Social Study 2013
The Economic Impact of BT in the United Kingdom and the East of England

A report prepared by Regeneris for BT Group
Foreword

BT is the UK’s major provider of telecommunications networks and services and we play a key role in the economic, business and community life across the East of England. The work we do provides the platform for new local business growth as economies start to recover.

As a key UK communications services provider we facilitate and effect a wide range of economic and social activities. The Social Study 2013 focuses on our direct economic contribution across local areas of the UK both in numbers and through case studies. It estimates BT’s total Gross Value Add (GVA) impact in the UK, direct and induced, is some £18.5 billion.

BT sits at the centre of economic life. We support employment in every part of the region, both through our direct workforce, and indirectly, through our extensive supply chain. We seek to focus our procurement and expenditure in the UK’s local economies.

Our £2.5 billion fibre broadband investment programme will reach around two-thirds of all UK homes and businesses by the end of Spring 2014, a year ahead of schedule. Fast, reliable broadband connectivity underpins economic recovery in the East of England, and can provide major economic boosts to local communities. Various studies have indicated significant potential for revenue growth by firms switching to fibre broadband, leading to a range of benefits for businesses. In one survey* almost 83% of SMEs connecting to fibre broadband reported that it had saved their businesses time and/or money.

Alongside the BT funded £2.5 billion programme we are making further commitments to infrastructure investment at local levels. Following major competitive tender processes across the UK, there are a number of projects jointly financed by public bodies and BT which will extend the availability of fibre broadband to the more rural and remote locations, an additional 6 million or so premises, giving

* The Superfast Cornwall Evaluation Final Midterm Report was completed by SERIO at Plymouth University in collaboration with Buckman Associates. The survey fieldwork was conducted by Marketing Means. Both SERIO and Marketing Means were commissioned by CDC to carry out this work. SERIO and Buckman Associates independently analysed the survey data that is presented in the Midterm Report.
approximately 90% UK coverage by 2016. We are also working closely with city leaders to create more fully connected cities.

In many ways, the 2012 Olympic and Paralympic Games highlighted what we do best. We created a fibre broadband network that connected 94 individual locations with every part of the UK and every country in the world. We carried every official photograph and sports report, and connected every visit to the Games website. We carried many millions of calls, emails, text messages and tweets from every part of the UK.

More recently, we have changed the face of televised sport bringing our new BT Sport channels that offer world-class action, analysis and debate to local TV viewers and broadband customers wherever in the region they live. BT Sport is good news and not only for sports fans. It is helping to drive fibre broadband take up and has also safeguarded and created jobs in some of our UK call centres.

Our people live, play, work and do business in their local communities, and we are often best placed and most able to support technology-neutral programmes and projects, wherever they are. In the East of England we are proud to work in partnership with local authorities, community and business organisations to develop next generation solutions for areas where a commercial investment is not immediately justifiable.

Dave Hughes
*BT Regional Director for the East of England*
November 2013

Regeneris Consulting is an independent economics firm that provides research-based advice to major corporates, developers, national government bodies and local government. Regeneris specialises in preparing robust assessments of economic impact, focusing on the impact of new technology, physical developments, policy changes or corporate impact. Regeneris work across the UK from our offices in London and Manchester.

See: [www.regeneris.co.uk](http://www.regeneris.co.uk) for further information.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Our Report</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>An Overview of BT</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>The Economic Impact of BT in the UK</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Economic Impacts</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total Impact in the UK</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Investing in Next Generation Broadband</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Investing in Corporate Responsibility and Sustainability</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>BT in the East of England Region</td>
<td>16</td>
</tr>
<tr>
<td>A</td>
<td>Technical Appendices</td>
<td>30</td>
</tr>
</tbody>
</table>
Our Report

The Economic Impact Report 2013 has been prepared independently by Regeneris Consulting, working closely with BT Regions to draw upon their data and information.

