

Mobile data services

Our goal is to become the provider of choice for customers wanting to use data services. The opportunity is huge as we believe that over time all customers will want to use data internet services on their mobile devices.

The mobile industry started less than 30 years ago with a single service—making and receiving calls. Today our customers enjoy a range of services including simple voice calls, text and picture messaging, and data services such as mobile internet browsing, social networking sites, downloading applications ('apps') and sending emails via smartphones.

Market context:

According to industry analysts, data is expected to be the fastest growing segment of the mobile industry. It is estimated that between the 2011 and 2016 calendar years worldwide mobile data revenue is set to grow by US\$142 billion, compared to a US\$27 billion decline in voice revenue over the same period.¹

Goals:

We aim to have the best mobile network in all of the markets in which we operate, supported by leading IT systems. This means giving our customers far-reaching coverage, a very reliable connection and increasing speeds and data capacity.

Strengths:

We have more than 238,000 base station sites transmitting wireless signals – making us one of the largest mobile operators in the world.

Actions

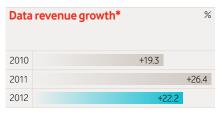
We are investing around £6 billion a year to deliver a high quality mobile data experience for our customers.

Progress

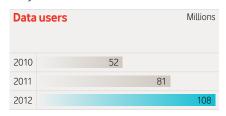
In 2012 nearly one trillion minutes of calls were carried and more than 216 petabytes of data were sent across our networks — in other words enough data for 2.8 trillion emails.

The demand for mobile data services is growing rapidly

Data is already our fastest growing segment, with data revenue up by 22.2%* over the financial year, compared to a 4.4%* rise for messaging revenue and a 4.0%* fall for voice revenue. This demand is being driven by three key factors — a widening range of powerful and attractive smartphones and tablets, significant improvements in mobile network quality and capability, and an increased choice of user friendly and useful applications for business and social use.



We have already seen significant growth in the number of customers using smartphones, with 27% of customers in Europe using these devices today, compared to 19% last year, and this is expected to grow rapidly in the next few years.



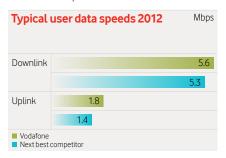
34%

of our customers use data.

We are growing data revenue through enhancing technology and improving the customer experience

We are continuing to refocus our business on data to capture the significant expected growth in customer demand for data services.

We aim to deliver a market-leading network experience to our customers. To compare our performance against our major competitors we conduct regular benchmark tests using reputable third parties. The latest results show that we have leading data service performance in 13 out of 18 markets with data downlink speeds on average around 6% better than our next best competitor.

