
Telenor in Bangladesh (B)

Achieving Multiple Bottom Lines at GrameenPhone

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In 1997, when Bangladesh's Prime Minister Sheikh Hasina, in inaugurating the Telenor-GrameenPhone venture, made the first mobile phone call to the Norwegian Prime Minister she told him it was 33°C in Dhaka. The Norwegian Prime Minister replied that it was –33°C in Norway. They shared a laugh when they discovered that the sun was shining in both places.

In November 2002, Tormod Hermansen, former CEO of Telenor, nostalgically recalled the events of 26 March 1997, when the Prime Minister of Bangladesh, Sheikh Hasina Wazed, made the much-anticipated first mobile phone call from Bangladesh to the Prime Minister of Norway, Thorbjorn Jagland. This first mobile telephone call symbolized Bangladesh's giant leap in upgrading and expanding its telecommunications infrastructure to serve its population of 130 million.

Five years after this momentous telephone call, Hermansen, sitting in Telenor's new headquarters in Fonebu just outside Oslo, seemed a happy man. Recently retired from Telenor, he mused that Telenor's Bangladeshi venture had exceeded everyone's expectations. The previously palpable anguish, uncertainty, apprehension, and frustration had, in a period of five years, been transformed into feelings of pride and accomplishment. The Bangladesh strategy could easily have fallen apart for numerous reasons: the fear and risk associated with doing business in an economically, socially and culturally "far off" place, the frustrating process of obtaining a mobile license in Bangladesh, the daily fights with a corrupt bureaucracy to launch and expand the mobile telephony network, the difficulties faced by other equity partners to sustain their share of the investment, the fear of taking profits out of Bangladesh...all could have been stumbling blocks. But Telenor had overcome these and other obstacles. And five years later it was clear that through its GrameenPhone operations, Telenor had successfully achieved its objective of multiple bottom lines: outstanding financial returns for Telenor and outstanding socio-economic returns for Bangladesh.

The Bangladesh Strategy: GrameenPhone Limited

In 1994, spurred by a telephone call from his personal friend, the Norwegian Ambassador to Bangladesh, His Excellency Mr. Tore Toreng, Hermansen had begun considering the possibility of Telenor entering Bangladesh's mobile telephone market. Other global telecommunications operators, including Telia of Sweden, had concluded that the political and regulatory instability of Bangladesh made the venture highly risky. After much discussion and deliberation, Telenor decided to bid for a cellular license in Bangladesh through a new joint-venture operation. Three main considerations underlay this decision: Telenor's initial investment seemed modest (about US\$40 million), Bangladesh represented a significant market (with a market potential of about 6 million subscribers, which was larger than the population of Norway), and Telenor had found a well-respected local partner for the joint-venture in Grameen Telecom, a subsidiary of the much respected Grameen Bank in Bangladesh. In late 1995, a joint venture company, GrameenPhone Ltd. (GPL), was established. This was a joint venture between four organizations: Telenor, Grameen Telecom (Bangladesh), Gonofone Development Corporation (U.S.A.), and Marubeni (Japan).

Telenor, the lead partner in the joint venture, was a global telecommunications operator based in Norway. It provided mobile telephone services primarily in the European countries of Norway, Hungary, Ukraine, and Russia. With a 1996 revenue turnover of US\$3.4 billion and

net profit of US\$297 million, Telenor's operations were not as large as those of the big global players such as Nokia, Vodafone, and others. It was a more modest company, with more limited ambitions, and a somewhat "socialist" culture (in light of its Norwegian origins). But even for Telenor, Bangladesh fell outside its "comfort zone" of European operations, and the social objective of alleviating poverty via mobile telephony services seemed far too ambitious to risk large capital investment. Despite this, under Hermansen's patronage the Bangladesh operations moved forward.