Impact calculations are in accordance with Government guidelines and the HM Treasury’s Green Book Guidance for appraisal and evaluation, and are consistent with the Office for National Statistics’ national accounts. Details of our approach are shown in Appendix A. Estimates in this report relate to BT’s activities in the UK during financial year 2012/13. Note that the economic impact figures presented throughout this report are expressed to three significant figures. This means they have been rounded up or down as appropriate and, as a result, may not sum exactly to the totals presented.

Economic Impact Report 2013
This study shows BT’s economic contribution to the UK national economy and to regional economies in terms of jobs, output and Gross Value Added (GVA) supported. The report covers several effects of BT’s activities:

Direct impact: people employed directly by BT (including contractor employees) who receive wages and salaries.

Indirect impact: income and employment created with suppliers as a result of BT’s spending on goods and services.

Induced impact: further income and employment generated as wages created directly and indirectly are spent within the economy.

BT’s wider social and community contributions are covered in summary in this report. Further details can be found in the Better Future Report 2013, available online at:
In the UK BT sell products and services to consumers, small and medium sized enterprises and the public sector. Wholesale products and services are also sold to communications providers in the UK and around the world. Globally BT supply managed networked IT services to multinational corporations, domestic businesses and national and local government organisations.

BT has four customer facing lines of business: BT Retail, BT Wholesale, BT Global Services and Openreach. These are supported by an internal service unit BT Technology, Service & Operations responsible for innovation, design, test, build and running of networks and systems.

Full details are available in the BT Annual Report 2013 which can be found at http://www.bt.com/annualreport
The Economic Impact of BT in the UK

The figures below show the number of employees working in each English region, Scotland, Wales and Northern Ireland. Note: Figures are rounded to 3 significant figures.

<table>
<thead>
<tr>
<th>Region</th>
<th>Working</th>
<th>Living</th>
<th>Total direct GVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>East of England</td>
<td>10,600</td>
<td>10,900</td>
<td>1,200</td>
</tr>
<tr>
<td>East Midlands</td>
<td>4,160</td>
<td>4,510</td>
<td>362</td>
</tr>
<tr>
<td>London</td>
<td>13,900</td>
<td>12,500</td>
<td>1,540</td>
</tr>
<tr>
<td>North East</td>
<td>4,060</td>
<td>4,100</td>
<td>341</td>
</tr>
<tr>
<td>North West</td>
<td>9,500</td>
<td>9,440</td>
<td>809</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>2,850</td>
<td>2,860</td>
<td>272</td>
</tr>
<tr>
<td>Scotland</td>
<td>7,000</td>
<td>7,040</td>
<td>635</td>
</tr>
<tr>
<td>South East</td>
<td>10,400</td>
<td>11,100</td>
<td>1,060</td>
</tr>
<tr>
<td>South West</td>
<td>5,750</td>
<td>5,660</td>
<td>548</td>
</tr>
<tr>
<td>Wales</td>
<td>2,920</td>
<td>3,400</td>
<td>266</td>
</tr>
<tr>
<td>West Midlands</td>
<td>6,830</td>
<td>6,640</td>
<td>599</td>
</tr>
<tr>
<td>Yorkshire &amp; The Humber</td>
<td>6,900</td>
<td>6,760</td>
<td>612</td>
</tr>
</tbody>
</table>
UK Key Points

74,100
Employees directly working for BT and 10,700 contractors (Full Time Equivalent – FTE)

231,510
Total FTE jobs supported (including indirect and induced effects)

£3.0 billion
Total income of BT employees (including contractors)

£7.2 billion
Spend with suppliers based in the UK

£18.5 billion
Total GVA impact associated with BT activities (including indirect and induced effects)

Across the UK...

• BT directly employs 1 in every 190 employees in the private sector across the UK, and 1 in every 10 in the IT and Communications sector

• BT directly creates £1 in every £165 of GVA in the UK

• As a result of the full economic impact of BT, the firm supports £1 in every £70 of GVA in the UK economy and 1 in every 100 employees working in the UK economy
Wider Impacts

BT also makes a significant economic impact in other ways:

- BT is investing £2.5bn to roll-out superfast broadband to two-thirds of UK premises by the end of Spring 2014. This will support local jobs and generate GVA in these areas (see Superfast Broadband – Boosting Business and the UK Economy report available to download from http://www.bt.com/sfbbreport)

- During 2012/13, BT invested money, time and in-kind support worth £27 million in community and sustainability programmes.