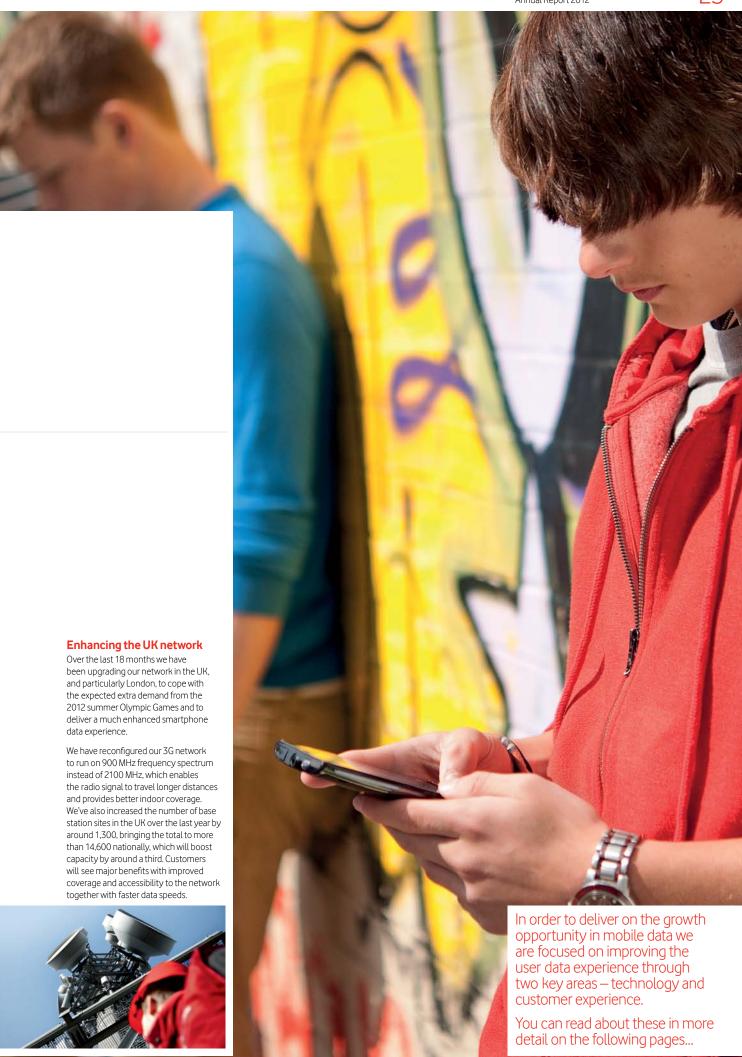


More on how we're driving data through technology and customer experience Pages 24 and 25

Note:

Sourced from Strategy Analytics

Business review



Strategy (continued)

Mobile data:

Technology

We want to have the best data network and IT systems to provide the platform for our products and services. At the same time we will continue to carefully manage our cost base to deliver profitable data services.

- → We want to provide the best data network in terms of coverage, speed and capability.
- → At the same time we will continue to carefully manage our cost base to deliver profitable data services.
- → Our goal is to provide robust IT systems to provide the platforms and tools for managing customer relationships for our products and services.

89%

of the European population where we operate is covered by our 3G network. £304m

invested in research and development during the year to ensure we continue to develop innovative services.

Petabytes

Our goal is to provide the best data network

- → Today 99% of the population in our European markets can make a call across our network. We want the same level of reach for data users so that customers can use data almost everywhere they want, whether at work in big cities, relaxing in the countryside or on holiday by the beach. We already have a strong data network as a result of significant investment in 3G technology, with over 89% 3G data population coverage. We aim to increase coverage further to enhance the number of locations where customers can use data services.
- → We are building faster and more reliable data networks that either meet or exceed the capabilities of leading smartphones for headline data downlink speeds. At present some 82% of our 3G footprint in Europe is capable of maximum data speeds of 14.4 Mbps or better and by 2015 this is expected to be nearly 100%. We will continue to upgrade our capability of both 21.6 Mbps and 43.2 Mbps in anticipation of the latest generation of smartphones and tablets.
- → To support high speed data capability being introduced across our network we continue to upgrade our backhaul and backbone transmission capabilities, which connect our base stations to the latest technology. High capacity backhaul using ethernet, microwave and optical fibre transmission equipment is now in about 41% of our sites in Europe compared to 20% a year ago.

We continue to manage our cost base carefully

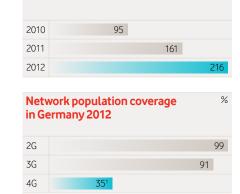
→ The increase in demand for data has meant that data traffic has more than doubled in the last two years and as a result, data now accounts for 67% of the total traffic on our network. Despite the significant cost pressures that this adds, we have managed to keep our technology operating costs, broadly stable over the same period by investing in cost efficient equipment. For example over 70% of the new radio sites deployed across the Group during the year were shared with other mobile operators which reduces the cost of renting or building new sites. We are also deploying more single radio access network ('RAN') base station sites which comprise 2G, 3G and 4G technology in one single unit as opposed to three different, and hence more expensive units. Single RAN units are now present in 24% of our sites and deliver energy operating cost savings of up to 40% compared to traditional RAN units.

