



The Economic Impact of BT Group plc in Wales



2020 Edition

HATCH

A report by Hatch
for BT Group plc

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Introduction

1 Introduction

BT plays a critical role in supporting both the economy and society across Wales. We are here to connect for the good of our customers, colleagues and country, and our people and networks underpin nearly every part of our lives across the nation. We have a profound sense of purpose that we are here to deliver not connectivity per se, but the benefit it brings to people.

The coronavirus crisis has brought our national leadership role in telecommunications into the sharpest focus in our company's history. The multiple challenges posed by Covid-19 have highlighted the vital role BT plays in supporting families, businesses and communities across Wales. Throughout the pandemic we have seen how technology can be harnessed to help save lives and deliver even better services for the public. We were proud to get the new NHS field hospitals around the country connected and to support pupils with their home learning by responding to a request to get thousands of devices to every local authority early in the lockdown.

More than 95% of the UK now has access to superfast speeds. We are committed to delivering full fibre across the UK and, with the right fiscal, regulatory and legislative enablers in place are ready to make the biggest communications infrastructure investment in a generation. When combined with our extensive 5G mobile network from EE, this will provide a digital infrastructure that will connect millions and help drive future economic growth. In addition to our mobile and broadband networks, we have the UK's most extensive public wi-fi network and are bringing these three networks into one converged, digital platform.

We have seen the power of innovative technology and the best converged network in trials in health care and education. Working with partners we are using new technology to treat patients remotely and helping develop the smart hospital of the future. We are one of the largest investors in innovation in the UK, investing £662m in 2019/20. Our innovations have been responsible for many of the pioneering innovations which have transformed our digital world.

A report commissioned by BT shows how smart technology can help transform rural communities. Focussed on agriculture and tourism in rural Wales, the Smart Rural report shows how technology such as the Internet of Things, could help these areas thrive. For agriculture, solutions such as sensors and devices connected to networks are already being trialled to show how farmers can remotely track and manage their stock, helping reduce costs and increase efficiency. The tourism industry has also seen a revolution in the use of digital technology, with smartphones, mapping services and augmented reality apps transforming visitor engagement. We are working with the Welsh Government to look at ways in which 5G can support our rural communities in both these key sectors.




Nick Speed
BT Group Wales &
South West Director

We are a key part of communities across the UK and want to help people harness the power of technology to meet their needs or fulfil their potential. In 2019/20 we launched our Skills for Tomorrow programme, designed to empower 10 million people by providing help to improve their digital skills, by 2025. This programme offers free resources for school children, parents and jobseekers. Recognising the importance of small business to the economy we are supporting 1 million businesses with free digital skills support, and we have already supported 1,000 vulnerable people connect with family and friends through the donation of devices.

We are the founding partner of the UK Modern Slavery Helpline and Tech Against Trafficking. In terms of the climate change challenge, our technology and communications networks have a huge role to play in enabling the innovative solutions and exponential change needed to achieve a net zero carbon economy. In the UK 100% of our directly purchased electricity comes from renewable energy suppliers, with 50% of our power supply from nine turbines at Mynydd Bwllfa, Hirwaun, Rhondda Cynon Taf. We are also working with others to drive innovation in electric vehicles to transform our fleet, and have installed electric charging points at our offices in Merthyr Tydfil and Swansea.

BT has a significant presence right across Wales. We were the first private sector organisation to sign up for 'Work Welsh', a learning programme to strengthen Welsh language skills in the workplace, devised by the National Centre for Learning Welsh. BT has also invested heavily in providing Welsh language services, and since 1994 has adopted a voluntary Bilingual Policy further demonstrating our commitment to both the Welsh language and communities of Wales.

In this report we look at the economic contribution of BT Group across Wales, and show we make a very significant impact on the national economy. We support employment across every part of the nation through our direct workforce and indirectly, through our extensive supply chain, with our procurement and expenditure in the local economies. For the period 2019/20 the total Gross Value Added (GVA) to the Welsh economy, combining the direct, indirect and induced impacts of our activities and spending, is estimated to be £970 million.