- BT invested £544 million in R&D to support innovation in 2012/13. This covers everything from scientific research to the development of new products and services working with customers, partners and universities around the world.

Economic Impacts

Direct Impact

BT directly employs a total of 74,100 people in the UK, with a further 10,700 employed as contractors. This results in £3.0 billion in wages and salary spend across the region.

More than 75% of BT employees are equipped to work flexibly on any given day. This includes 7,240 registered BT Homeworkers in the UK (or 9% of the direct workforce).
Procurement Impact (Indirect)
BT spent a total of £7.2 billion with UK based suppliers in 2012/2013. This results in significant benefits for the UK economy, including knock-on benefits further down the supply chain, which results in additional employment and output. This is summarised below.

**Figure 4-1: Indirect (supply chain impacts) in the UK**

- Employment supported amongst suppliers = 83,300 FTE
- Output generated amongst suppliers = £11.9 billion
- Income of supply chain employees = £3.6 billion
- GVA generated in the United Kingdom = £5.9 billion

**BT Supply Chain Spend in the United Kingdom = £7.2 billion**
Impact of BT and Supplier Employee Expenditure (Induced)
BT employees and contractors based in the UK earned over £3 billion in 2012/13 before tax. In turn, the expenditure of BT employees, contractors and the employees working for firms within BT's supply chain supports further employment and output in consumer industries. Through these knock-on effects, BT supported further jobs and turnover as shown below.

Salaries of BT Employees and Contractors in the UK = over £3 billion

Employment supported in consumer industries = 63,300 FTE
Output generated in consumer industries = £8.7 billion
Income of supported employees = £2.2 billion
GVA generated in the United Kingdom = £4.3 billion

Figure 4-2: Induced (wage expenditure) impacts in the UK
Total Impact in the UK
Combining BT's direct impact and employment with the indirect supply chain impact and induced wage expenditure impact gives the total impact of BT operations in the UK. This is summarised in the diagram below.

Figure 4-3: Total Impact of BT in the UK
More than 99% of UK homes and businesses have access to ‘first generation’ broadband, and BT’s £2.5 billion investment plan is fully on target to bring ‘next generation’ fibre broadband services to around two-thirds of all UK premises by the end of Spring 2014.

For the remainder of UK premises – largely those sited in the more rural and remote locations – the upfront costs and likely returns simply do not justify the necessary private sector investment. Left alone, this would thwart the ambition to achieve a transformation in broadband in the UK by 2015.

To help make high-speed broadband more widely available in rural communities, the Department for Culture, Media & Sport has set up the Broadband Delivery UK (BDUK) team to help local authorities and devolved administrations. The government has allocated £530 million during the current spending review period to stimulate further commercial investment.

**Fibre Partnerships**
BDUK recognises the central importance of facilitating local delivery while maintaining an effective commercial approach. Its broadband programme is being delivered through local projects, each bringing public and private sector partners together to take shared responsibility for success.

BT has participated in this process, which was open to other internet service providers, and developed a viable business model that combines BDUK funding, support from local government and other sources including private sector investment. This resulted in an additional BT investment of up to £1 billion in total. BT has unrivalled experience in overcoming the challenges of geography, topography and distance, and is already working with local communities through partnership projects right across the UK.
With continued government support, alongside a visionary approach from local authorities and devolved administrations, and a commitment to significant infrastructure investment by framework suppliers, BDUK’s broadband delivery framework looks set to succeed in achieving the ambition to provide superfast broadband to at least 90% of UK homes and businesses.

**Investing in Community and Sustainability**

Being a responsible and sustainable business leader is one of BT’s six strategic priorities. Driving sustainable practices in their operations, connecting people and communities digitally, using their skills and technology, and working with customers to reduce their carbon emissions, BT is making a further contribution to local economies and society as a whole.

