuous Learning

Actively identifying new areas for learning, regularly creating and taking advantage of learning opportunities, using gained knowledge and skills on the job and learning through their application.

❖ Customer Focus

Making customers and their needs a primary focus of one's action; developing and sustaining productive customer's relationships.

❖ Decision Making

Identifying and understanding issues, problems and opportunities; comparing data from different resources to draw conclusions; using effective approaches for choosing a course acting or developing appropriate solutions; taking action that is consistent with available facts, constraints and probable consequences.

❖ **Facilitating Change**

Facilitating change means encouraging others to seek opportunities for different and innovative approaches to address problems and opportunities; facilitating the implementation and acceptance of change within the workplace.

❖ **Follow Up**

Follow up is monitoring the results of delegations, assignments, or projects, considering the skills, knowledge and experience of the assigned individual and characteristics of the assignment or project.

❖ **Formal Presentation**

Formal presentation means to present ideas effectively to individuals or groups when given time to prepare; delivering presentation suited to the characteristics and needs of the audience.

❖ **Impact**

Impact is to create a good first impression; commanding attention and respect; showing an air of confidence.

❖ **Integrity**

Integrity is monitoring social, ethical, and organizational norms; firmly adhere to codes of conduct and ethical principles.

❖ **Meeting Leadership**

Meeting Leadership is ensuring that meeting service its business objectives while using appropriate interpersonal styles and methods and considering the needs and potential contribution of others.

❖ **Negotiation**

The purpose of negotiation is to effectively explore alternatives and position to reach outcomes that gain the support and acceptance of all parties.

❖ **Planning And Organizing**

Planning and organizing for establishing courses of action for self and others to ensure that work is completed effectively.

❖ **Safety Awareness**

Safety awareness is for identifying and correcting conditions that effect employee safety; upholding safety standards.

❖ **Work Standards**

Setting high standard of performance for self and others, assuming responsibility and accountability for successfully completing assignments or task, self-imposing standard of excellence rather than having standard imposed.

ORIENTATION

✓ **Organizational issues**

New employees should be provided a detailed briefing regarding the organization and different issues concerning the organization. This type of briefing should be conducted by the new entrants for informing the new employees, so they can better be responsive to the environment of the organization.

✓ **Employee benefits**

The employees should be briefed about the benefits that shall be provided by the organization. This will be the real motivational aspect for the new employees when they come to know about the benefits.

✓ **Job duties**

Then the employees should be briefed about the duties assigned to them as well. What will be their responsibilities and to whom they will report. The information regarding their tasks should be provided to the employees and in case of any query they will be provided the answer for that query as well.

Employee placement

- ✓ **Promotions**
- ✓ **Merit based promotions**
- ✓ **Seniority based promotion**
- ✓ **Transfer and demotions**
- ✓ **Job posting programs**
- ✓ **Separations**
- ✓ **Temporary leaves of absence**
- ✓ **Termination**

TRAINING AND DEVELOPMENT

The most important aspect in all the HR process is the training of the employee in the specific organization. As the Warid telecom and Telenor are the two new entrants in the Pakistani cellular market. After the hiring the employees, they should be provided the on-job-training in order to make them well aware of the organization and let them know the ways and tool for carrying on their tasks and jobs effectively. The steps to be followed in the training process are as followed

- ✓ **Needs assessment**
- ✓ **Training and development objectives**
- ✓ **Program content/learning principles**
- ✓ **Actual program**
- ✓ **Skills, knowledge, ability of workers**
- ✓ **Evaluation**

Trainings

Following are the different ways the new entrants can provide training to their new employees. These include

- ✓ **Job Instruction training**
- ✓ **Job rotation**
- ✓ **Apprenticeships and coaching**
- ✓ **Lecture and video presentations**
- ✓ **Role playing and behavior modeling**
- ✓ **Case study**
- ✓ **Simulation**
- ✓ **Self study and programmed learning**
- ✓ **Action learning**
- ✓ **Laboratory learning**

Training & Development Plan

It forecasts schedule of various programs / activities, outlines their direction, identifies trainees, motivates participants and spells out objective for each training activity.

- **Management Training**

Training in all these aspects are planned organized, coordinated and executed under the supervision of HR department for all the employees of the company.