Nick Speed

December 2020

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Our report

2 Our report

The Economic Impact Report 2020 has been prepared independently by Hatch Urban Solutions, drawing upon data for BT Group.

Estimates in this report relate to BT Group plc activities in the UK during the financial year 2019/20. BT Group plc includes all wholly owned subsidiaries, including Openreach Limited and EE (now part of BT Consumer)

We are proud to be a major contributor of taxes in the UK. The One Hundred Group 2019 Total Tax Contribution Survey ranked us as the sixth highest contributor in the UK. The impact of this tax contribution has not been assessed in this report.

Further information about BT Group's activities can be found in the BT Group plc Annual Report 2020 and Digital Impact and Sustainability Report 2019/20.

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 5.

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 2020

This study shows BT Group'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 Group's activities:

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

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

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

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The economic impact of
BT Group plc in the UK

3 The economic impact of BT Group plc in the UK

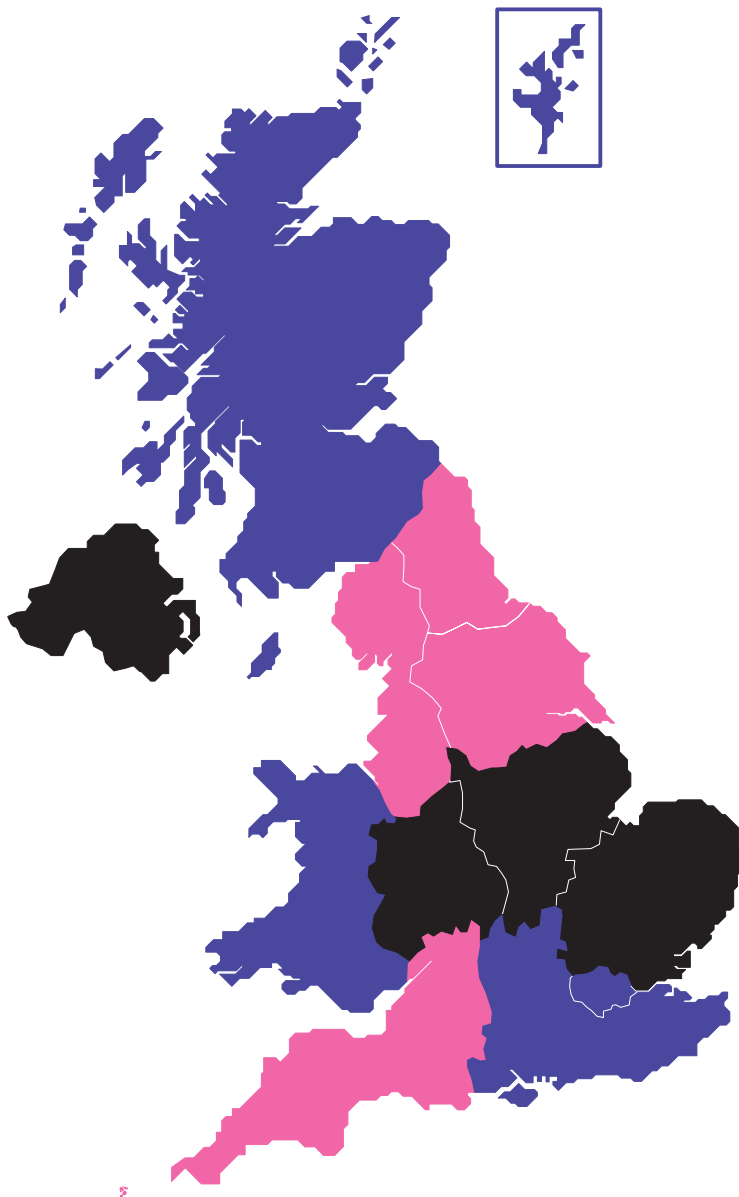
The figures below show the number of employees working in each English region, Scotland, Wales and Northern Ireland.