**Key facts**

- During 2012/13, BT invested money, time and in-kind support worth £27million in community and sustainability programmes.

- The internet connects people and societies and helps transforms people’s lives - from learning a new skill, to keeping in touch with family, to finding a job, to making new connections online. In the UK around 55% of the population now has access to fibre-based products and services; BT’s goal is to increase this to 90% by 2020.

- During 2012/13 BT used it’s skills and technology to help generate more than £59m for good causes. This included underpinning charity telethons such as BBC Children Need, and the Disasters Emergency Committee. Helping get charities online and fundraising, BT has developed MyDonate, a free online fundraising platform. For smaller charities that may not yet be online, BT Community WebKit enables them to self-build a site that BT will host free of charge.
• BT has taken a lead in the market place by starting to source 100% of its electricity in the UK from renewable energy. This amount of electricity from non-renewable sources would equate to a carbon footprint of around one million tonnes of CO2 a year. BT encourages its suppliers to innovate in sustainability and has launched its Better Future Supplier Forum to support this. Through this BT has helped its suppliers save 30,000 tonnes of CO2 in the first year.

• BT people can take up to three days a year of work time sharing existing skills and developing new ones through volunteering in their local community. In 2012/13 BT people provided more than £13m of in-kind support and assistance, some 43,600 days last year. This included 1,000 employees who served as youth leaders, 800 school governors, around 150 military reservists and 70 special constables.

• BT provides young people with opportunities for apprenticeships and training schemes. In 2012/13 BT created over 480 new apprenticeships and hired an additional 266 graduates. BT plans a further 600 apprenticeships for 2013 financial year.

More detailed information can be found in the BT Better Future Report 2013: [http://www.bt.com/betterfutureresport](http://www.bt.com/betterfutureresport)
**East of England Region**

**East of England Key Points**

- **10,900**
  BT employees live in the region (FTE)

- **10,600**
  BT employees work in the region (FTE)

- **£438 million**
  Total income of BT employees working in the region

- **£1,110 million**
  Spend with suppliers based in the region

- **£2,770 million**
  Total GVA impact (including indirect and induced effects)

**Across the East of England...**

- BT employs 1 in every 140 employees working in the private sector, and 1 in every 8 employees working in the IT and Communications sectors

- £1 in every £100 of GVA is generated directly by BT

- BT supports 1 in every 40 employees working in the private sector and £1 in every £40 of GVA as a result of the firm’s full economic impact

- BT’s full employment footprint is larger than the region’s Higher Education sector
Regional Impact

Direct Impact
BT directly employs a total of 9,460 people in the East of England region, with a further 1,140 employed as contractors. This results in £438 million in wages and salary spend across the region.

More than 75% of BT employees are equipped to work flexibly on any given day. This includes 1,060 registered BT Homeworkers in the East of England (or 10% of the direct workforce).

Procurement Impact
BT spent nearly £1,110 million with suppliers based in the East of England in 2012/13. The largest item of spend was telecommunications services, as illustrated in this chart which shows the top 5 supplier sectors by value.

Figure 6-1: Top Supplier Sectors in the East of England by Value of Expenditure

Source: BT Procurement data
BT’s spend with suppliers results in significant benefits for the East of England economy, including knock-on or multiplier benefits as a result of supplier spend. This is summarised below.

**BT Supply Chain Spend in the East of England = £1,110 million**

- Employment supported amongst suppliers = 13,900 FTE
- Output generated amongst suppliers = £1,900 million
- Income of supply chain employees = £584 million
- GVA generated in the East of England = £908 million

Figure 6-2: Indirect Supply chain impact in the East of England

Source: Regeneris Consulting
Impact of Employee Expenditure

BT employees and contractors living in the East of England earned £448 million in 2012/13. In turn, their expenditure supports further employment and output in consumer industries in the region. Figure 6-3 below illustrates the wider induced employment and output supported through this employee expenditure.