Our goal is to maintain robust IT systems to provide the platform for enhancing the ways we manage our customer relationships

- → We are developing a number of tools to improve the ways we interact with customers. We are investing to create a "single view" of our customers across the Group which links together all customer activity and information on our various sales channels online, retail and contact centres. So, for example, if a customer calls a contact centre or participates in web chat online this information would be available to our in-store staff.
- → We are also investing in new ways of billing customers to make tracking spend easier, including one bill for voice, data and fixed services.

Long-term evolution ('LTE') technology

While 3G provides a mobile data user experience comparable to traditional fixed broadband services based on copper technology, the development of 4G services, sometimes called long-term evolution ('LTE') technology, will significantly enhance the user experience providing user speeds of up to 12 Mbps, compared to up to 6 Mbps on 3G. In Germany, our first market to launch LTE, we have already deployed the capability on 12% of our radio sites, and as a result we can provide market leading coverage to 14 million German households, one-third of the total.



Household coverage

Data volume



Mobile data:

Customer experience

We aim to differentiate from our competitors by smart and continued investments in technology, capabilities and distribution, providing both a great customer experience and competitive value to our customers.

- → We want our customers to enjoy the experience when they interact with us, through providing the best retail stores, the easiest online experience and most accessible expert advice when needed.
- → Our goal is to offer customers the most attractive and innovative range of mobile devices, from smartphones to tablets, USB sticks and connected devices.
- → We aim to provide services that help our customers access their digital life in an easier and safer way and to build customers' trust.

14,000

We are among the world's largest retailers with around 14,000 retail stores.

1st

Our brand is rated as the most valuable telecoms brand in the world.

We want our customers to enjoy the experience when they interact with us

- → Our traditional voice and text messaging services are relatively simple to use and understand, however mobile data can be more difficult to understand – for example setting up your smartphone, email account or accessing internet applications. We are taking a number of steps to improve our service to make it easier for our customers. Our retail stores around the world are being reconfigured to offer customers a better experience with services which ensure customers leave the store with their smartphone fully running, and technical support experts to resolve customers' questions or problems with their devices. By May 2012 4.400 of our stores provided these services and during this year we will further expand the roll out.
- → We are also using more online capabilities so that 57% of our customers in Europe now receive an electronic bill which saves us money and also helps the environment. We have extended the online self-care service from PC to smartphones and tablets in 17 of our markets and now have eight million customers who can view their billing information, their usage and information about their price plan, across any of their connected devices.
- → We are evolving our contact centre strategy to encourage the use of social media which is simple and attractive to use for some customers. Last year we received 64 million contacts through our social media contact centres such as Vodafone Facebook, YouTube and customer forum.

Our goal is to offer our customers the most attractive and innovative range of mobile devices

→ Our strategy is to leverage our devices portfolio to both differentiate as well as drive data usage in the market. 27% of our customers in Europe use a smartphone, compared to 19% a year ago. Among consumer contract customers that pay a regular fee the figure is even higher at 47%. We continuously work with our strategic partners to have the most attractive smartphone portfolio, including both high-end devices and prepaid handsets such as the value-focused Vodafone 858 Smart.

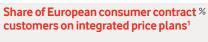
We aim to provide services that help our customers access their digital life in an easier and safer way and to build customers' trust

- → We have established a range of integrated voice, SMS and data plans. Within these plans, customers are able to use whatever services they wish from simple calls and text messaging to all the applications that the internet provides. 27% of our customers in Europe are already on these plans, up from 13% last year.
- → In order to keep customers' information safe and secure, Vodafone has launched a range of services designed to support data usage on smart devices and build longer term relationships with customers. Key examples are Vodafone Cloud, Vodafone Contacts, Vodafone Protect and Vodafone Guardian. Vodafone Cloud automatically uploads or saves customers' photos and videos to the cloud which can then be retrieved from any device. Vodafone Contacts, another cloud based solution, backs up customers' phone contacts, so all their numbers are always safe. Vodafone Protect enables us to locate lost or stolen phones and laptops, and wipes the content to keep them secure. Vodafone Guardian is a service to help protect children with smartphones against unwanted communication, promoting responsible use of mobile technology, and helping parents control how their children's smartphones are used

Vodafone 858 Smart

The Vodafone 858 Smart is our Vodafone branded Android smartphone positioned to accelerate mobile data mass market adoption, with a retail price of around £55 in the UK. We are giving access to the mobile internet with a high quality experience to the mass market, and have sold around one million units since its launch in June 2011.