The other joint venture partner was Grameen Telecom Corporation (GTC), a not-for-profit, non-governmental organization in Bangladesh. Grameen Telecom's mission was to spread the information revolution in Bangladesh by making mobile telephony accessible to all Bangladeshis, specifically the 80% of its population that lived in rural areas. Grameen Telecom was itself a wholly-owned subsidiary of the Grameen Bank. An internationally acclaimed micro-lending institution, the Grameen Bank had 2.4 million borrowers in 41,000 of Bangladesh's 68,000 villages. In Bangladesh and overseas, the "Grameen" brand had tremendous equity by virtue of the Grameen Bank's widespread success in alleviating poverty and empowering rural women. In the minds of many Bangladeshi consumers the "Grameen" brand was even more recognizable than Coca Cola! For this reason, branding the new joint venture "GrameenPhone" brought instant credibility to the new business. The third joint venture partner was Gonofone Development Corporation, which was established in 1994 by Iqbal Qadir, a Wall Street-based investment analyst of Bangladeshi origin. Qadir, who had conceived the idea of establishing mobile telephony services in rural areas of Bangladesh, set up Gonofone as a platform for raising funds in the US for eventual Bangladesh mobile operations. The fourth partner was Marubeni Corporation of Japan, a trading company with global interests.

Along with Hermansen, the three other visionaries who championed GrameenPhone included: Iqbal Qadir, who believed that telecommunications and connectivity could play a major role in poverty reduction in Bangladesh; Professor Muhammad Yunus, founder and Managing Director of the Grameen Bank; and Khalid Shams, the Deputy Managing Director of Grameen Bank. Through their efforts, investment in GrameenPhone began with initial funding of US\$125 million including a US\$50 million loan from the International Finance Corporation, the Asian Development Bank and the Commonwealth Development Corporation in Britain. Telenor provided 51% of the equity investment, Grameen Telecom provided 35%, Marubeni provided 9.5% and Gonofone Development Corporation provided the balance of 4.5%.

On 11 November 1996, the Bangladeshi government awarded licenses to operate cellular mobile phone networks to GrameenPhone, Telecom Malaysia, International Bangladesh Ltd. and Sheba Telecom Ltd. Four operators were selected because it was believed that a competitive environment was necessary to ensure high quality service at low prices. All four operators were joint ventures in which Bangladeshi units collaborated with foreign companies.

GrameenPhone had a license to operate the nationwide cellular network and particularly to provide service to urban subscribers. It leased and operated a 1,800 km fibre optic cable from Bangladesh Railroad, effectively providing a parallel nationwide phone network to the one operated by the BTTB state monopoly. GrameenPhone began operating on 26 March 1997,

when Bangladesh's Prime Minister, Sheikh Hasina Wazed, placed the first mobile phone call to her counterpart in Norway.

Village Phone Project (VPP)

Because of the high urban population density, GrameenPhone concentrated operations in Dhaka and other major cities. The large unmet need for telephony services in urban areas ensured a sound financial bottom line for GrameenPhone. Grameen Telecom undertook the task of meeting the "social" bottom line by making mobile telephony available to Bangladesh's 68,000 villages. To meet this objective, Grameen Telecom set up the Village Phone Project (VPP). The idea was to provide a mobile PCO-style (public call office) operation in the villages by capitalizing on GrameenPhone's existing wireless networks, operating experience, and the portability of its GSM cellular phones.

The VPP's business model was deceptively simple and offered a potential win-win situation for all involved, including the service providers and the end users. Four business entities were involved in the VPP: GrameenPhone (the for-profit business), Grameen Telecom (the not-for-profit business), the Grameen Bank (the not-for-profit micro-credit bank), and the mobile handset owner in the village, commonly referred to as the Village Phone Lady (who was a member of the Grameen Bank).