Salaries of BT Employees and Contractors = £448 million

Figure 6-3: Induced (wage expenditure) impacts in the East of England

Source: Regeneris Consulting
**Total Impact in the East of England**

Combining BT’s direct impact and employment with the indirect supply chain impact and induced wage expenditure impact gives the total impact of BT operations in the East of England. This is summarised in Figure 6-4 below.

![Figure 6-4: Total Impact of BT in the East of England](source)

Source: Regeneris Consulting
## Sub-regional Impact

The table below illustrates the economic impact of BT at a County level in the East of England.

<table>
<thead>
<tr>
<th>County</th>
<th>BT Employees &amp; Contractors</th>
<th>Total Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work in area</td>
<td>Resident in area</td>
</tr>
<tr>
<td>Bedfordshire</td>
<td>712</td>
<td>952</td>
</tr>
<tr>
<td>Cambridgeshire</td>
<td>917</td>
<td>810</td>
</tr>
<tr>
<td>Essex</td>
<td>2,050</td>
<td>2,690</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>2,900</td>
<td>2,510</td>
</tr>
<tr>
<td>Norfolk</td>
<td>660</td>
<td>763</td>
</tr>
<tr>
<td>Suffolk</td>
<td>3,360</td>
<td>3,150</td>
</tr>
</tbody>
</table>

Table 6-1: County Impact – East of England
Local Enterprise Partnerships (LEPs) are locally-owned partnerships between businesses and local authorities and are intended to play a central role in determining local economic priorities and undertaking activities to drive economic growth and the creation of local jobs. A total of five† Local Enterprise Partnerships fall in full or in part within the East of England region and the economic impacts which relate to these areas are shown below.

<table>
<thead>
<tr>
<th>BT Employees &amp; Contractors</th>
<th>Total Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work in area</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>2,900</td>
</tr>
<tr>
<td>New Anglia</td>
<td>4,020</td>
</tr>
<tr>
<td>Greater Cambridge &amp; Greater Peterborough*</td>
<td>1,270</td>
</tr>
<tr>
<td>South East Midlands*</td>
<td>2,360</td>
</tr>
<tr>
<td>South East*</td>
<td>4,450</td>
</tr>
</tbody>
</table>

Table 6-2: LEP Impact – East of England

† The information provided on LEPs and Enterprise Zones is correct at the time of publication of this report (as at September 2013). We have used information published by the Government which is available at the following location: [https://www.gov.uk/government/publications/local-enterprise-partnerships-local-authority-mapping](https://www.gov.uk/government/publications/local-enterprise-partnerships-local-authority-mapping). Note that in some cases part of the LEP areas fall outside of the region. These are marked with an asterisk (*).
• 1 in every 90 employees working in the private sector in the New East Anglia LEP area is directly employed by BT, and 1 in every 4 employees working in the ICT and communications sector

• 1 in every 8 employees working in the IT and communications sector in Hertfordshire LEP area is directly employed by BT

• 1 in every 30 private sector employees working in the South East Midlands LEP area is supported by BT’s full economic impact

• 1 in every 16 employees working in the IT and Communications sector in the Greater Cambridge and Peterborough LEP is directly employed by BT

• 1 in every 8 employees working in the IT and Communications sector in the South East LEP area are directly employed by BT
Local Impacts

The map below illustrates the locations of key BT sites. It demonstrates the importance of *Adastral Park* as a major employer for the region. Based at Martlesham in Suffolk, Adastral Park provides a focus for BT’s advanced research and technology division.

---

Figure 6-5: BT Employees Place of Work – East of England

Source: Regeneris Consulting
Figure 6-6 also demonstrates the broad geographical spread of the workforce, which lives throughout the region.
Investing in Broadband

BT is investing £2.5 billion to bring superfast broadband to two-thirds of UK homes and businesses by the end of Spring 2014. Independent research by Regeneris Consulting, suggests this investment will result in significant economic benefits for every rural area, town and city.