Note: Figures are rounded to 3 significant figures.

	Working	Living	Total income £m	Spend with suppliers £m	Total direct GVA £m
London & the South East	24,300	23,100	992	5,620	3,220
London	14,500	12,200	634	3,140	2,050
South East	9,780	10,900	359	2,480	1,160
Midlands & East of England	19,500	20,500	751	2,270	2,440
East of England	8,950	9,580	377	1,510	1,220
East Midlands	4,490	4,990	151	130	489
West Midlands	6,070	5,940	224	636	725
North of England	25,700	25,500	813	876	2,630
North East	9,290	9,280	262	41	849
North West	9,720	9,690	322	410	1,040
Yorkshire and The Humber	6,660	6,550	229	424	741
South West	8,560	8,350	321	634	1,040
Scotland	7,440	7,480	254	167	825
Wales	4,600	5,060	146	340	472
Northern Ireland	3,340	3,350	115	155	373

Source: Hatch

3 Key points



Across the UK in 2019/20

82,800 employees directly working for BT Group, and 10,600 contractors (Full Time Equivalent – FTE)

300,000 total FTE jobs supported (including indirect and induced effects)

£3.4 billion total income of BT Group employees (including contractors)

£10.1 billion spend with suppliers based in the UK

£24 billion total GVA impact associated with BT Group activities (including indirect and induced effects)

BT Group directly employed **1 in every 230 employees** in the private sector across the UK, and **1 in every 12** in the IT and Communications sector

BT Group directly created **£1 in every £165** of GVA in the UK

As a result of the full economic impact of BT Group, the firm supported **£1 in every £75** of GVA in the UK economy and **1 in every 90 employees** working in the UK economy

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Economic impacts

Direct impact

BT Group directly employs a total of 82,800 people in the UK, with a further 10,600 employed as contractors. These employees have an associated £3.4 billion in wages and salary spend.

Procurement impact (indirect)

BT Group spent a total of £10.1 billion with UK based suppliers in 2019/20. 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.