GrameenPhone sold bulk airtime to Grameen Telecom at half the regular rate levied in urban areas. The handsets were made available to villagers through Grameen Bank loans. Grameen Telecom was responsible for the sales, marketing, servicing and administration of the village phones. This arrangement meant that GrameenPhone avoided the costs of billing and bill collection from the village phone users, and had a steady revenue stream from Grameen Telecom. The Grameen Bank benefited by cross-selling to its existing clients the opportunity to start an additional business providing mobile phone services in their village. Because the initial loan for a mobile phone set was about US\$390 – an amount few villagers could invest on their own – these Grameen Bank members took loans to lease or purchase the mobile telephone sets thus, generating additional income for the Grameen Bank. In addition, villagers settled their monthly telephone bills and loans at the same time. For Grameen Telecom, the VPP set-up allowed it to fulfil its promise of providing access to mobile telephone services of the country's rural poor. The specific objective was to make a mobile phone available in each of the 68,000 villages so that everyone living in a village in Bangladesh was no more than a 10 minute walk from a mobile phone. While most telephone companies targeted only the urban rich, Grameen Telecom's VPP focused on the rural poor, and particularly women, as 94% of Grameen Bank borrowers were women. The situation indeed appeared to be 'win-win': the Village Phone Ladies benefited from an independent source of revenue; the villagers who used the mobile phones to make and receive calls benefited from being "connected" to the rest of the world, using one of the most modern cellular technologies of the world, while paying one of the cheapest cellular rates in the world; and the Bangladeshi government benefited by mobile phones eliminating the need to install expensive large-scale telephone exchanges and digital switching systems.

The Village Phone Lady

Critical to the success of the VPP program in each village was selecting the villager who would receive the loan for the mobile handset. The selection of the 'phone lady' depended primarily on three factors: the applicant's history with the Grameen Bank, the location of her home in the village, and a rudimentary knowledge of English. The Grameen Bank selected women for the VPP based on their past borrowing record with the bank. She should have a successful existing business, such as, a village grocery store, and have the spare time to act as the village phone operator. The location of her home was important, with a central location being the most beneficial to the community. At least one member of the family should know English letters and numbers. Usually, a one-day training session was given to these ladies by GrameenPhone to familiarize them with the handset.

Each village phone operator was responsible for extending the services to customers for both incoming and outgoing calls, collecting call charges, remitting payments to Grameen Telecom and ensuring proper maintenance of the mobile set. The operator's income consisted of the difference between charges paid by the customers and the airtime charges billed to the operator by Grameen Telecom. These ranged from US\$75 to US\$100 per month. From this income, she would have to pay the weekly installments of the Grameen Bank loan, which ranged from US\$3.40 to US\$4.70 depending on whether the repayment period was two or three years. Repayment of the loan for the phone set was processed through the existing loan granting and collection procedures of the Grameen Bank. Grameen Telecom used Grameen Bank's successful methods of debt collection to achieve a repayment rate of over 95%.

The village phone project had remarkably transformed the life of the village telephone ladies. Mosammat Anwara, a Village Phone Lady in Chamurkhan village, remarked: "The income from my village phone subscription has helped to change my life. Initially, I didn't think the Village Phone could generate much income. Now, I'm earning an average of Tk 5000 [US\$80] per month." The income from the VPP has helped Anwara to pay for the education of her three sons and a daughter and to start a poultry and fish farm. Anwara now wants to buy a computer for her children. The Village Phone has also helped enhance her social status in the village. "People who used to look down on me before, respect me now. They come to my house to make phone calls," Anwara pointed out.

Parveen Begum, a village phone lady in Chaklagram village, drew an apt analogy between her new mobile telephone business and her existing dairy enterprise: "My mobile phone is like a cow. It gives me "milk" several times a day. And all I need to do is to keep its battery charged. It does not need to be fed, cleaned, and milked. It has now connected our village with the world."

Pricing

GrameenPhone charged Grameen Telecom US\$0.04 and US\$0.02 per minute for peak and off-peak hours respectively, whereas the urban subscribers paid US\$0.08 per minute. The VP operators charged their customers US\$0.20 per minute for all incoming international calls and US\$0.04 per minute for each incoming domestic call. The cost for the phone operator also varied depending on whether the call was placed to or from another mobile phone or a fixed line phone (See Exhibit 1 for a breakdown of the cost of a one-minute peak time call). VP operators were provided with a price list of charges, which also indicated their profit margin.

