

# [A marketing strategy analysis of vodafone](https://assignbuster.com/a-marketing-strategy-analysis-of-vodafone/)

Vodafone Group PLC is a British multinational mobile network operator and Britain’s third largest company which is also the world’s largest mobile telecommunication network company in terms of revenue £44. 47 billion and market value of £80. 2 billion (August 2010) at UK FTSE and leading the global market with 7% market share. It started in the year 1984 and the name Vodafone is acronym for Voice Data Fone. Vodafone has its presence in all the continents (direct operation in 31 countries and partner network in more than 44 countries) and by the end of June 2010, it has a customer base of 347 million proportionate mobile customers across the world (Wikipedia & Vodafone 2010). Vodafone’s vision as per the case study cited through the times100 is “ To be the world’s mobile communications leader. Corporate Responsibility (CR) helps us to achieve this by reducing business risk and supporting our reputation with customers, employees, government and other important stakeholders….. This commitment is about making money in a way that minimises our negative impacts and maximises the positive benefits of our business on people and the planet.” In 1997, Vodafone introduced its Speech mark logo, as it is a quotation mark in a circle; the O’s in the Vodafone logotype are opening and closing quotation marks, suggesting conversation (Wikipedia).

## Presence of Vodafone

In June, 1999, Vodafone completed its merger with AirTouch Communication, Inc, US based wireless service provider as Vodafone Airtouch PLC. However Vodafone retained its name later on after the annual general meeting (Vodafone, 2010). In September 1999, Vodafone agreed to merge its US assets with Bell Atlantic Corp. which formed Verizon Wireless, which was completed in April 2000 (Wikipedia, Elliott & Schiesel, 2000). In Feb, 2000, Vodafone took over Mannesmann which was a German giant having 42 million customers, successfully sealed the historic (world’s largest takeover) deal of £112 billion after months of rancorous negotiations (BBC NEWS 11 Feb, 2000).

Since 2001 till date, Vodafone has expanded its footprints in every continent having their own subsidiaries or is partnering with other local service providers.

Table1: Vodafone’s presence in the world. (source: Wikipedia)

In India, Vodafone Essar Limited was created in the year 2007, when Vodafone Group Plc made its entry to India and acquired entire indirect and direct interests and rights of Hutchison Essar. Hutchison Essar had their presence in the Indian market since 1994. The company now has more than 109 million subscriber bases in India which counts to 23. 89% market share of the total 457 million subscribers in India as of June 2010 (http://coai. in/)

## How Vodafone entered India?

Vodafone had its existence already in India, as it had 5. 6% stake in Bharti Airtel. However, Vodafone entered in India with a joint venture having sensational 67% stake with the Essar Group as its partner for the Indian market for purchasing or taking control of Hutchison Essar owned by Hong Kong’s Hutchison Telecommunication. There was a tough competitive bid between Reliance Communications and the Hinduja Group to purchase Hutch which was the second largest GSM brand in the Indian Telecom Market, but the deal was finalised at $18. 8 billion, whereas Vodafone paid estimated $11. 1 billion for its 67% stake in the company (BBC, 2007). It was considered to be a hard-fought deal which is the biggest foreign acquisition in India ever (Timmons 2007).

## Vodafone faced legal issues

Vodafone received legal notice from the Indian Tax Authority for the potential tax liability in October 2009. Vodafone was accused of alleged failure to deduct withholding tax from the consideration paid to the Hutchison Telecommunications International Ltd (HTIL), Hong Kong in respect of HTIL’s capital gain on disposal of its shares in Hutchison Essar.

Mary Swire in Tax-News. com interpreted this tax issue as “ the Indian tax authorities have contended that the shares in the Cayman Islands company were merely the mode or the vehicle to transfer the assets situated in India, and that, therefore, the effective transaction between the VIH and HTIL was a transfer of interests, tangible and intangible, in an Indian company and not merely an acquisition of shares of a shell foreign company.” VIH was Vodafone International Holding BV, subsidiary of Vodafone Group PLC. VIH later filed writs in the court for the cancellation of the notice, but the initial court hearings dismissed the writs in favour of Tax authority of India. Vodafone later appealed and filed its petition against the decision of tax authority in the High Court. The tax liability has been considered to be around $2 billion. Vodafone is defending themselves that they have no liability for withholding tax and the case is still in court for ultimate decision. Vodafone says it is exempt from the charge as the stake sale took place between two off-shore entities. (Galani, 2009)

## Competition in Indian Market

Due to the takeover of the business and the subscribers of Hutch, Vodafone successfully secured its place as the second largest operator in the industry, and as a premium brand in the Indian market. But it is very difficult for Vodafone to charge the premium rates because of the immense competition. Bharti Airtel, IDEA, BSNL, Aircel, Reliance Communications and Tata Communications are the bigger rivals of Vodafone (Galani, 2009).