BT Group supply chain spend in the United Kingdom = **£10.1 billion**

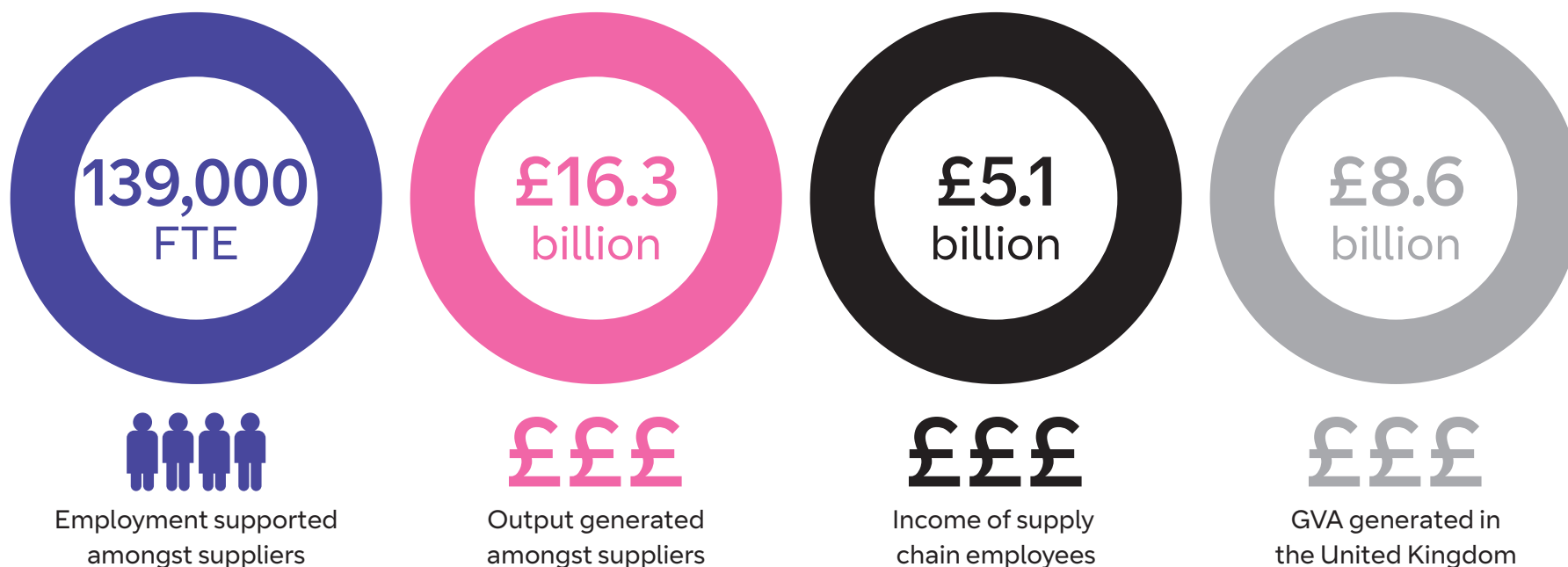


Figure 3-1: Indirect (supply chain impacts) in the UK

Source: Hatch

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Impact of BT Group and supplier employee expenditure (induced)

BT Group employees and their contractors based in the UK earned around £3.4 billion in 2019/20 before tax. In turn, the expenditure of these employees, contractors and the employees working for firms within BT Group's supply chain supported further employment and output in consumer industries. Through these knock-on effects, BT Group supported further jobs and turnover as shown below.