- **Non Management Training**

In the ambit of non-management training are those functions, which are considered as 'specialist fields'. These include sales, marketing, quality control and finance etc. Training/development activities for specialist fields are the responsibility of respective functional heads. The annual training plan does not cater to 'non-management training'.

- **Group Training**

When number of employees requiring training in some category is 7 to 8 or more, then training is organized in a group and more formal approach is adopted. Various methods are adopted for this type of training.

- **Workshops**

The new entrants should organize workshops on selected topics/areas of management skills. These workshops are of following types:

- **Employee Development Workshops**

Workshops of various duration are conducted by inviting external trainees. These trainees are either invited on individual basis or the program is outsourced to a 'Management Trainee Organization'. Following workshops can be conducted / planned.

- **Motivation Programs**

In this type of the programs, a renowned/known personality is invited to share his/her experiences with the managers/junior managers.

Basically focus is on various aspects of leadership and motivation. One such program was recently held in which, Mr. Imran Khan featured and shared his views on leadership.

Training Objective

The objective of this activity is to generate discussion, the insights that participants gain from each other during their discussions is important.

Feedback

Feedback is important to the success of this program. There may be some disagreement over the answers and points given in the case studies.

Town Hall Practice

In this program, all management persons of a particular function hold a meeting with the 'Marketing Company President' (boss of local company). In this meeting professional matters including training and development are discussed with the president and solutions are hammered out mutually.

Non-Group Training

When the number of affected individuals who require training/development is less (six or less) then non-group training activities are planned. A deliberate procedure in this regard is followed which involves employee, his/her manager and the HR department. The aim is to monitor employees' pre and post training/development performance and provide in time feedback to employee as

well as manager. This also helps in career management of the employee. Formal process and HR department also gives motivation.

Feedback/Evaluation

An appraisal (effectiveness) of training programs as well as evaluation of trainees' progress is measured systematically. Employees who attend a workshop are made to fill in a 'workshop evaluation' form.

COMPENSATION & REWARD

The new entrants aim to have compensation policies and programs that will enable them to recruit, retain and motivate the top caliber executive talent which it needs and for which it competes in an international market place.

Remuneration policies and programs represent a competitive advantage and best practice through a heavy emphasis on pay for performance and 'at risk' compensation for its top executives. The compensation and rewards include the salary, performance balances etc which are briefly explain as under;

- **Salary**

The salary of any employee has to be based on the experience as well as the basic qualification. The person whose is more responsible should be awarded more salary as well.

- **Performance Bonus**

This is based on annual performance by business teams against demanding financial targets and individual accomplishments against objectives. Bonuses are subject to upper limits. On target business performance brings total compensation into line with the competitor panel. Compensation rises if the target performance is exceeded but the executives' total compensation falls well below the level of compensation of competitors if these targets are not achieved.

Benefits

the benefits are provided to the employees in the form of the annual bonuses and awards.

PERFORMANCE APPRAISAL

Performance Appraisal

Performance standards

Performance measures

Performance appraisal challenges

- legal constraints
- rater biases
- halo effect
- the error of central tendency
- leniency and strictness bias
- cross functional biases
- personal prejudice

Past oriented appraisal methods

- rating scales
- checklists
- forced choice method
- critical incident method
- accomplishment records
- behaviorally anchored rating scales
- field review method
- performance tests and observations
- comparative evaluation approaches

Future oriented appraisals

- self appraisals
- management by objectives
- psychological appraisals
- assessment centers

RECRUITMENT STRATEGY ADOPTED BY THE NEW ENTRANTS

TELENOR

Introduction:

Telenor being one of the leading companies enjoys a customer base of 39 million. It has a skilled and trained workforce. Telenor is going to launch its cellular operations all over Pakistan in a few months time.

Recruitment process:

Telenor has started its recruitment process six months ago with a vision to hire a competent and skilled people who can deliver to best of their abilities in a cut-throat competitive cellular market.

Job advertisements:

For the advertisement of various positions Telenor has primarily selected print media and Telenor's web site. The vacant positions are in English dailies "DAWN" and "THE NEWS" along with Urdu newspaper "JANG" due to wide readership of these newspapers and to ensure that the message reaches throughout the country.

