

YES 2 SMS

Short Message Service Opportunities



By Mobile Lifestreams

See also <http://www.mobileSMS.com>

Issue Date: 1st April 2000

Copyright © 1999-2000 Mobile Lifestreams Limited

Table of Contents

“YES 2 SMS” is divided into the following sections:

1. Introduction

2. Customer Usage and Market Growth

SMS VOLUMES PER EUROPEAN MARKET

GLOBAL SMS MARKET

SMS VOLUMES PER EUROPEAN MARKET

3. SMS Messaging Milestones

1. FIRST GENERATION SMS CENTER
2. VOICE MAIL NOTIFICATIONS AND SMS MOBILE TERMINATE
3. SMS MOBILE ORIGINATE
4. EMAIL
5. INFORMATION SERVICES
6. BUSINESS PARTNERS PROGRAM
7. SECOND GENERATION SMS CENTER
8. NATIONAL SMS INTERWORKING
9. SMS FOR PREPAYMENT
10. PREDICTIVE TEXT INPUT PHONES
11. STANDARDIZED PROTOCOLS E.G. WAP
12. TERMINAL DEVELOPMENTS E.G. SMART, HANDHELD COMPUTERS

4. Consumer Applications using SMS

SIMPLE PERSON TO PERSON MESSAGING

VOICE AND FAX MAIL NOTIFICATIONS

UNIFIED MESSAGING

INTERNET EMAIL ALERTS

PREPAYMENT

RINGTONES

CHAT

INFORMATION SERVICES

5. Corporate Applications using SMS

CORPORATE EMAIL

AFFINITY PROGRAMS

MOBILE BANKING

ELECTRONIC COMMERCE

CUSTOMER SERVICE

VEHICLE POSITIONING

JOB DISPATCH
REMOTE POINT OF SALE
OVER-THE-AIR
REMOTE MONITORING

6. SMS Phone Features

7. Summary

1. Introduction

The Short Message Service (SMS) is the ability to send and receive text messages to and from mobile telephones. The text can comprise of words or numbers or an alphanumeric combination. SMS was created as part of the GSM Phase 1 standard. The first short message is believed to have been sent in December 1992 from a Personal Computer (PC) to a mobile phone on the Vodafone GSM network in the UK. Each short message is up to 160 characters in length when Latin alphabets are used, and 70 characters in length when non-Latin alphabets such as Arabic and Chinese are used.

2. Customer Usage and Market Growth

There is no doubting the success of the Short Message Service- the market in Europe alone has reached over three billion short messages per month despite little proactive marketing by network operators and phone manufacturers. Key market drivers over the next two years such as the Wireless Application Protocol (WAP) will continue this growth path.

SMS VOLUMES PER EUROPEAN MARKET

The SMS market is growing very rapidly. In Europe alone, the traffic statistics are:

<i>SMS per month</i>	<i>Date</i>
1 billion	March 1999
2 billion	October 1999
3 billion	December 1999
4 billion	March 2000
5 billion	July 2000 (Forecast)
7.5 billion	December 2000 (Forecast)

SOURCE: Mobile Lifestreams and GSM Association
(www.gsmworld.com/gsmdata).

GLOBAL SMS MARKET

<i>SMS per month</i>	<i>Date</i>
1.5 billion	March 1999
2.75 billion	October 1999
4 billion	December 1999
5 billion	March 2000
10 billion	December 2000 (Forecast)

SOURCE: Mobile Lifestreams and GSM Association
www.gsmworld.com/gsmdata).

SMS VOLUMES PER EUROPEAN MARKET

Market feedback has indicated that the SMS market in the European Union reached one billion short messages per month in April 1999. This market size is comprised from the following information:

<i>Country</i>	<i>SMS/ month April 1999</i>	<i>SMS/ month October 1999</i>	<i>SMS/ month December 1999</i>	<i>SMS/ month May 2000</i>
Germany	150 million	300 million	600 million	1 billion
UK	100 million	175 million	250 million	400 million
Italy	170 million	250 million	300 million	400 million
Finland	75 million	100 million	150 million	175 million
Norway	70 million	100 million	125 million	150 million
Sweden	70 million	120 million	150 million	175 million
Portugal	60 million	100 million	125 million	200 million
France	60 million	100 million	125 million	200 million
Spain	60 million	100 million	120 million	160 million
Denmark	50 million	80 million	175 million	220 million
Belgium	25 million	50 million	65 million	80 million
Greece	15 million	25 million	45 million	55 million
Other	95 million	500 million	780 million	685 million
TOTAL	1 Billion	2 Billion	3 Billion	4 Billion