View or download the Superfast Broadband Boosting Business and the UK Economy report at http://www.bt.com/sfbbreport

High speed broadband in the East of England

BT has announced plans to bring fibre-based broadband to 154 exchanges in the area, serving more than 1.7 million homes and businesses. Fibre to the Cabinet will be the main technology deployed. This can deliver wholesale downstream speeds of up to 80Mbps, and upstream speeds of up to 20Mbps. Fibre to the Premises technology – delivering ultra-fast wholesale speeds of up to 330Mbps – will also be deployed in certain areas and will be available on demand throughout the whole of the fibre footprint should local businesses want the ultra-fast speeds it offers.

A range of high speed technologies also provides broadband services in the East of England:

- **ADSL** offers up to 8Mbps broadband services from 100% of the exchanges in the East of England.
- **ADSL2+** offers up to 20Mbps next generation copper-based broadband services from 272 exchanges, and more than 2 million homes and businesses in the area can benefit.
- **Ethernet** services offer higher bandwidth services for businesses and larger organisations from 104 live nodes, with a further 10 planned.
- **Wi-Fi** coverage is increasingly widespread with more than 562,200 Wi-Fi hotspots in homes, businesses, high streets and city centres.
The government recognises that high speed next generation broadband services are both a key business enabler, and an engine for economic recovery and growth. To extend next generation broadband services even more widely, especially to more rural and remote communities, BT is working in project partnerships with regional and local authorities.

In the East of England BT is currently working with 6 fibre partnerships across the counties of Norfolk, Suffolk, Cambridgeshire, Hertfordshire, Essex and Bedfordshire to bring high speed broadband to the more remote communities, towns and villages.

BT continues discussions across the East of England with prospective public and private sector partners about further government initiatives and local projects such as Enterprise Zones and Connected Cities.

The latest news and information regarding high speed broadband in the East of England can be found online at –
http://www.superfast-openreach.co.uk

Further information regarding fibre partnerships across the East of England can be found online at -
http://www.btplc.com/ngb/partnerships

Adastral Park is recognised as one of the leading centres of technical innovation in the communications world, from pioneering work in optical technologies and digital switching through to advanced software techniques and protocols. The site is BT’s Global Research and Development Headquarters which in 2012/13 hosted in excess of 50,000 visitors. It is the home of ‘Innovation Martlesham’ – a joint initiative by BT and Local Authorities to encourage ICT related companies to co-locate, collaborate and innovate at the Park. It provides physical and virtual office accommodation to support the demand from businesses and hosts networking opportunities and events, has a mentor Group and an ICT Business Incubator. Twelve new companies joined the cluster in 2012/13 to bring the total up to 45.
Investing in Community and Sustainability

BT is also contributing to the local economy and society in a number of ways. BT invested more than £2.5m in the East of England during 2012/13. A few examples of BT’s work in this area are highlighted in case studies below.

Despite the internet now being an essential part of everyday life, more than 7 million UK adults are still not online. This means they may miss out on employment or educational opportunities, online shopping bargains and even simple, quick access to information services. In 2012 BT launched a new programme to proactively encourage more than 10,000 children across the UK to become Digital Champions. In association with the children’s charity, The Transformation Trust, the initiative has already seen over 19,800 students pledge to be digital champions. More than 1,200 students from schools across the East of England have signed up for the new BT Digital Champions initiative to get more people in the area online. The programme is more than just sharing IT skills. Students are able to develop their communication skills and self-esteem whilst contributing to the local community.

http://www.btdigitalchampions.com
Volunteering
Volunteering is a core element of BT’s strategy to be a responsible and sustainable business leader. Every BT employee is entitled to 3 fully paid days each year to volunteer for their chosen cause. In 2012/13 BT people volunteering in the community provided more than £13m of in-kind support and assistance, some 43,600 days. In the East of England employees contributed 6,680 days, some 48,100 hours during the year.

Volunteers from BT’s research labs at Adastral Park, have hosted more than 28 schools events in the last year and helped to pass on computer skills to more than 2,600 students.