Job description:

The highlight of the hiring process of Telenor is that they give complete job specification, key responsibilities, the exact scope of the jobs.

Application process:

The applicants who are interested in starting their careers in Telenor are required to build an online resume at Telenor's Website. The applicants are then given a resume tracking number along with a password. The applicants can also update his/her resume. Whenever the job is advertised the details are posted on the website. So the applicants can apply online to any specific job.

Conclusion

In a nutshell we can say that Telenor is pursuing a very focused and organized HR approach. Its prime objective seems to be to hire only experienced people. It will surely benefit them as they will not have to invest time and money on their training and can straight away reap the fruits of their skills and experience. This as a result will put Telenor in a very healthy position and take it to a stage where Telenor can have a firm grip on cellular market. But on the other hand this strategy seems to have some repercussions in terms of employment opportunities in Pakistan. It was predicted rather claimed that huge employment opportunities will be created by the telecom companies especially for young qualified people but it is discouraging to note that Telenor is relying on experience only and having a look at the job advertisement one gets the impression that the experience criterion easily outweighs the qualification aspect. In all the jobs requirements a minimum of 2 to 3 years experience is mandatory and in the same area. Let's hope that in future this trend is discouraged and some entry level positions are created for the young and capable graduates and post graduates.

RECRUITMENT STRATEGY ADOPTED BY THE NEW ENTRANTS

WARID TELECOM

Introduction:

Warid Telecom is owned by The Abu Dhabi Group which is led by His Highness Sheikh Nahayan Mabarak Al-Nahayan.

In addition to its mobile services, Warid Telecom will be launching a Long Distance & International and Wireless Local Loop business shortly. This service will provide international termination of traffic into Pakistan, alternative affordable nationwide and international voice telephony and data & value added services. These services also target a market that is highly price competitive and quality conscious.

Warid Telecom is also providing the national transmission network, providing quality connectivity across Pakistan, vertical integration into complimentary markets such as Call Centers and Product Development, and several other options.

Recruitment process:

Warid has started its recruitment process two months ago with a vision to hire a competent and skilled people who can deliver to best of their abilities in a cut-throat competitive cellular market.

Job advertisements:

For the advertisement of various positions Warid has primarily selected print media and Warid web site. The vacant positions are in English dailies "DAWN" and "THE NEWS" along with Urdu newspaper "JANG" due to wide readership of

these newspapers and to ensure that the message reaches throughout the country.

Job description:

The highlight of the hiring process of Warid is that they encouraged young and qualified people to work job specification, key responsibilities, and the exact scope of the jobs.

Application process:

The applicants who are interested in starting their careers in Warid are required to build an online resume at Warid Telecom Website. The applicants are then given a login and password to access their account and edit the resume whenever they desire. Whenever the job is advertised the details are posted on the website. So the applicants can apply online to any specific job by simply clicking the option, the resume will be automatically submitted against the particular job.

Conclusion

Warid Telecom has a strong financial background and they used this aspect for attracting professionals from the telecom sector. By this they are hiring the strong, competent workforce. The procedure followed for the middle and the lower management is same as followed by any other multi organizations. Its really encouraging step taken by the Warid Telecom that they not only attracted the senior and experienced people, but also include the fresh graduates in their team. They want to gain the knowledge sharing as well as unique ideas from the fresh graduates as well. The Warid Telecom is also following the procedure of hiring the people from the local market and trained them according to their own requirement. The positive aspect of their hiring process is encouraging the fresh graduates which really cost them a lot for their training purpose because the experienced people not require any training which really having impact on the organization. But by including these youngsters can be a value added assets to these organizations and this fact can't be negated.

CONCLUSION

When we selected this topic for our project, people were quite skeptical as how are we going to achieve this very hectic task. But we took it as challenge, with a vision to integrate all important fields in the business and most importantly have tried to integrate the information technology with business areas because we strongly believe that the way forward in today's corporate environment is a blend of information technology with strategic decision making. It can never be achieved if don't apply IT and business expertise in tandem. In this project we have tried to achieve this target and make proper use of our potential. Now let's go back in retrospect and find out what we have achieved in the four areas that we identified and worked on.