SOURCE: Mobile Lifestreams

All figures are:

- APPROXIMATE and should be treated with extreme caution only
- Based on conversations with various industry players in each market
- EXCLUDE voice mail notifications
- Encompass messages and not messaging transactions- e.g. delivery reports etc. are excluded

3. SMS Messaging Milestones

So how have these network operators developed their messaging volumes to such a high degree? How can you develop your own messaging market? What the factors that are driving the continuing growth in the SMS market and to what degree?

1. FIRST GENERATION SMS CENTER

The network operator needs to purchase its first generation SMS Center as part of the network commissioning plan. The initial SMS Center may be simply a voice mail platform module or alternatively a standalone SMS Center. It is not possible to make the Short Message Service available without an SMS Center since all short messages pass through the SMS Center.

2. VOICE MAIL NOTIFICATIONS AND SMS MOBILE TERMINATE

The network operator sees SMS as a "tick box option"- something to say that it does have on its network. Often SMS Mobile Terminate Services are offered along with voice mail notifications, which account for the vast majority of SMS traffic on the network- typically over three-quarters.

3. SMS MOBILE ORIGINATE

The network operator launches SMS Mobile Originate to give customer true two-way SMS capability. Customers experiment with the service and work out new uses for it. Addition of SMS Mobile Originate typically leads to 25% increase in overall SMS volumes being handled.

4. EMAIL

Additional of a wireless Internet/ mobile email service often follows, typically with the customer's mobile number becoming part of the email address they are allocated as part of the service. Emails sent to that address are forwarded as a short message to their wireless phone. Such a service tends to be popular with customers, especially in markets where Internet penetration is low and people don't already have an email address. This typically leads to 20% increase in overall SMS volumes being handled.

5. INFORMATION SERVICES

Addition of information services. These services typically start with mainstream content such as news, travel, weather and sports and over time, new information providers are sourced that offer lifestyle services such as horoscopes and jokes. Because there is typically a lot of work involved in sourcing and setting up content, these services tend to build up slowly, typically accounting for about a 10% increase in SMS volumes being handled.

6. BUSINESS PARTNERS PROGRAM

The network operator starts to see independent companies experimenting with SMS-based applications and offering these on a regional or company-specific basis. To encourage these developments and assist in their widespread deployment, the network operator hires a person whose sole responsibility is to manage relations with these business partners and help them to get any technical or commercial support they need. The aim is to try to get the business partners to deploy their applications using their network's SMS services rather than those of their competitors. Because vertical market applications can account for high messaging volumes, the introduction of a business partners program can soon lead to a further 20% increase in overall SMS message volumes being handled by the network.

7. SECOND GENERATION SMS CENTER

The network operator has seen gradual but significant increases in SMS traffic volumes as these initiatives have been taken and awareness of SMS builds. They then often find that their SMS Center capacity is starting to be challenged and need to expand the existing platform or purchase an industrial strength SMS Center from another supplier. This may involve a migration from MXE to Ericsson e-SMS-C. This then removes any constraints in handling messages, and may lead to corporate customer complaints about service reliability at peak times falling, typically leading to a 10% increase in overall SMS message volumes.

8. NATIONAL SMS INTERWORKING

The additional of interworking between network operators who are competing in the same geographical market gives customers to both networks the opportunity to use SMS in the same way as they do voice. Just as they can make a voice call to each other's phones, so too can they send short messages to each other. Enabling this capability can rapidly increase the number of available messaging destinations, thereby increasing the value and use of SMS. As such, adding national SMS interworking can lead to an uplift of 50% in SMS message volumes.

By this time, the total use of SMS on the network has reached "Critical Mass". There are sufficient regular users and awareness of and momentum behind the services. SMS has become an integral and important part of many customer's everyday business and personal lives.

Facilitating international SMS roaming is also important, particularly in land-locked countries where border crossing is frequent.