BT People
BT’s apprenticeship scheme recruited more than 480 apprentices during 2012/13. In the East of England over 110 apprentices were in learning during this year on a variety of courses. Laura Harvey, a BT higher apprentice won the STEMNET award for being the most inspirational technician and a trip to CERN in Switzerland to see the Large Hadron Collider. STEMNET is a government-backed organisation that creates opportunities to inspire young people in Science, Technology, Engineering and Mathematics. Laura regularly returns to her old schools to give career talks and raise awareness of career opportunities.
Here we set out the methodology used to estimate the economic impact of BT and the data sources that have been drawn upon.

Definitions

There are three sources of economic impact that a company like BT generates.

**Direct impacts**
These are the impacts arising as a direct consequence of the company's activities, in the form of output and wealth creation, employment within the firm and associated employment income.

**Indirect impacts**
Also known as the supply chain impact, this contribution arises from BT's purchasing of goods and services from suppliers in the UK, who in turn make further purchases from their suppliers, and so on. This chain of procurement spending resulting from BT's initial expenditure injection creates further wealth, and supports jobs and income.

**Induced impacts**
Further economic activity and employment is created as BT employees and those whose jobs are supported through supply chain effects spend their wages and salaries on goods and services. The economic effects from this consumer spending are known as the induced effect.
Throughout the report these impacts are measured using four key indicators:

**Output**
This refers to the turnover /sales revenue that is generated directly within BT or within other firms in the economy through indirect and induced effects.

**Gross Value Added (GVA)**
This is the key measure of wealth creation within an economy and is used by the government to monitor economic performance. It refers to the residual value created by firms once non-labour costs have been paid, which is then distributed to owners/shareholders in the form of profits and to employees via wages and salaries. It is measured in two ways:

- \( \text{GVA} = \text{turnover} - \text{bought in goods and services} \) (known as the production approach)
- \( \text{GVA} = \text{gross operating profit} + \text{depreciation and amortisation} + \text{taxes less subsidies on production} + \text{compensation of employees} \) (i.e. wages plus social security contributions) (known as the income approach)

**Employment**
This is the quantity of jobs supported by BT’s activities. Since these jobs are a mix of full time and part time positions, throughout the report we refer to Full Time Equivalent (FTE) posts, in order to express all jobs in a common currency.

**Employment Income**
These are the gross wages and salaries paid to employees whose jobs are supported by BT, including NI and pension contributions, and PAYE taxes.

Note that the economic impact figures presented throughout this report are expressed to three significant figures. This means they have been rounded up or down as appropriate and, as a result, may not sum exactly to the totals presented.
Methodology and Data Sources

The methodology used to estimate BT’s economic impacts for 2012/13 has been designed to be consistent with previous reports. Further information is provided below.

Direct impacts

The two data sources used to estimate this are BT’s financial accounts for 2012/13 and BT’s HR database.

Output has been taken directly from the accounts, as revenue from external customers in the UK. This removes both internal revenue resulting from internal transfers between BT group companies and sales made outside the UK.

GVA has been calculated using the income approach, as the sum of gross operating profits before tax, interest, depreciation and amortisation, and compensation of employees. We have estimated UK gross operating profit using global EBITDA from the accounts, and estimated the UK portion by factoring down by the UK share of total revenues. Compensation of employees has been estimated using data on gross wages and salaries (sourced from BT), plus social security costs (sourced from BT).

Employment numbers have been sourced from a snapshot of information provided by BT at June 2013, with data on the number of people employed directly by BT and the number of contractors employed through agencies, along with their contracted hours. These have then been converted to FTEs based on one full time job being equivalent to a 36 hour per week contract. The data indicates both the place of residence and place of work of each employee. For direct employment we have used workplace based figures.
Since this snapshot was taken after the end of the financial year, the resulting employment numbers differed slightly from the average annual FTE figures quoted in the accounts. Therefore, we have adjusted these employment numbers to be consistent with the average number of employees across the financial year in the UK.

The BT data provided the home and workplace postcode for each employee. These were used to allocate employees to regions and local authorities for the residence and workplace based analysis. Home postcodes were not available for agency staff and contractors. The assumption was made that these members of staff were resident in the same Local Authority and Region as their workplace.