For example, for a local VP call to another mobile phone, the retail rate was US\$0.10 per minute, out of which the GrameenPhone rate was US\$0.04, the VAT was US\$0.006, and the service charge was US\$0.006. The remaining US\$0.048 was the profit for the VP operator from which she had to pay the monthly line fee, the royalty fee and the loan instalment for the handset. A different rate applied for a local call to a fixed Bangladesh Telegraph and Telephone Board (BTTB) line as an additional US\$0.034 was charged by the BTTB per call. Thus, it was relatively more expensive to make calls to a fixed line from a mobile phone.

Billing

The Grameen Bank operated through its 1,100 branches and 12,000 workers. This existing village-based infrastructure of the Grameen Bank allowed it to handle the billing and logistics of the Village Phone Project at minimal additional cost. GrameenPhone prepared a monthly bill at the bulk airtime rate for village phones for the total airtime used by all VP operators. The bill included the monthly line rent of all VP operators and showed the net amount payable to GrameenPhone. It was then sent to the Grameen Telecom head office for processing by the end of each month. Grameen Telecom retabulated the individual bills and sent them to the corresponding branches with a summary of the bill due from the respective branch. Grameen Bank managers were responsible for collecting the bills from the VP operators and the branch paid the bill to Grameen Telecom six weeks later. This was a convenient solution to the revenue collection problem that often plagued operators of rural telephone systems.

After Sales Service

Unit offices established by Grameen Telecom provided after sales support. These unit offices helped the Grameen Bank branch managers find new areas of coverage, select new members to become village phone operators, train them and handle any problems regarding handsets or billing.

It would have been suicidal for any GSM cellular service provider to solely focus on rural Bangladesh because of the small overall market (68,000 villages) and minimal purchasing power. But by combining the skills and expertise of GrameenPhone, Grameen Telecom, and the Grameen Bank, it was possible to profitably serve the telecommunications needs of the underserved rural poor. For Telenor, this meant that in addition to having a profitable business based in the urban areas of Bangladesh, by aggregating mobile telephony demand across the villages, it also made a modest amount of money from its rural operations and played a critical role in the socio-economic transformation of Bangladesh.

Results¹

Nationwide each operator stands to net an average of US\$2 a day – more than US\$700 a year – in a country with an average annual per-capita income of about US\$250.²

Telenor's involvement in the GrameenPhone mobile telephony project in Bangladesh yielded an impressive list of business and social accomplishments, which exceeded the expectations of Telenor and GrameenPhone, set in 1997. By December 2003, Bangladesh's mobile telephone users (1.4 million) outnumbered its fixed-line telephone subscribers (700,000). GrameenPhone's subscription doubled each year from 1997 to reach over 1 million subscribers by December 2003 (the expectation in the 1997 business plan was to reach about 500,000 subscribers by 2006). This represented the biggest subscriber base and coverage of any mobile telephone operator in Bangladesh, and in the entire South Asia region. GrameenPhone had a 70% market share (it had as many subscribers as the three main competing operators put together) and covered the biggest cities Dhaka, Chittagong, and Khulna. Since Telenor was one of the early entrants in a relatively neglected and underserved telecommunications market, it was well positioned to maintain its dominant leadership position in Bangladesh.

The company's market value, estimated by its management at a modest US\$600 per subscriber, was US\$600 million. These numbers suggested that GrameenPhone's present value to Telenor was more than 15 times its majority (51%) equity investment of about US\$40 million. GrameenPhone achieved operating break-even during 2000, when it turned its first annual profit of approximately US\$14 million. (The initial plan was to achieve break-even by the end of 1999). GrameenPhone achieved positive retained earnings (after setting off accumulated investments in the Bangladesh operations) during 2001, though the plan had been to achieve this by the end of 2000. Total revenue in 2001 was over US\$131 million, with a profit of 39%. Profits in 2002 were US\$109 million, greatly exceeding the estimates made in the original business plan in 1997 (see Exhibits 2 and 3 for further details).

By December 2003, GrameenPhone had invested US\$160 million in Bangladesh, making it the largest foreign private investor in the country. By December 2003, GrameenPhone had directly created about 600 jobs internally and 40,000 jobs externally in 29,000 Bangladeshi villages through the Village Phone Project of Grameen Telecom.