9. SMS FOR PREPAYMENT

The next quantum leap in SMS traffic volumes is caused by the introduction of SMS for prepayment customers. These customers pay for their cellular airtime as they go rather than having contracts. Enabling the prepay customers to send short messages causes large traffic uplifts because the typical young person who is the main user of prepaid services is also ready, willing and able to manipulate the phone keypad and originate short messages. When customers are cost conscious, they tend to use SMS to let their friends know about changes in meeting arrangements and so on, calculating that this is less expensive than making a voice call to communicate the same information. An increase in SMS traffic of 100% (sometimes more) is not unusual when SMS for prepay is introduced.

For example, as we saw at the start of this guide, whilst Vodafone in the UK had more postpaid customers than prepay (three million postpaid, two million prepaid), the prepay customers sent more than twice as many short messages as the postpaid users.

10. PREDICTIVE TEXT INPUT PHONES

Because simple person to person messaging is such an important component of total SMS traffic volumes, anything that simplifies message generation is an important enabler of SMS. Predictive text input algorithms such as T9 from Tegic that anticipate which word the user is trying to generate significantly reduce the number of key strokes that need to be made to input a message. Widespread incorporation of such algorithms into the installed base of mobile phones will typically lead to an average uplift in SMS traffic of 25% per enabled user. These predictive text algorithms support multiple languages.

11. STANDARDIZED PROTOCOLS E.G. WAP

The introduction of standardized protocols such as SIM Application Toolkit and the Wireless Application Protocol (WAP) contributes to an increase in messaging

usage by providing a standard service development and deployment environment for application developers and business partners. These protocols also make it easier for users to reply to and otherwise access messaging services through the provision of custom menus on the phone. As such, whilst these protocols are only a means to an end and not new messaging destinations or services in their own right, they are likely to lead to a 10-15% uplift in total SMS volumes.

12. TERMINAL DEVELOPMENTS E.G. SMART, HANDHELD COMPUTERS

The introduction of more friendly and easy to use terminals contributes to increases in messaging usage by providing simpler access to messaging services. Terminals such as smart phones make it easier for users to originate, reply to and otherwise access messaging services through the provision of a QWERTY keyboard rather than the limited keypad on standard mobile phones. As such, whilst these terminals are only a means to an end and not new messaging destinations or services in their own right, they are likely to lead to a 10-15% uplift in total SMS volumes.

As such, there are various steps that mobile carriers can and should take to spur the development of SMS usage. Each of these steps is complementary and useful in making SMS a success. It is the combined effect from these steps that has led to the significant and almost exponential growth in the usage of SMS by many developed network operators since the late 1990s.

4. Consumer Applications using SMS

The vast majority of SMS usage is accounted for by consumer applications. It is not uncommon to find 90% of a network operator's total SMS traffic being accounted for by the applications described in this next section. The main consumer applications based on SMS are:

SIMPLE PERSON TO PERSON MESSAGING

Mobile phone users to communicate with each other routinely use the Short Message Service. Typically, such person to person messaging is used to say hello or prompt someone for something or arrange a meeting or tell someone something. Such messages are usually originated from the mobile phone keypad.

When the information to be communicated is short or it would take too long to have a full conversation or someone is traveling overseas or not available to take a voice call, SMS is an ideal messaging medium. For example, network operators typically charge the same to send a short message to someone in the same room as they do to someone traveling overseas with their mobile phone. Because short messages are proactively delivered to mobile phones that are typically kept in the user's pocket and can be stored for later reference, SMS is often more convenient than email or Data to communicate amongst distributed and mobile groups of people.

Once users have familiarized themselves with reading and sending short messages, they often find that SMS is a useful way of exchanging information and keeping in touch with friends. This is particularly so when the recipient is also able to reply to messages for two-way communication. If the recipient of the short message is unable to read or reply to it, then clearly the effectiveness of using SMS as the communications media is much lower. This is one of the reasons why simple person to person messaging is popular with many young people, a group that is generally more willing to learn how to use new technologies such as SMS.

As such, simple person to person messaging generates a high volume of short messages.

VOICE AND FAX MAIL NOTIFICATIONS

The most common use of SMS is for notifying mobile phone users that they have new voice or fax mail messages waiting. This is therefore the starting point for most mobile network operators and the first (but hopefully not the last) time that

mobile phone users use SMS. Whenever a new message is dispatched into the mailbox, an alert by SMS informs the user of this fact.

Because SMS is already routinely used to alert users of new voice mail messages, this application is and will remain one of the largest generators of short messages.