Salaries of BT Group employees and contractors in the UK = £3.4 billion

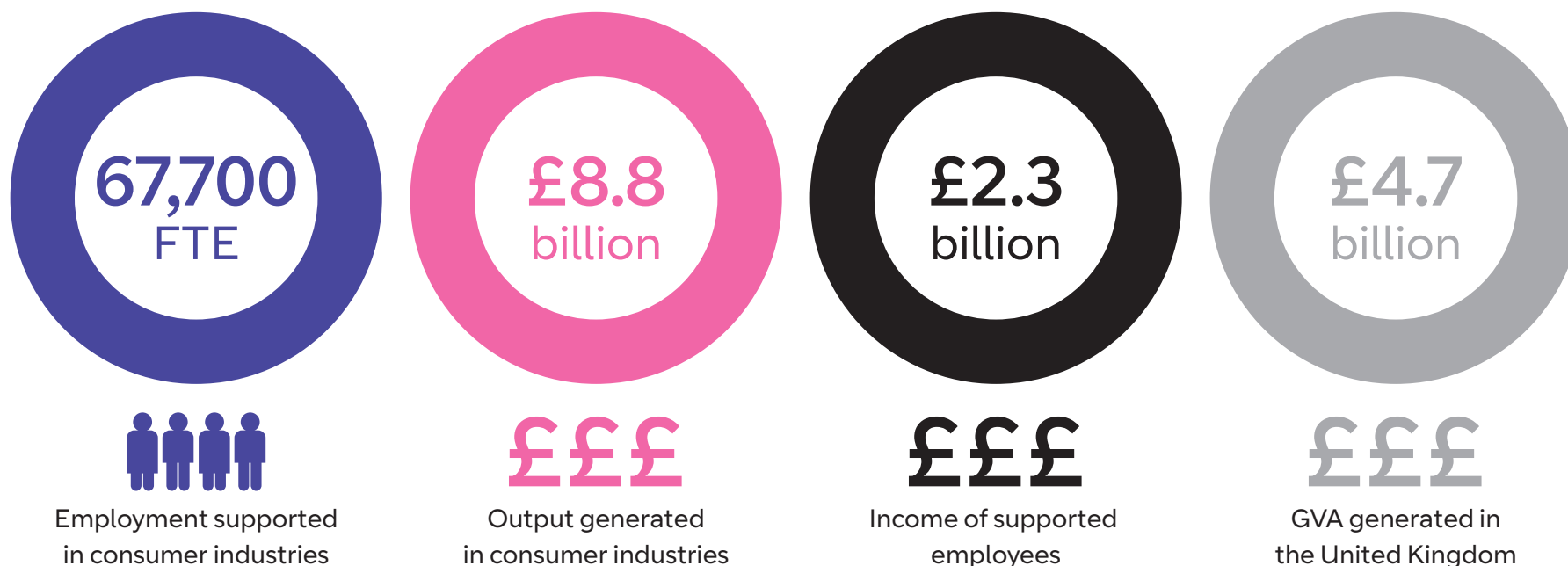


Figure 3-2: Induced (wage expenditure) impacts in the UK

Source: Hatch

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Total impact in the UK

Combining BT Group's direct impact and employment with the indirect supply chain impact and induced wage expenditure impact gives the total impact of BT Group's operations in the UK in 2019/20. This is summarised in the table below.

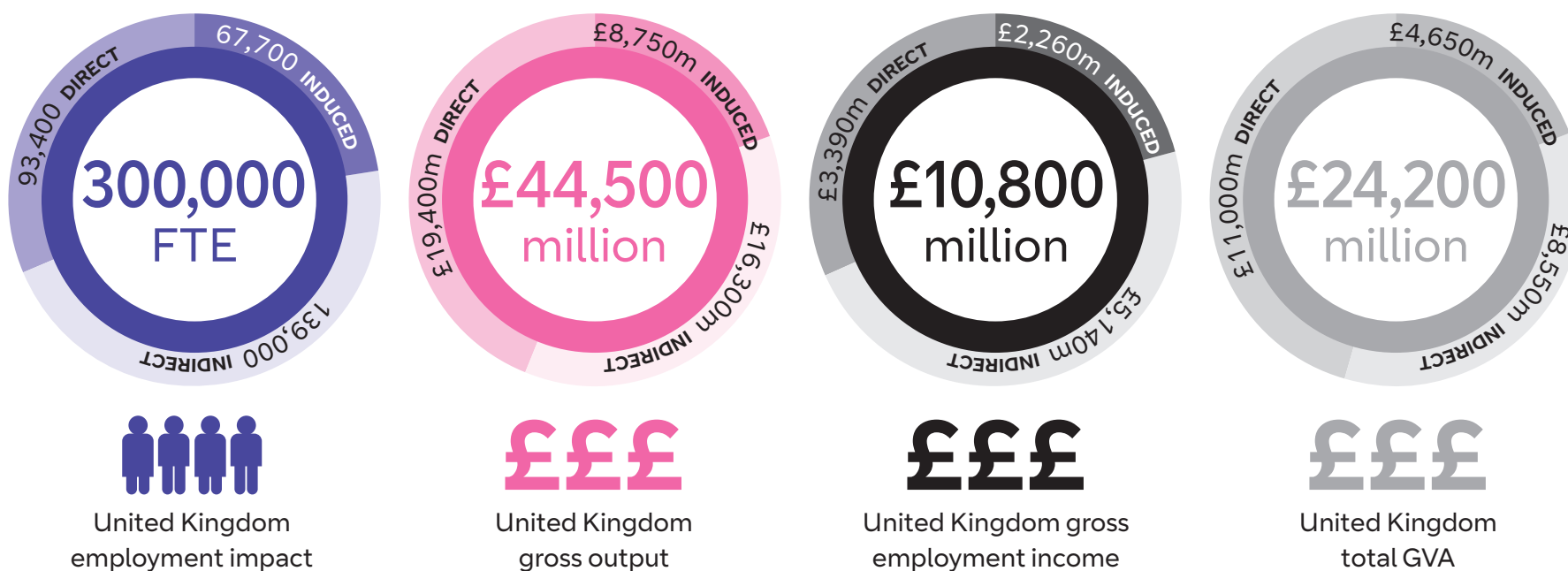


Figure 3-3: Total impact of BT Group in the UK

Source: Hatch

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BT Group plc across Wales

4 Wales



Across Wales in 2019/20

5,060 BT Group employees live in the nation (FTE)