By the end of 2003, some 40,000 village phones were operating (about 4% of GrameenPhone's 1 million subscribers) in 29,000 Bangladeshi villages. These 40,000 village phones were serving an estimated 55 million rural inhabitants, more than half of Bangladesh's

¹ Bayes, A., Braun, J. von, and Akhter, R. (1999). *Village Pay Phones and Poverty Reduction*. Bonn, Germany: Center for Development Research.

Richardson, D., Ramirez, R., and Haq, M. (2000). *Grameen Telecom's Village Phone Programme in Rural Bangladesh: A Multimedia Case Study*. Ottawa, Canada: Canadian International Development Agency.

Singhal, A., Svenkerud, P.J., and Flydal, E. (2002). Multiple bottom lines: Telenor's mobile telephony operations in Bangladesh. *Teletronikk*, 98(1): 153-160.

² Article on Grameen Telecom's Village Phone Project in the *Los Angeles Times*, 10 November 1997.

rural population. The village phones, on average, generated two to three times more revenue for GrameenPhone than a personal use city subscription. That said, the total revenue from these village phones made up a relatively small proportion of total GrameenPhone revenues (6%).

Although the village phones contributed a small percent toward GrameenPhone revenues, their social impact, however, was very high, reaching 55 million rural Bangladeshis previously without access to telephony services. Studies indicated that the VPP had a very positive economic impact in rural areas, creating a substantial consumer surplus, and immeasurable quality-of-life enhancements.³ For instance, village women were empowered by the project because even a rich landowner had to come to their home to use the telephone. Likewise, he had to wait in line for his turn if another villager was using the phone at that time. The home of the village phone lady became an important location on the village map, often being referred to as the *Phone Bari* (or “home of the phone”). In addition, the village phone eliminated the need for rural farmers to travel to the city to discover the market price for their produce. The village phone accomplished this task instantaneously at about one-fourth the cost of the trip to the city (thereby saving many hours and considerable expense). The village phone helped families to keep in touch with overseas relatives, to learn about remittances from migrant workers, and to arrange appointments with doctors in the cities.

People living in the villages were thinking and doing things somewhat differently after the mobile phone arrived. For instance, many villagers started maintaining livestock and poultry as it now became possible to contact experts should there be an outbreak of animal disease. They could also learn the current market price for their poultry products, achieving higher returns on sales. Villagers could cultivate food products on a somewhat larger scale, because they were able to gain market prices on time to adjust their shipping decisions. Vegetable growers got easy and instant access to the prevailing market demand and supply situation and thus could make appropriate cultivation and harvesting decisions. The supply of agricultural inputs like diesel and fertilizer become more stable in the villages because dealers could monitor the supply situation throughout the year and guard against any unforeseen contingencies. Lastly, the VPP allowed migrant Bangladeshi workers in Dubai or Singapore to call home and better manage the welfare of their family members left behind.

Overall, the project made telephony services accessible and affordable to poor, rural Bangladeshis, spurred employment, increased the social status of the village phone ladies, provided access to market information and to medical services, and facilitated communication between family and friends within and outside Bangladesh. In light of these achievements, the former US President Bill Clinton visited the village telephone ladies in March 2000, remarking: “I want people throughout the world to know that the people of Bangladesh are a good investment. With loans to buy cell phones, entire villages are brought into the information age.”

By the end of 2003, Telenor's experience in Bangladesh suggested that sound business could mean subscribing to multiple, co-existing, and mutually reinforcing (win-win) bottom lines. In Bangladesh, Telenor's multiple bottom lines included meeting its commercial interests in terms of revenue, profit, and growth, as well as fulfilling social interests by serving poor,

³ See, for example, Richardson *et. al*, 2000 and Bayes *et. al*, 1999.