Below statistical comparison of December 2009 vs. June 2010 tells us about the top five in the GSM Telecom Industry, market share and subscribers wise, where Vodafone has secured its second place with 23. 89% market share as of June 2010 and has increased significant number of subscribers in comparison to December 2009 data. Bharti Airtel holds the first position with 29. 92% & Idea Cellular is in the third place with 15. 09% market share. Bharti Airtel and IDEA are the tenable competitors for Vodafone whereas others are way behind.

Table1: Market Share of GSM Operators in India, Source: http://www. coai. com/statistics. php

## Economic Environment of India

India opened their economy in early 1990s which had served to accelerate the country’s economic growth, increasing the GDP growth of more than 7% since 1997. India’s economy includes traditional and modern agriculture, handicrafts, modern industries, and a multitude of services. Below figure reveals the growth rate of India’s GDP; however we can see fluctuation in growth but the mean GDP growth is considered as 8. 39%.

Figure 1: India GDP Growth Rate (source: www. tradingeconomics. com)

As the economy was growing, the consumers were attracted with the mobile technology and the growth in the mobile industry was outstanding. Figure below describes the every year growth since 2006 till June 2010. There was no cultural and economic problem faced by Vodafone.

Figure 1: YOY comparison of growth of subscribers in India. (Source: www. coai. com)

## Consumption Behaviour of Indian consumers

Consumption behaviour plays very important role for in an organisation for various decision making such as positioning, pricing, promotion, distribution, segmentations, service etc. Vodafone bought Hutch, the second largest cellular operator, with excellent brand. When Vodafone made entry and started operating as Vodafone Essar, it was very important to perform well and proving themselves as the world leader. Vodafone and its international brand name enabled the company to show a very strong growth and performance. The revenue was increased by over 50% during the year on a proforma basis due to the rapid expansion of the customer base, adding 1. 5 million net customers every month since its acquisition of Hutchison Essar. Vodafone also shipped 7 million handsets in 2008, which made Vodafone the second largest supplier of handsets in the market. (Vodafone Annual Report 2008)

## Market Adaptation & Services

As Vodafone entered the market, they had a big challenge of handling their growing customer base and at the same time, they had to reduce their personnel and infrastructure cost because they had heavily invested for buying Hutch brand. Vodafone introduced and installed 1100 plus Vodafone Self-Service Kiosk, the self service automation machine, which helped customers to top up their prepaid account, printing-paying post paid bills, and information of new services offered by Vodafone. Kiosk provided 24×7 conveniences to the customers and also reduced their cost per transaction. (Intellivisons Newsletter, 2008)

Vodafone offered various suitable products and services to the Indian market designed according to the demand and choice of the diverse customer base. Products and Services offered were:

Table 2: Products and Services of Vodafone Essar

Source: http://www. vodafone. in/existingusers/services/pages/services. aspx

## Product Pricing

The Indian telecommunication market was expanding very fast and with that pace the competition was also getting stiffer and competitive, but Vodafone somehow managed to increase the rates and tariff for the air time per minute and sms in the beginning. These prices if compared to the Europe and US Market are far lower. To attract new customers Vodafone started selling low cost handsets (Vodafone 150 and 360) with connectivity at very low and attractive rates (Vodafone annual reports, 2009) Later due to the increasing competition and competitors also cutting down their tariffs, Vodafone was compelled to cut down its rate by more than 50%. Vodafone slashed STD and Roaming Call rates to Rs 1. 30 and Re 1 respectively. While in roaming, outgoing call was priced at Rs 1. 50. Before that competitor Bharti Airtel had reduced call rates by 43% (Nagpal, 2008). It even came up with deals where they provided customers with free talk time at night times and over the weekends. This lead to massive price war in the telecom industry, but Vodafone managed to attract and retain their customers while selling their products. (Vodafone 2009)

## Promotion & Advertising

After the acquisition of Hutch by Vodafone, it promoted itself with the slogan, “ Change is Good…. Hutch is now Vodafone” and “ wherever you go our network follows..” to “ make the most of now”. Change in the brand name from Hutch to Vodafone, was unveiled nationally and internationally through a high profile campaign covering all important media (Vodafone 2007). It retained and continued with the elements from its predecessor’s advertisement and introduced the corporate colour Red. Employee uniforms were changed to the corporate red colour from previous Pink.

