

Our strategy (continued)

Network

We aim to have the best mobile network in all our markets, be competitive in fixed services and provide the best converged fixed and mobile services to support the growing demand for unified communications. We are aiming to provide our customers with a “perfect voice” call experience, and provide both high quality and broad data coverage.

Context

- The telecoms industry continues to experience a rapid increase in the demand for data services, such as video streaming and internet browsing on smartphones and tablets.
- Across the Group data traffic increased by 64% over the last year and data now accounts for 81% of our total traffic including voice.
- Mobile and fixed network technology is continuing to evolve providing faster data speeds and the capability to carry more data.
- Customers are also increasingly seeking fixed and mobile converged or unified communications propositions.

Where we are going

Our strategy is focused upon delivering a clearly differentiated, market-leading network position. We will do this through:

- the provision of the best mobile voice and data service, by the rapid and widespread deployment of 3G and 4G, and upgrades to network backhaul infrastructure; and
- being competitive in the fixed market and delivering leading unified communication solutions, by acquiring access to an effective mix of high speed next-generation fixed network cable and fibre infrastructure.

Mobile network Europe

Across Europe data has become an increasingly important driver of total traffic on our network. In the last year European data traffic increased by 44%, compared to 4% for voice. Video streaming and web browsing are the most popular data applications – accounting for nearly 75% of data usage. 3G accounts for most of our data traffic, so it's a key area for investment. This is why today around two thirds of our European 3G network can now deliver peak downlink speeds of 43.2Mbps and the latest smartphone drive trials showed that we had the best or co-best 3G data network in 15 out of 20 markets. The faster speeds offered by 4G make this increasingly attractive to our customers, shown by a significant rise in the number of users last year to 4.7 million. The increasing take-up of 4G means that this now represents 18% of total European data traffic.

Mobile network emerging markets

Nearly 40% of Group mobile data is now carried across our AMAP network, which includes our emerging markets, and by the end of the year India became the greatest data user by volume of any country within Vodafone. The scope for further data growth remains significant with only 52 million of our 167 million customers in India having access to data, of which only seven million are 3G users. 3G usage is already averaging in excess of nearly 750MB per month – compared to around 500MB in Europe. To meet this rapid growth in data traffic, we have rolled out more than 10,500 3G and over 9,700 2G sites in India supported by more than 13,000 kilometres of fibre in the last two years.

Investing in fixed networks for unified communications

As demand for unified communications and data grows we are increasing our access to next-generation fixed line infrastructure to support this. Through a combination of wholesale agreements, self-build programmes and targeted acquisitions we now have access to fixed line infrastructure in 17 markets (with data speeds of up to 300Mbps in some) and we offer combined fixed and mobile propositions in 12 countries.

During the year we acquired Kabel Deutschland in Germany and announced the acquisition of Ono in Spain, both of which provide us with high quality cable network infrastructure. The integration of Cable & Wireless Worldwide in the UK and TelstraClear in New Zealand remains on track and we have made good progress on our fibre build programmes in Spain and Portugal with a target to reach three million and 1.5 million homes passed respectively by 2015.

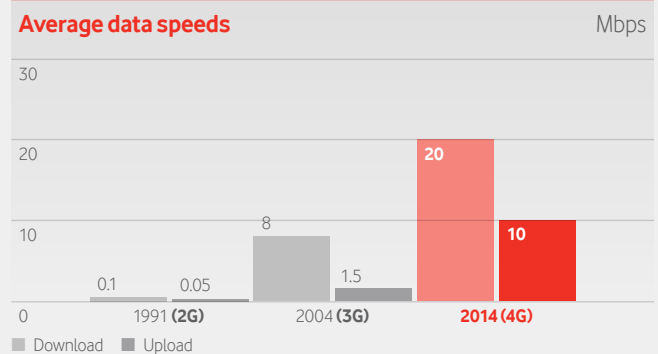
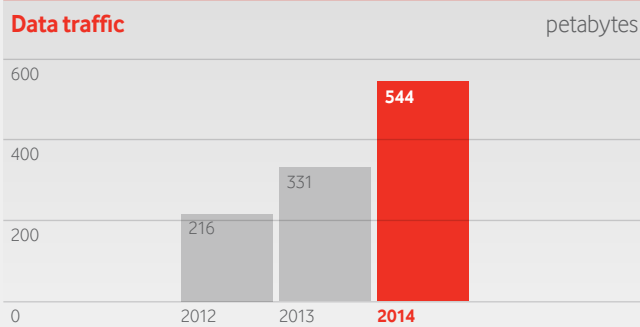
Spectrum

Radio spectrum is the key raw material for our mobile business. During the year we acquired and renewed spectrum for £2.2 billion in India, Romania, New Zealand and the Czech Republic, with a cash cost of £0.9 billion during the year. The purchases in India will enable the provision of enhanced voice and data services including 2G, 3G and 4G across the country. We have a strong portfolio of spectrum assets to support the rapid deployment of 4G, with 800/900MHz frequency spectrum for deep indoor coverage and 1800/2600MHz for capacity and performance. See page 194 for more details.

Project Spring

The largest part of Project Spring will be significant additional investment in our mobile and fixed networks over the next two years to both accelerate and clearly differentiate our network position in all of our markets. This is the largest network investment programme in our history.

In our European mobile networks, this will enable us to deliver “perfect voice” which means a call success rate of over 99%. We will also deliver the best 4G data experience with over 90% outdoor population coverage and 90% of customer data sessions on high speed smartphones will be above 3Mbps. This will be supported by a future proofed network with over 98% of sites covered with high capacity backhaul. In emerging markets, we will also deliver “perfect voice” and will grow our 3G coverage to 95% in targeted urban areas in India. For our fixed customers, we will deploy fibre in Italy passing 6.4 million households, extend our fibre roll-out in Portugal to more households and build fibre coverage to support 15,000 enterprises in South Africa.



>263,400

Over 263,400 mobile base stations, making us one of the largest mobile operators in the world



Expanding our 4G network

Our 4G journey continues to go from strength to strength. In the last year, we launched 4G services in a further seven markets, including the UK, bringing the total to 14. 17% of the smartphones on our European network are 4G capable, and our 4G network enables customers to upload and download content two to three times faster than over 3G. This allows users to stream video content and browse the internet with less delay. By 2016 we expect to expand our 4G network to cover over 90% of the European population.



Portable network supports victims of typhoon

In November 2013, the Vodafone Foundation deployed two Instant Network to support relief efforts following Typhoon Haiyan, in the Philippines. These portable networks pack into four cases, each weighing less than 100kg. Over 29 days the networks enabled 1.4 million SMS and 443,200 calls to be made.

In February 2014, the Vodafone Foundation launched the Instant Network Mini – a “network in a backpack” weighing just 11kg, which can be deployed in ten minutes.

Network innovation

We work very closely with our network suppliers to continually develop innovative new solutions to help improve our customers' network experience, deliver efficiencies and enable us to differentiate. During this year, we began testing and deploying several solutions, which will be available in the near future. For example, “4G carrier aggregation”, bonds together multiple spectrum blocks to increase peak data download speeds up to 300Mbps; and “4G Broadcast” enables an unlimited number of smartphone users, with compatible devices, to watch TV channels without putting additional load on the 4G network. We were the first operator to trial this service in Europe in February 2014.