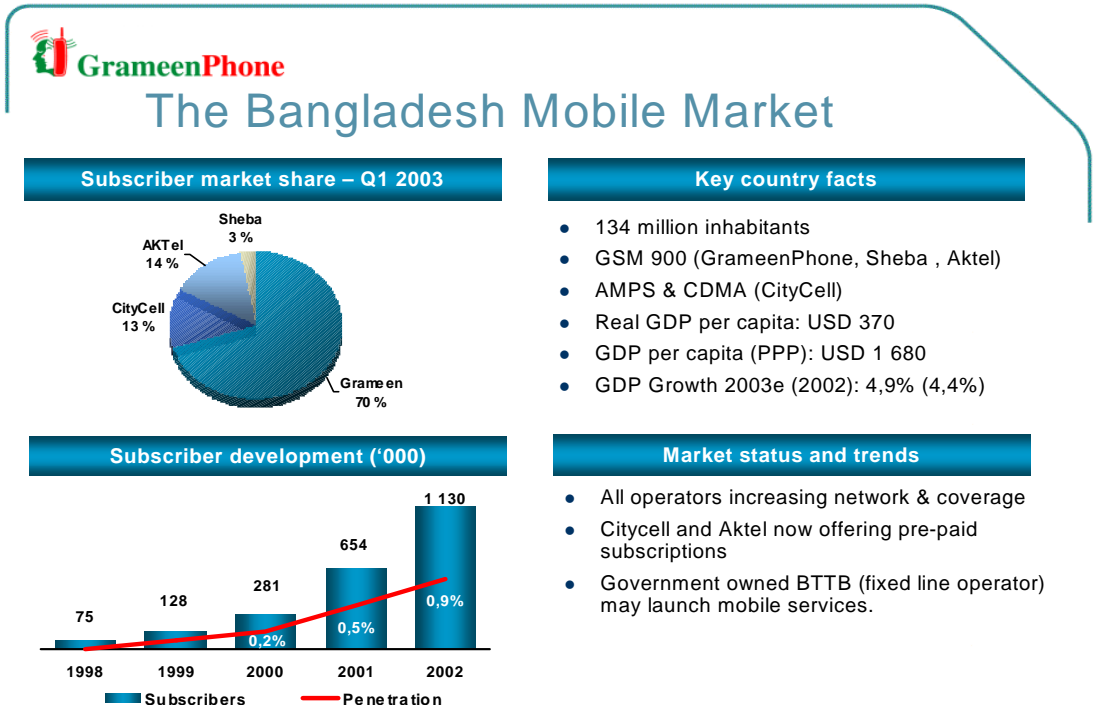
illiterate rural inhabitants usually excluded from traditional markets. In this way, it contributed to Bangladesh overcoming the digital divide. In the process, Telenor had gained substantial experience in overseas operations by doing business in a “distant” country and in an unfamiliar market. This helped the company build intellectual and structural capital for future ventures. For instance, Telenor learned that conventional European benchmarking for estimating market potential (by using measures of per capita GNP or Western patterns of telecommunications traffic) may be inappropriate or at least inadequate in the Asian context. In Bangladesh, for instance, people spend a much higher proportion of their disposable income on telephony than in Western countries. Also, by virtue of their “collectivistic” orientation and extended kinship structures, Asian cultures generate greater telephone usage between family members and friends. Clearly, this new learning about the importance of culture-specific benchmarking added tremendously to Telenor’s intellectual capital.

In addition to an impressive list of commercial and social accomplishments in Bangladesh, significant public relations and promotional benefits accrued to Telenor by cooperating with the Grameen family of companies. When the world’s leading agenda-setter, the US President visits with the village telephone ladies in Bangladesh and hails the integrated business and social aspects of this venture, mass media, policy-makers, corporations, and the public all over the world takes notice.

Exhibit 1*Breakdown of Cost (in US\$) for a One-Minute Peak-Time Call*

	Village Phone to fixed BTTB line (first minute)	Village Phone to GrameenPhone mobile line (also applies to each extra minute)	GrameenPhone mobile line to BTTB (first minute)	GrameenPhone to BTTB
GP charge	0.040	0.040	0.080	0.080
BTTB	0.034	0.000	0.034	0.000
Subtotal	0.074	0.040	0.114	0.080
15% VAT	0.011	0.006	0.017	0.011
Subtotal	0.085	0.046	0.131	0.091
Service charge	0.013	0.007	0.019	0.014
Total	0.098	0.053	0.150	0.105

Exhibit 2
Grameen Phone Results



Key country facts

- 134 million inhabitants
- GSM 900 (GrameenPhone, Sheba , Aktel)
- AMPS & CDMA (CityCell)
- Real GDP per capita: USD 370
- GDP per capita (PPP): USD 1 680
- GDP Growth 2003e (2002): 4,9% (4,4%)

Market status and trends

- All operators increasing network & coverage
- Citycell and Aktel now offering pre-paid subscriptions
- Government owned BTTB (fixed line operator) may launch mobile services.