Vodafone become an official partner and provided sponsorship for various popular public events like MTV Splitsvilla, IPL 20-20 Cricket tournaments, etc. which enabled helped proving the presence to be felt in the market. For the promotions of the value added services, Vodafone introduced the advertisement character named ZooZoos and Pug (small cute dog), which became a craze in the market surprisingly. ZooZooz were the low cost advertisements, which were not animation but actually acted by real people. ZooZoos created sensation in social networking sites too and did a lot in mass viral marketing.

This was an emotional advert which touches the heart and makes us laugh; it was unique concept that was completely different if we compare with European and US adverts. Satbir Singh, chief creative officer, Euro RSCG, shares his own experience about Zoozoos, “ Every time the commercial gets over, my two-year old son Angad hands me the remote and demands to watch it again. The other day, a waiter at a club mixed up my order as he was too busy watching the ad during IPL!” (Joshi, 2009). Advertisements starring Irfan Khan also gained good publicity for Vodafone in India.

## Distribution & Payment System

Vodafone Essar has two kinds of distribution network of its services to the customer. In direct distribution, it directly owns and manages store under the brand name of Vodafone. These stores sell the services to the customers, existing customers and the required support when the customers want. After Vodafone took control in Vodafone Essar, all the stores were rebranded as Vodafone and refurbished more than 40 stores in the standard format of Vodafone Group around the world (Annual report 2009). Vodafone also sells its products and services, using the franchise and the exclusive dealers all around India. Vodafone also operates post-paid outlets and mini stores to sell their services and products. It also uses Internet technology to sell their products, the state of the art website is very much user-friendly and useful for the customers who are busy and can’t reach to stores for the services (Vodafone Annual Report 2008). For indirect distribution, Vodafone has ties with independent dealers, distributors and retailers to provide services in the rural areas where it has not much access.

Vodafone’s payment system is also quite good and hassle free. Prepaid customers can top up their balance via recharge cards available through various stores and online. For post-paid customers, they can pay their bill online, through Self Service Kiosks, various payment centres, direct debit, payment at drop box, by IVR and collection agencies (Vodafone, 2010).

## Analysis by Gaurav Bashyal (9100070)

## STP Strategy and Vodafone Essar:

Segmentation: Vodafone Essar is seen as much focused in segmentation in India. Vodafone as segmented Indian Market as geographical segment where rural part of India is at much attention because of the huge potential market for telecom. Secondly, it has focused on the demographical segment where the middle and low income group falls. Both the segment comprises the major population of the country. Vodafone has also segmented the customer in terms of psychographic (students, professionals etc) and behavioural aspects (high users and low users) and have provided the services as per the needs of the market and customers.

Targeting: After the segmentation, Vodafone has selected the target customers which it is focusing on to sell its product and services. Vodafone’s is targeting its marketing strategy to the people living in small towns and villages, lower or middle income group of population, youngsters and Business peoples. Vodafone’s good network of distribution channel is helping to reach and provide services to the people living in remote villages and areas of India. Their prepaid service has attracted the lower or middle income group customers and the youths. Products like iPhone and Blackberry are targeted towards the high income people or business persons in India. They are offering series of differentiated products to their respective markets.

Positioning: Vodafone has been successful to position itself in almost every part of India with its excellent channel of distribution. And for creating sales and enquiry, it has introduced various exciting advertisements and sales promotional activities. The tag line used by Vodafone says “ wherever you go, our network follows”, also creates good image in customer’s mind about the network coverage which is superior and consistent. By the introduction of the advertisement character like Zoo Zoos also helped Vodafone to position because the advert was highly appreciated by the customers and was a great hit. Cricket is thought as a religion in India, sponsorship in IPL 2020 cricket also positioned Vodafone very well in the Indian market.