UNIFIED MESSAGING

Unified messaging is an emerging value-added network service that is particularly compelling because it elevates communication above the technology used to communicate- the message takes precedence over the media. Currently, it is difficult to manage all the different kinds of messages that people get- they have to dial in and pick up emails, pick up their faxes from the fax machine, call in and listen to voice mail and so on.

Unified messaging involves providing a single interface for people to access the various different kinds of messaging they use. Be the messages fax, voice mail, short messages, email or so on, they can be conveniently accessed from a single point in the most actionable form.

The user typically receives a short message notifying them that they have a new message in their unified messaging box. The short message often also includes an indication of the type of new message that has been deposited, such as fax, email or voice mail.

Unified messaging is a convenient application that is likely to become mainstream in the future. It should therefore be a significant generator of short messages as more services are launched.

INTERNET EMAIL ALERTS

Upon receiving a new email in their mailbox, most Internet email users do not get notified of this fact. They have to dial in speculatively and periodically to check their mailbox contents. However, by linking Internet email with SMS, users can be notified whenever a new email is received.

The Internet email alert is provided in the form of a short message that typically details the sender of the email, the subject field and first few words of the email message. Most of the mobile Internet email solutions incorporate filtering, such that users are only notified of certain messages with user-defined keywords in the subject field or from certain senders. Users could find it expensive or inconvenient to be alerted about every email they receive (including unsolicited "spam" emails), which would reduce the value of the service.

Because of the high and increasing usage of Internet email to communicate globally, and the benefit from using SMS to notify mobile users about important new email messages, this is likely to be a fast growing and popular application for SMS.

RINGTONES

Another emerging SMS-based application is downloading ringtones. Ringtones are the tunes that the phone plays when someone calls it. With the same phone often sold with the same default tune, it is important for phone users to be able to change their ringtone to distinguish it from others. Phones often come with a range of different ringtones built into the phone's memory that the users can choose from. However, it has become popular to download new ringtones from an Internet site to the phone- these phones tend to be popular television or film theme tunes. It is important that network operators consider copyright issues when offering ringtone services, since such commercial tunes must be licensed before they can legally be distributed (the people behind "The Saint" theme tune must be getting reach!). Ringtone composers are also popular because they allow mobile phone users to compose their own unique ringtones and download them to their phones.

Much of the usage is spurred by word of mouth- people hear someone else's phone ringing and ask where they got that particular ringtone.

As mobile phone penetration increases, and everyone has a mobile phone, unique ringtones to help determine just whose phone is ringing will become increasingly popular. Expect to see this application grow in availability and popularity over time.

CHAT

An emerging application for the Short Message Service is chat. In the same way as Internet chat groups have proven a very popular application of the Internet, groups of likeminded people- so called communities of interest- have begun to use SMS as a means to chat and communicate and discuss.

Chat can be distinguished from general information services because the source of the information is a person with chat whereas it tends to be from an Internet site for information services. The "information intensity"- the amount of information transferred per message tends to be lower with chat, where people are more likely to state opinions than factual data.

SMS-based chat services are an emerging application area. It remains to be seen how willing the participants in the chat groups are to pay for EVERY message sent to the chat channel. It is likely that commercial chat services will let participants select which messages they receive on their mobiles according to who the message sender is.

Because SMS chat applications are high volume applications whereby one message submission leads to multiple message deliveries, expect this application to be a significant generator of short messages in the future.

INFORMATION SERVICES

The Short Message Service can be used to deliver a wide range of information to mobile phone users from share prices, sports scores, weather, flight information, news headlines, lottery results, jokes to horoscopes. Essentially, any information that fits into a short message can be delivered by SMS.

Information services can therefore be configured as push-based and from a public or private source or pull-based and from a public or private source. An information service for an affinity program may combine public information such as share prices with private information from bank databases.

Successful information services should be simple to use, timely, personalized and localized.

5. Corporate Applications using SMS

Corporate applications that use the Short Message Service are currently few and far between. Most of the SMS messaging volumes are generated by consumer applications. The reasons are the older age of corporate mobile phone users and their lower price sensitivity, particularly since mobile phones bills are usually paid by the company. Corporate users are less willing to learn how to and make the effort to send a short message- they tend to use voice as their primary communications method. The main corporate applications based on SMS are:

CORPORATE EMAIL

The Short Message Service can be used to extend the use of corporate email systems beyond an employee's desk and office PC. With 40% of employees typically away from their desks at any one time, it is important for them to keep in touch with the office at all times. Corporate email systems run on Local Area computer Networks (LAN) and include Microsoft Mail, Outlook, Outlook Express, Microsoft Exchange, Lotus Notes and Lotus cc:Mail.