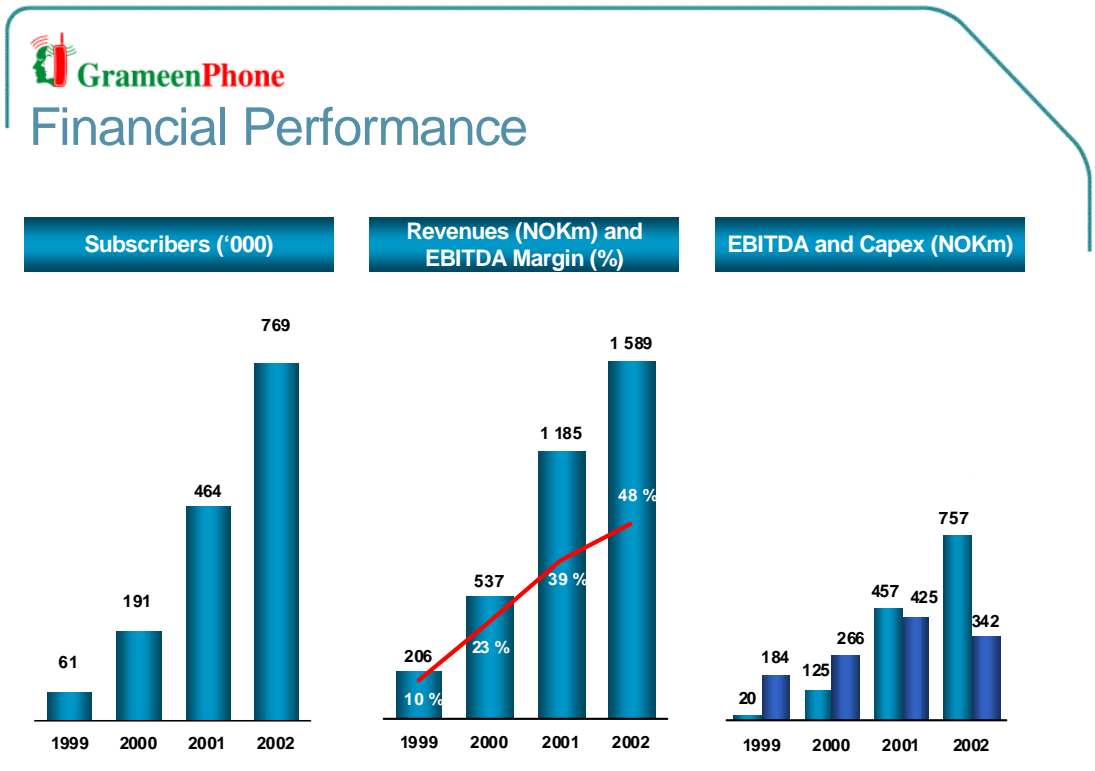


Exhibit 3*Telenor (Subsidiary or JV) Performance across Countries in 2002*

Country	Population (millions)	Mobile Penetration (%)	Telenor				
			Subscriber base ('000)	ARPU (NOK)	Revenue (NOK mil)	EBITDA	Market Share
Bangladesh	131	0.9	769	172	1589	48	69%
Malaysia	23.8	37	1616	180	2715	38	19%
Thailand	61.2	29	5130	n.a.	4902	31	32%
Hungary	10.2	68	2450	180	4505	35	38%
Ukraine	49.8	7.8	1856	113	708	57	50%
Denmark	5.4	84	1103	n.a.	4121	29.5	30%
Norway	4.5	84	2382	340	9441	40	61%

Note: ARPU = Average Revenue Per User.