Share of European customers with a smartphone 2010 10 2011 19 2012 27





Note

Integrated tariffs were introduced to our markets during the 2011 financial year.

Strategy (continued)

Focusing on growth in:

Emerging markets

Emerging markets such as India and Africa represent a significant opportunity for growth. Last year the Indian mobile market added 140 million customers – over two times the size of the UK population.

Emerging markets represent around 29% of our service revenue and the share is likely to grow over the medium to longer term driven by continued strong economic growth and the increase in mobile penetration towards mature market levels.

Market context:

Almost all of the 1.5 billion new mobile phone users over the next four years are expected to come from emerging markets.¹

Goals:

We are steadily increasing our exposure to emerging markets given the stronger growth prospects that they offer relative to developed markets.

Strengths:

We operate mobile networks in a number of emerging markets including India, Vodacom, Egypt, Turkey, Ghana, Qatar and Fiji – in which we hold either a number one or two revenue market share position.

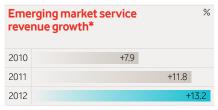
Actions:

Our high quality networks combined with low cost devices and innovative services such as mobile payments and mobile health solutions help to support economic development in underdeveloped communities (see below and "Sustainable business" on page 36 for more information).

Emerging markets represent our fastest growing geographies, delivering service revenue growth of 13.2%*, compared to a fall of 1.1%*, for our Europe region.

The attraction of emerging markets

Over 70% of the world's six billion mobile phone users are in emerging markets, where incomes are generally lower than mature markets such as Europe. Emerging markets tend to have stronger growth prospects than mature markets, as a smaller share of the population in these countries have mobile phones and the pace of economic and population growth tends to be higher. During the year mobile service revenue growth in our emerging markets increased by 13.2%*, including 19.5%* in India and 25.1%* in Turkey. This was driven by continued strong economic growth and rising mobile penetration. In contrast revenue growth in Europe declined 1.1%.



The data opportunity in emerging markets

Mobile data is increasingly popular in emerging markets given the lack of alternative fixed line infrastructure. For many people in emerging markets their first internet experience has been on a mobile device and we expect this to be the case going forward. The demand for data is expected to grow strongly as only around 29% of our customers in these markets currently use data services, compared to about 42% in Europe. At 31 March 2012 over half of our mobile data users were from emerging markets.

Our money transfer service, M-Pesa, supports economic development in emerging markets

Mobile services are a key driver of economic development in emerging markets. According to a World Bank study, a 10% increase in mobile penetration can add 1.2% to annual economic growth in an emerging economy. Our Vodafone money transfer service, M-Pesa, is also contributing to economic growth in countries that lack banking services. It enables millions of people who have a mobile phone, but with limited or no access to a bank account, to send and receive money, top-up airtime and make bill payments. We now have just over 14 million active M-Pesa customers, who transfer up to £600 million per month. The service is established in Kenya, Tanzania, South Africa, Afghanistan, Qatar and Fiji. During the financial year, we launched M-Pesa on a trial basis in Rajasthan, India, in preparation for a full launch later this year across the country.

of our service revenue is from

transferred person to person over our M-Pesa platform per month.

Note: 1 Sourced from IDC.



Strategy (continued)

Focusing on growth in:

Enterprise and total communications

Continued globalisation of marketplaces and the growth of small businesses looking for more productive ways of communicating has created growth opportunities for Vodafone in all enterprise segments from micro-businesses to multinationals.