## Vodafone’s Marketing Mix in India:

Marketing Mix is the combination of 4 major variables which a management must have to take care of and controlling it in order to best satisfy customers in the target market and creating wealth. Those 4 variables are also known as 4 P’s of Marketing and these are: Product, Price, Place (distribution) and Promotion (quickmba. com). In the changing world, nowadays another ‘ P’ is added as People, making it 5 P’s of Marketing.

Vodafone acquired hutch in 2007 and has used the good marketing mix for gaining success in the vast telecommunication market of India as the 2nd biggest company in India in terms of GSM mobile technology, which is growing day by day.

Product: Product is the major variable in marketing mix, because without product no other variables can work. Product refers to tangible, physical products as well as services (netmba. com). The brand Vodafone was itself able to sell its products in the Indian market but Vodafone introduced various suitable and affordable ranges of products and services for the various range of customers in India. For the low income customers, Vodafone provided facilities of pre-paid mobiles and for the high income customers, Vodafone served with their post-paid mobiles. Vodafone also introduced easy to use, low cost handsets addressing the rural community of India who cannot afford mobile phones at high prices.

Price: Price plays an important part in the buyer/seller relationship. A trust develops between seller and buyers, who mutually agree that prices will be set at a fair level. A significance of price can be reduced when the factors such as quality and reliability of service delivery is equal or greater than the price buyer is paying for the product (Lancaster and Reynolds, 2004). In case of India, Vodafone is in a low price strategy to gain high market share of the people who are in the rural areas of India and cannot afford higher or premium prices. As 71% of total population of India lives in rural part (CIA, fact-book 2008), Vodafone has taken this strategy to reach out to the higher volume of people. Vodafone has introduced various products with the range of prices which a customer has option to choose and customers also receive the quality service they pay for their products.

Place: Vodafone has opened maximum number of outlets in each and every part of India. The outlets are direct distribution through their own distributors, indirect distribution through associate distributors to the local retailers, who provide products and services to the local customers. Vodafone has also established many service centres in almost every part of India, so that the customer is always satisfied with the products and services of Vodafone and we can see that the customers of Vodafone are significantly increasing every month. Vodafone is also selling their products and services through their own website as well.

Promotion: The promotional mix comprises of advertising, sales promotion, selling and public relations (Lancaster & Reynolds, 2004). Promotion refers to the method used to inform the customers about the products and convincing them to buy. Vodafone has used this strategy since its inception in India as Vodafone Essar. Vodafone’s advertisements and promotions were hearty welcomed by the audiences. Introduction of the advertisement of Zoo Zoos and pug was a great sensation which also got popularity in many social networking sites like Facebook etc. Actor Irfan Khan’s advert was highly popular due to his style. Vodafone also sponsored many sporting events and Indian Premier League helped Vodafone to create attraction in customers. Other sponsorship like MTV reality show named Splits villa which was famous in the circle of Indian youngsters also helped Vodafone to gain good success in a very short span of time. Vodafone has introduced various new beneficial schemes/offers to attract the customers like various talk time offers, validity offers, Bonus Cards, Tariff offers, low cost handsets etc for the prepaid users and ISD, STD, SMS, MMS offers, iPhones and Blackberry handsets to the post-paid users (Vodafone, 2010).

## Conclusion:

Vodafone has been fully successful in applying their marketing mix strategy and STP strategy in the vast Indian market; they are now in their third year of full control of operation in India and are securing their second place every year and seeking opportunities to be the number one. As per the mission statement of Vodafone to be the world leader in the field of communication, Indian market will surely help them to grow the base of it as India has a huge potential in the telecommunication sector.

## Analysis by Mandira Bajracharya (9100080)

## INTRODUCTION:

Mobile phone has become the one of the most exciting marketing tools today because mobile phone is in the heart of billions of people, who are always within the reach of their mobiles 24 hours a day. Over 4 billion people, i. e. 60% of world’s total population have subscription of mobiles by the end of year 2008. Among the numerous mobile telecommunications found globally, Vodafone is ranked as the top mobile telecommunications all in the United Kingdom and 11th in the global ranking.

## SWOT ANALYSIS FOR VADAFONE:

SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats. It is moreover an internal (which are under the control of the organisation, i. e. strengths and weaknesses) and external analysis (which are not under organisation’s control, i. e. opportunities and threats) of the, marketing, financial, manufacturing and organisational fields of any company.