The first area of our project was IT and to be specific, Networks. In this we first of all carried out an in depth study of how telecom works. It involved the intricacies of communication infrastructure; we identified the pre-requisites of cellular network, its history how it started altogether, its background in Pakistan .we then narrowed down our study to existing technologies being adopted by the cellular companies. For this we paid extensive visits to the companies, probed into their technology. This gave us lot of invaluable information. On the basis of that information we gave our perspective on the new technologies currently being deployed and what the new entrants can adopt to gain a competitive edge over the existing companies. We conclude that in the technological sector future will be of those companies who will respond promptly and vigilantly to these technological advancements and serve their customers in an effective and satisfactory manner.

The second area of our work was marketing. We being business students fully realize the importance of effective marketing strategy especially in a cutthroat competitive telecom sector. We know what it takes to sell and distinguish your product and service. In the marketing phase we carried out a thorough marketing research about existing mobile operators Mobilink and Ufone. This research was carried out with careful considerations of parameters set by the marketing

pundits. Our research methodologies' highlights were visits to the companies' corporate offices, retail outlets, taking views and feedback from respective customers, marketing publications. We also had the opportunity to have expert opinion from the marketing analysts. The marketing analysis comprised of SWOT analysis, PEST analysis and most importantly the recommendations we extended in the light of the study apart from our deductions and subject matter knowledge. The most important aspect of our marketing phase was the proposed market plan for the new cellular entrants who are all set to launch their services in Pakistan. In the proposed plan we gave an insight on the prevailing marketing environment in Pakistan specifically in the telecom arena. How a customer feels, what are his information needs, what are his priorities, what turns him on, how the customers should be addressed in order to grab their attention, ways and means to add appeal in the promotional campaign. It is deduced that in a market like Pakistan the real issues for the masses seem to be price or economy. People incline towards that service or product that is economical and does not pose any threats to their budgetary constraints. At the end we recommended some strategies and actions that need to be followed by the new entrants to ensure their presence felt in the telecom sector of Pakistan.

Our third area of work was Finance. The basic objective behind this section was making financial calculations based on annual reports of existing and new entrants in order to judge their financial strengths. From existing operators we have selected Mobilink which has been declared Significant Mobile Power (SMP) by PTA recently. Telenor Group which is the world's known group has been selected as a new entrant to Pakistan's Mobile's market. This way we have selected the two top companies for our financial analysis purpose.

Having a detailed view of different ratios and their analysis of both the companies, we come to the conclusion that the year 2003 has been much more profitable for Telenor Group. The Mobilink which is the Pakistan's most favorite mobile company did not perform reasonable well during 2003 in financial terms. All of the different financial ratios except a few had a declining trend over the year. Such a picture does not show a sound financial position of Mobilink. It

might face a number of different problems such as difficulty in fund raising. Moreover the company cannot invest in any profitable project due to its bad financial position. In Addition, it cannot offer compensation programs to its employees and customers.

On the other hand Telenor Group has a much stronger position as indicated by various financial ratio calculations. Such a sound position would help Telenor to invest in any profitable project for the Group. So investing in Pakistan's cellular market possessing a severe competition can be considered a great opportunity as well as threat for Telenor. Though greater amount of risk is involved in Mobile Industry, but higher risks always generate higher return. So with a financial position of this kind, Telenor would certainly grow as greater amount of funds are available to offer any innovative services, features to its target market.

In the HR phase our primary objective was to propose an effective HR strategy for the new entrants' .but for that we first gave our perspective on role of HR in the corporate sector. What role it plays in the growth and development of a company along with its role in the national economy. We also gave an overview of HR strategy of the new entrants adopted so far. What is their objective, the recruitment and selection process? We drew conclusion from the current HR strategies of the two new cellular companies. So in a nut shell we can that, the HR phase enabled us to envisage the goals and spirit of effective HR strategy which can play a pivotal role in the performance of a company.

Now at the end we would like to share our feelings about this experience. I think it had been a wonderful learning experience. This project was a test of skills and capabilities to carry out of tasks of diverse nature like gathering information, data, meeting people, taking their views, learning the technical jargon of telecom sector.

This project has done lot of good to us and will go a long way in our professional career especially at the juncture time when we stand at the threshold of our careers.

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