Our enterprise customers range from small-office-home-office ('SoHo') businesses and small-to medium-sized enterprises ('SME'), through to large domestic and multi-national corporates ('MNC'). Across the Group we have over 30 million mobile enterprise customers accounting for around 8% of all customers and around 23% of service revenue.

Market context:

Enterprises spend €86 billion in total in areas where Vodafone provides its services: mobile voice, messaging and data.1

Goals:

We want to confidently connect businesses using our expertise in converged services, delivering unmatched customer experience and real value for money. We aim to continue to gain market share and exploit opportunities across our geographic footprint.

Strengths:

Our geographic footprint in Europe allows us to enhance efficiency and realise scale benefits, allowing us to offer customers both fixed and mobile converged solutions.

Our Vodafone One Net proposition offers customers one number which can be answered on their desk phone or mobile phone and is the foundation of our unified communications strategy.

Progress:

40% of our enterprise customers now have a smartphone or tablet across Europe, pushing enterprise data revenue growth of 18.2%*.

Leading in enterprise

The core criteria our enterprise customers use when choosing a communications service provider are speed, simplicity, flexibility, cost and security. We are well placed to offer enterprise customers all of these through our mobile and fixed converged services, applications and secure solutions.

Vodafone Global Enterprise

Vodafone Global Enterprise serves the needs of Vodafone's largest multi-national corporate ('MNC') customers. MNCs demand a consistent multi-country offer from Vodafone across our global footprint. Vodafone Global Enterprise simplifies operations for these customers by providing them with a single account and service team, a single contract, single pricing structures and a single portfolio of products and services. Vodafone Global Enterprise has created a market leading portfolio of Managed Mobility Services providing capabilities such as mobile email or device security as a chargeable managed service in addition to providing the underlying connectivity and devices. By providing a broader range of services Vodafone Global Enterprise extends its core value proposition of integrating, managing and simplifying global communications services for MNC customers.

During the financial year Vodafone Global Enterprise achieved revenue of £1.3 billion, with growth of 11%* across the Group, 12%* in Europe and 8%* growth in our AMAP region.

Total communications

Enterprise customers are embracing flexible and remote working to improve business efficiency. Vodafone's fixed and mobile converged solutions and reliable mobile data services are increasingly vital to our customers' business operations.

Vodafone One Net offers customers a single telephone number which rings on both their fixed desk-phone and mobile handset. One Net users have complete control over where and when they take their calls. Businesses have the flexibility to change the number of users depending on their needs. As a result we help improve business efficiency, flexibility and cost control. Vodafone One Net users generate higher revenue and lower churn than mobile-only customers.

Consistent with our Group strategy of continuing to develop services in Europe and enhance our efficiency and realise scale benefits, in April 2012 we announced a recommended cash offer for Cable & Wireless Worldwide plc, a leading UK fixed line business. If our offer is successful our combined business will create a leading integrated fixed and mobile operator in the UK, opening up attractive opportunities in the unified communications space.

Enterprise mobile data

Vodafone's device management solutions help customers manage the rapidly increasing number of mobile devices, such as smartphones and tablets, used in their business. Our reliable and secure data networks allow our customers to make full use of the mobile internet for business. Enterprise data revenue grew 18.2%* this year driven by smartphone penetration of 40%, as the use of the internet on smartphones has increased.



2010	22.8
2011	22.9
2012	23.1

Enterprise customers

2010	26.0
2011	28.1
2012	30 3

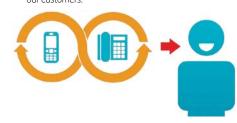
Millions

Vodafone One Net users		Millions
2010	0.8	
2011	1.4	

Total communications

2012

In November 2011, Vodafone Global Enterprise acquired Bluefish to become the consultative heart of our unified communications offering to multinational corporations. As enterprise customers demand more complex end-to-end solutions, Bluefish brings Vodafone the experience and expertise to be innovative and deliver complex projects through sophisticated use of technology and brings more value to our customers.