Corporate email notifications are similar to Internet email notifications. Users are given information such as the sender and subject of the email. Any emails of a business or personal nature that are sent to the corporate email address can be sent out over the wireless network.

Because unlike Internet email notifications, corporate email services tend to use the existing corporate infrastructure and email addresses, this kind of email application tends to generate significant average quantities of short messages per user. Very few corporations have so far extended their office email systems out to the wireless environment, leaving a large opportunity for the deployment of such services.

AFFINITY PROGRAMS

Some mobile network operators view the development of the Short Message Service as low down in their overall priorities- because few users select the mobile network solely or primarily on the basis of SMS. However, affinity programs- which are also known as lifestyle packages- are a large opportunity for mobile network operators with the potential to secure large numbers of new customers, in which SMS is an integral part of the offering.

Affinity programs are the result of collaboration between mobile carriers and other companies in different industries with large customer groups. Affinity partners include television companies, sports clubs, supermarkets and other

retailers, airlines and banks. SMS can be used to provide customers with all kinds of reminders and information such as frequent flyer miles status, overdue videotape rentals, appointment reminders and prescription drug pick-up notifications.

All parties to affinity programs can potentially benefit from the partnership- mobile network operators gain access to a largely new set of potential customers and affinity partners get to offer their customers new convenient services to their customers- offering differentiation possibilities against their competitors.

For affinity programs, the mobile phone may be branded with the affinity partner's logo and may have custom and personalized packaging. The route to market- i.e. the sales channel for the affinity product- is likely to be different from that of standard mobile phone purchases. Typically, the customized phones are marketed and distributed using direct mail- customers receive information about the affinity program through an insert into their statements or bills and they can then sign up and receive the package containing the mobile phone by post. A single bill, lower rates and easy access to the services are often features of the affinity package.

MOBILE BANKING

Let us take a closer look at a specific kind of affinity program- mobile banking. The successful implementation of mobile banking programs incorporates several different elements discussed in this guide, such as Information services and SIM Application Toolkit.

Affinity programs and related lifestyle packages are a fast growing area of mobile communications, because as competition between network operators increases, differentiation and customization for specific user groups will be necessary to extend mobile phone penetration and usage. As such, they are likely to be a significant generator of short messages.

ELECTRONIC COMMERCE

Electronic commerce applications involve using a mobile phone for financial transaction purposes- this usually means making a payment for goods or transferring funds electronically. Transferring money between accounts and paying for purchases are electronic commerce applications.

The convenience of paying for purchases using SMS must be weighed against the related issues of security, integration with the retail and banking hardware and systems, and money transfer issues. However, this area of electronic commerce applications is expected to contribute to growing SMS traffic in the

future, as mobile phone penetration delivers a critical mass of potential customers for such services.

CUSTOMER SERVICE

By providing mobile phone customers will information about their account, the Short Message Service can help to avoid the need for expensive person to person voice calls to customer service centers. In the customer service environment, SMS can help to deliver account status information, new service configuration and so on, in particular when standard SMS is combined with a protocol such as SIM Application Toolkit or Wireless Application Protocol. Some network operators find significant financial justification for deploying a value-added services platform on the basis of what they save in customer service costs alone.

VEHICLE POSITIONING

This application integrates satellite positioning systems that tell people where they are with SMS which lets people tell others where they are. The Global Positioning System (GPS) is a free-to-use global network of 24 satellites run by the US Department of Defense. Anyone with a Global Positioning System (GPS) receiver can receive their satellite position and thereby find out where they are. Many commercial GPS receivers also incorporate support for the Russian equivalent of the Global Positioning System.

The Short Message Service is ideal for sending Global Positioning System (GPS) position information such as longitude, latitude, bearing and altitude. GPS information is typically about 60 characters in length, leaving room for other information such as the vehicle registration details, average speed from the tachometer and so on to be transmitted as part of the same short message.

Because the position updates are automatically generated, mobile network operators find that vehicle positioning applications are amongst the leading generators of short messages.

JOB DISPATCH

160 characters is sufficient for communicating most delivery addresses such as those needed for a sales, service or some other job dispatch application such as mobile pizza delivery and courier package delivery.