Figure: Swot Analysis

(Source: http://www. businessteacher. org. uk/business-operations/swot-analysis/)

## Strengths:

Dominance in Cellular market

Wide geographical presence

Vodafone merged with an US based wireless service providers, Airtouch communication in 1999 with the name Vodafone Airtouch Plc, however the company retained its name after their annual general meeting.

If we look at the history, it is found that Vodafone has successfully completed the world’s largest takeover by taking over the German giant, Mannesmann with 42 billion customers.

Vodafone has successfully expanded its footprints in more than 90 countries, including Finland, Austria, Malaysia, Sri Lanka, Sweden, Turkey, Ghana, etc. from the year 2001 till date.

Vodafone has acquisition of 5. 6% stake in Bharti Airtel and 67% stake with the Essar Group in the partnership for the Indian market.

In the UK market Lebara mobile use the network of Vodafone, which is one of the strength possessed by Vodafone as a network service provider.

Strength for Vodafone is the diversified geographical portfolio along with the strong mobile telecommunications being operated in the Middle East, Europe, Africa, US, Asia Pacific, etc.

Network infrastructures can be considered as the strength for Vodafone.

In the emerging markets like India, Vodafone has shown its leading presence.

India has 23 licence areas with single regulator in the telecommunication field, which helps to build the economies of scale and Vodafone is able to fully utilise these available resources.

With the growing economy in India, the number of subscribers for the mobile reached to 457 million by June 2010, and Vodafone never faced any type of cultural and economical problems to be established in the Indian market.

## Weaknesses:

Low Research and Development.

Negative ROA (return on assets) underperform key competitors like the BT groups.

No network in the rural areas.

Vodafone successfully secured the second position in the telecommunication industry after the takeover and the being the subscribers of Hutch and established as a premium brand in India. But due to the competitive market it is very difficult for the Vodafone Company to charge the premium rates.

Despite of being the established company, Vodafone received a legal notice from the Indian Tax Authority for the potential tax liability in October 2009.

## Opportunities:

If the company can overcomes it’s weaknesses that can create opportunities for them. Some opportunities for Vodafone are;

They can expand abroad my merging the existing markets, like if they can take over the CDMA group in India they will be the top leading telecommunication in Indian market.

Improve accessibility to the wider customer range.

Can gain majority of the stake in the Hutchison Essar in the Indian market.

They can be focused on the cost returns by improving the returns.

Can introduce more research and development of the new mobile technologies.

Among the three parts of the African continent; South Africa, Mediterranean region and the Sub-Sahara part, the Sub-Sahara region is the poorest with huge geography but low mobile density and low per-capita income. So, Vodafone can take this as an opportunity to spread in this region since the region is underdeveloped and under-penetrated.

(http://economictimes. indiatimes. com/articleshow/5601009. cms)

As in UK, Vodafone can provide its network in lease to the other telecommunications in India.

Introduction of good Tariff packages.

## Threats:

The biggest threat can be the merging of the competitors of Vodafone to take over the Vodafone Company.

Due to the highly competitive market, Vodafone is still lagging behind in the US market.

Extremely high penetration rates in the majority of the European market.

The regulations of the European Union regarding the usage of the cell phones across the border.

Chief Executive for Vodafone, Arun Sarin has said to be aware of the risks due to the arrival of new technologies like Google and Apple, so to overcome these risks the industry should come up with new innovations in the mobile services.

(http://www. zdnet. co. uk/news/mobile-working)

## Analysis by Bandana Thapa (9100066)

## Introduction

Vodafone group PLC is the world’s leading mobile telecommunications company presence in Europe, the Middle East, Africa and Asia Pacific. Vodafone is a mobile network operator with its headquarters in Newbury, Berkshire, UK. It is the largest mobile telecommunication employing over 65000 staff with over 302. 6 million customers in all over the world. It is the third largest wireless operator in UK. www. vodafone. com

## Vodafone in India

India is the fifth largest economy in the world and has third largest GDP in the entire continent of Asia. It is one of the few markets in the world which have high chance for growth and earning potential in all areas of business. Vodafone was come in India with ‘ Hutch is now Vodafone’ campaign. The transition from Hutch to Vodafone could be largest brand change ever undertaken in India. This was also known as fastest and comprehensive brand transitions in the history of Vodafone group with 40, 000 multi brand outlets, more than 350 Vodafone stores, around 1000 mini stores, 35 mobile stores and over 3000 touch point.