Focusing on growth in:

New services

We are supplementing our core communications services of voice, data and texts with a range of new services to generate additional revenue and enhance the customer experience. These new services comprise three key areas - mobile commerce services, machineto-machine ('M2M') services and operator billing.

People are using data more and more in their everyday lives driven by fast, reliable mobile data networks and continual improvements in devices such as handsets and tablets. We are also seeing increased interest from customers in new data-based services like mobile payments via handsets and mobile data devices for homes and cars.

Market context:

New services account for a small portion of our revenues today but the potential market opportunity is significant.

We want to expand our presence in attractive new growth segments to capture the incremental opportunity and enhance customer service through the provision of new and useful services that add value to our customers' lives.

Strenaths:

Our global network reach, leading brand and strong service platforms make us well placed to become the partner of choice and capture the revenue growth opportunity.

Actions:

We are developing new services in partnership with leading companies from all relevant industries, including financial institutions, retailers, software producers and handset manufacturers.

Progress:

During the year we saw strong growth in the take up of new services, adding 3.2 million active M-Pesa customers and 2.5 million new M2M connections.

Mobile commerce services

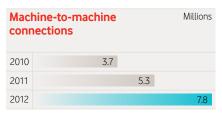
Mobile financial services are today at the core of our mobile commerce services and M-Pesa is our main service, a mobile payment service that enables millions of people to transfer money electronically even when they have no access to a bank (see page 26 for more details). We are also developing a global mobile wallet service whereby customers with suitably equipped smartphones can use them to pay for goods and services. Earlier this year we announced a worldwide partnership with Visa to enable customers to simply wave their phone in front of a payment terminal to make simple everyday purchases such as train tickets, newspapers or their morning coffee.



Machine-to-machine

M2M connections allow machines to communicate with one another via built-in mobile SIM cards. It is our vision to transform lives and businesses by providing the most innovative M2M products and services for our customers. Smart metering, automotive and logistics are currently the key growth sectors with the potential market increasing from $\[\le 3 \]$ billion in 2011³ to $\[\le 6 \]$ billion by 2015¹³. We are now serving around 7.8 million M2M connections globally, up from 5.3 million last year.

An increasing number of global businesses are incorporating M2M communications into their core operations, leading to greater productivity, enhanced customer service, lower energy use and decreased carbon dioxide emissions.



Operator billing

Across the globe around 28 billion apps are downloaded every year; most are free but an increasing number are paid for. To build on this opportunity we are partnering with leading companies such as Google and Facebook to enhance their service with a simple solution that allows our customers to pay for apps and games directly and simply on their Vodafone monthly phone bill. We were the first operator to launch the service in Europe for the Android market and the service today also works on BlackBerry and Nokia. Early results have shown that around 80% of apps bought through BlackBerry App World are paid for via operator billing. These recently launched services provide a great customer experience and we had over 130,000 active users at the end of the financial year.



- Notes:
 1 Consensus of leading M2M market analysts for global M2M connectivity (excludes hardware, software, applications and system integration services).
- Data for 2010 is unavailable as the service was launched in 2011.
- Refers to calendar year



The machine-to-machine market (SIM to SIM communication without human intervention) is expected to grow from €3 billion in 2011³ to €6 billion by 2015³.

BMW uses Vodafone's machine-to-machine SIMs

In March we announced that Vodafone's new SIM chip, which is based on machine-to-machine technology and allows different devices to communicate with each other, has been selected by BMW.

Starting later in 2012, new BMW vehicles will be fitted with specially adapted Vodafone SIM chips which will provide drivers with access to innovative in-car services such as the BMW online service, a 24/7 personal concierge service for drivers and emergency call functions.

The Vodafone SIM chip has a lifespan of more than ten years and can withstand temperatures from minus 40 to plus 85 degrees centigrade.