Information on contractor staff was supplied by BT. This information relates to a snapshot as of June 2012 and it has not been possible to pro-rata the figures back to the 2012/13 financial year.

**Employment income** has been estimated using data from BT, using gross wages and salaries of employees and contractors by place of work, again adjusted to be consistent with the averages wages and salaries bill quoted in the accounts in the same way as for employment numbers.

**Indirect Impacts**

The data source used to estimate indirect impacts has been provided by BT by location and by sector. Each supplier was allocated to a region and local authority based on the invoicing address. Suppliers were then allocated to sectors using the following process:

- All suppliers common to both 2013 and 2011 procurement data were allocated to the same sector as they had been in the 2011 economic impact assessment. This provided a sector allocation for covering 79% of total spend.
• Suppliers not included in the 2011 procurement data were allocated to sectors based on a brief review of each supplier’s business activities using information available on company websites. This manual allocation was completed to ensure that c.90% of procurement spend in each region and all suppliers where invoices totalled £10 million or more were covered.

• The remaining suppliers were assumed to be operating in the telecommunications sector.

As expenditure on contract and agency staff is encompassed by the employment element of the direct impact assessment, all identifiable procurement expenditure with employment agencies has been removed from the supplier spend analysis, in order to avoid double counting.

Impacts have been estimated using Regeneris Consulting’s input-output tables for the UK and the regions.

**Induced Impacts**
Data on wages and salaries of BT employees and contractors by place of residence has been used to calculate induced impacts, along with the employment income of indirect employees estimated above.
The regional and local dimension

Estimating regional and local impacts
The results are presented for the former Government Office Regions as well as the recently formed Local Enterprise Partnership (LEPs). Wherever possible this has been informed by actual data for these areas, but where this data is not available, we have apportioned results to local areas using suitable apportionment factors, drawn from other BT data. This should therefore be borne in mind when interpreting results at these geographical levels.

The HQ effect
National procurement contracts are often allocated to a location according to the supplier’s HQ address. However, it may be that these services are actually provided from a series of locations around the country. This process of allocating the procurement expenditure to the HQ location, rather than the location of the depot where activity is taking place, may skew impacts to the HQ region and consequently under-estimate impacts elsewhere. We have adopted this approach as in previous year’s assessment. It does mean that the results pertaining to indirect impacts in particular may be subject to significant margins of error, particularly at the local level.
Benchmarking the Results

The report sets the key results in their wider socio-economic context, in order to illustrate the relative scale of BT's contribution to the local, regional and national economy. To do this we have drawn down nationally published statistics. The data sources used are as follows:

1. **Total employees in employment**: The total number of people employed by all businesses with operations in the area. This excludes working proprietors and is presented as Full Time Equivalent employees (it excludes the self-employed). (Source: ONS, BRES, 2011).

2. **Total IT and Communications sector employees in employment**: The total number of people employed by ICT businesses with operations in the area. This excludes working proprietors and is presented as Full Time Equivalent employees (it excludes the self-employed). (Source: ONS, BRES, 2011).

3. **Total private sector employees in employment**: The total number of people employed by private sector businesses with operations in the area. This excludes working proprietors and is presented as Full Time Equivalent employees (it excludes the self-employed). (Source: ONS, BRES, 2011).

4. **Total gross earnings from all residents in employment**: This has been derived using the total number of residents in employment (source: Annual Population Survey, 2012) multiplied by the average gross annual pay for all employees in that geographical area (source: Annual Survey of Hours and Earnings, 2012)
5. **Total gross earnings from all employees in employment:** This has been derived using the total number of people employed by businesses in the area (source: BRES, 2012) multiplied by the average gross annual pay for all employees in that geographical area (source: Annual Survey of Hours and Earnings, 2012).

6. **Total GVA – Total Gross Value Added generated by businesses based in the area:** GVA data has only been provided for regions as there is no data source providing comprehensive estimates of GVA at Local Authority or LEP areas (Source: ONS, Headline Workplace Based GVA at Current Basic Prices, 2012).