## Segmentation

Figure: Segmentation chart

Vodafone has segment in major three bases demographic, psychographic and behavioural. Demographic segments it also segments according to income, age, nature of customer. Similarly in Psychographic segment it mostly segment according to lifestyle and personality. In behavioural segment it divides into three types on the benefit like local call, STD call and ISD call etc. regarding usage rate medium usage rate and light usages with various schemes for them. Last but not least segment is type of service provided.

## Targeting

Vodafone is adapting multi segment approaches in India. They are offering different series of product according to demand of related market. E. g. home calling card especially for professional to call family from abroad and ‘ Chhota’ recharge of Rs 10 for middle class customer and inexpensive SMS facility for young. Never the less Vodafone has different services for their different segment which matches their requirements.

## Positioning

Initially Hutch positioned as more of young and a fun brand. The positioning strategies have been highly successful. ‘ PUG’ dog which was a very powerful visual imagery. Using high profile Bollywood star for advertisement has been restrained for the brand promotion. Similarly ‘ happy to help’, ‘ where ever you go our network follows’ are some of the famous promotional lines which are quite success help to enhance their position in Indian market. Never the less well known character “ ZOOZOOS” was introduced by Vodafone in April 2009 during premier league and hit, helped to make different position in the mind of customer.

## Competition of telecommunications in India

Players of Indian telecommunication are Airtel, Reliance Communication, IDEA/spice, Aircel, TATA Indicom, BSNL, MTNL, HFCL Group BPL, Shyam Telecom Ltd. This seems that telecommunication market is highly competitive in India. Beside the high level of competition Vodafone is able to sustain in India Vodafone’s India operations have recorded a 50% growth in turnover at Rs 15, 288 crore in fiscal 2007-08 in contrast its global revenues. The monthly subscriber additional have been healthy at the rate of 1. 5 million subscribers, resulting in subscriber base of 44. 1 million as a march 2008 and 12% of its global revenues to be coming from the India mobile phone market by 2012.

On the basis of revenue Bharti Airtel and Reliance Communication have higher revenue margins than Vodafone. Never the less Vodafone have attempted to shed its premium image but also able to satisfy middle class customers with offers such as ‘ Chhota recharge’.

## PESTEL Analysis of Vodafone

Macro environments are hard to control for any business organization. Pestel analysis will help to find out the external factors which affect the potential of Vodafone.

## Political

Political factor is one of the macro factor which play important role to develop telecommunication operating business in any country. It may include from the government licensing process, legal issues, regulation etc to various pressure of pressure group. These factors play vital role to build infrastructure for any network operating industry.

## Economic

The rates of economic growth, inflation, income distribution process etc are the economical factors which also influence the growth of telecommunication operating network. Growing income or increase in purchasing power (Rs 12000 in 2002 to Rs 3300 in 2008) which may help to increase in the usage of Vodafone. Similarly falling prices of handset could affect the market of Vodafone. Rising in telecommunication density which will target 45% by 2010 is also challenge.

## Social

Growing demand for broad band services among youth which affect the level of competition in telecommunication sector. Increase in urban population which may affect the market of Vodafone. Rapid urbanization and rapid increase in income increase more competition for Vodafone in India.

## Technology

Some of technological advancement in India is CDMA- there are already three big players in this segment Reliance, Tata. 3G- value added services potential still to be tapped fully. 2G/3G- GSM currently commands 70% of mobile subscribes in India. These current scenarios of technological advancement in Indian telecommunication market could pressure Vodafone also. Vodafone’s competitors are now offering the same GSM hand set as Vodafone. So these all prove more external pressure and new challenge for Vodafone.

## Environmental

The Indian government is forcing Vodafone and other telecommunication operators to be environmental friendly. Like while putting up towers any negative externalities given out will have to be paid by a fully social cost by Vodafone.

## Legal

Vodafone is in only one legal force that it is to provide safety in the use of its services through the handsets they sell and provide. So this means that development cost will need to be done to produce handsets that attract low radiation.

Vodafone is one of the po