The Short Message Service is used to assign and communicate new jobs from office-based staff to mobile field staff. Customers typically telephone a call center whose staff take the call and categorize it. Those calls requiring a visit by field sales or service representative can then be escalated to those mobile workers using SMS. Job dispatch applications can optionally be combined with vehicle positioning applications- such that the nearest available suitable personnel can be deployed to serve a customer.

SMS can be used not only to send the job out, but also as a means for the service engineer or sales person can keep the office informed of progress towards meeting the customer's requirement. The remote worker can send in a short status message such as "Job 1234 complete, on my way to 1235".

Because of the need to communicate with mobile workers and effectively and cost-effectively serve customers, such job dispatch applications are likely to be steady generators of short messages.

REMOTE POINT OF SALE

SMS can also be used in a retail environment for credit card authorization. It is particularly convenient to use mobile technology when making sales from, for example, carts in the middle of isles at shopping malls, at flea markets or at sports stadiums, where it would be inconvenient to trail a fixed telephone wire. A mobile phone is connected to a Point of Sale terminal such as a credit card swipe and keypad. The credit card number is sent to a bank for authorization. The authorization code is then returned as a short message to the Point of Sale terminal.

OVER THE AIR

Over the air capability gives mobile network operators, application developers and corporate sales managers some remote control of mobile phones for service and subscription activation, personalization and programming.

Over the air facilitates a number of end user applications such as remote service activation and update book updates.

REMOTE MONITORING

The Short Message Service can be used to manage machines in a remote monitoring environment. This application provides people with valuable information from a remote location when an important event occurs that they need to know about. The information is automatically delivered electronically without having to constantly employ physical resources locally on the off chance that such an event occurs. Examples of remote monitoring applications include

remote meter reading, sending computer system fault information to mobile phones and notifying companies about empty vending machines.

Now that we have looked at the major applications that SMS facilitates, lets take a closer look at some of the factors that facilitate the achievement of the messaging milestones.

6. SMS Phone Features

Nearly all GSM mobile telephones are able to receive short messages (known as SMS MT: Mobile Terminate). The only known exceptions that CANNOT receive short messages are some of the very first GSM mobile phones released in the early 1990s such as the Motorola 3200, the AEG Telcard 901 and the Alcatel HB100.

All major and minor phone manufacturers without exception now have at least one mobile phone available that can send short messages (known as SMS MO: Mobile Originate). Furthermore, most phone manufacturers are not now supplying ANY mobile phones in their range of models that do NOT support SMS send. Even budget phones can send messages. As such, the percentage of phones that are able to send short messages is increasing over time. At the beginning of 1999, approximately 75% of the installed worldwide base of GSM mobile phones were capable of SENDING a short message.

My optimal mobile device for using the Short Message Service would have the following features:

1. Predictive text input algorithms such as T9 from Tegic
2. Screen size of three lines or more
3. Keys that are not too small or too close together
4. Autoread feature such as that on some Motorola phones whereby messages can be displayed immediately
5. Confirmation of message delivery
6. An "ABC" button to allow easy switching between numbers and letters, as with, for example, the Nokia 2110
7. Ability to save messages in phone memory as well as SimCard, possibly save them in different message folders (like the Nokia 7110)
8. Vibrating alert for incoming messages.

7. Summary

For a relatively simple messaging service, there certainly are a lot of elements that need to be taken into account when developing and deploying SMS! However operators who take the time and trouble to invest in SMS will find appreciative customers and appreciating revenues. As such, please say "Yes to SMS"!

:

	Simon Buckingham	Steve Dye
	Mobile Lifestreams	
	Internet site:	http://www.mobileSMS.com
	Email:	SMS@mobilelifestreams
Telephone:	+44 7000 366366	954 536 0086
GSM:	+44 831 664144	
Fax:	+44 7000 366367	954 575 2024
Postal Address:	9 The Broadway Newbury Berkshire RG14 1AS ENGLAND	4331 NW 63rd Drive Coral Springs Florida 33067-3139 USA

Mobile Lifestreams is a mobile data consultancy, research and publications company. Its publications include success 4 SMS, YES 2 WAP, Data on GPRS, Data on 3G and Mobile Positioning.

For an Special Introductory Price of 200 US dollars (a saving of 50 US dollars)
for the NEW

Success 4 SMS

350 page report

Fax this page to +44 7000 366367 or email SMS@mobilelifestreams.com

Name:

Email Address:

And we will follow up with a complete order form.