4,600 BT Group employees work in the nation (FTE)

£146 million total income of BT Group employees working in the nation

£340 million spend with suppliers based in the nation

£971 million total GVA impact (including indirect and induced effects)

BT Group employed **1 in every 170 employees** working in the private sector, and **1 in every 4 employees** working in the IT and communications sectors

£1 in every £130 of GVA is generated directly by BT Group

BT Group supported **1 in every 70 employees** working in the private sector and **£1 in every £60** of GVA as a result of BT Group's full economic impact

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National impact

Direct impact

BT Group directly employs a total of 4,560 people in Wales, with a further 48 employed as contractors. These employees earned £146 million in wages and salaries.

Procurement impact

BT Group together spent around £340 million with suppliers based in Wales in 2019/20. The largest item was computer programming, consultancy and related activities, as illustrated in the chart below.

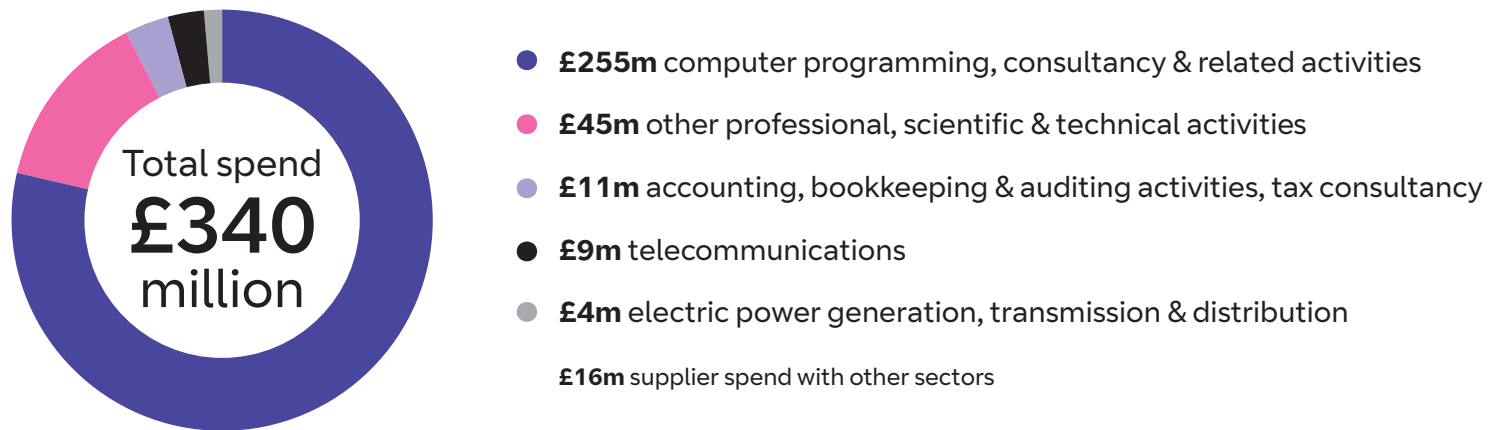


Figure 4-41: Top five supplier sectors in Wales by value of expenditure

Source: BT Group Procurement data

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BT Group's spend with suppliers results in significant benefits for the Welsh economy (including knock-on or multiplier benefits as a result of supplier spend). This is summarised below.

BT Group supply chain spend in Wales = £340 million

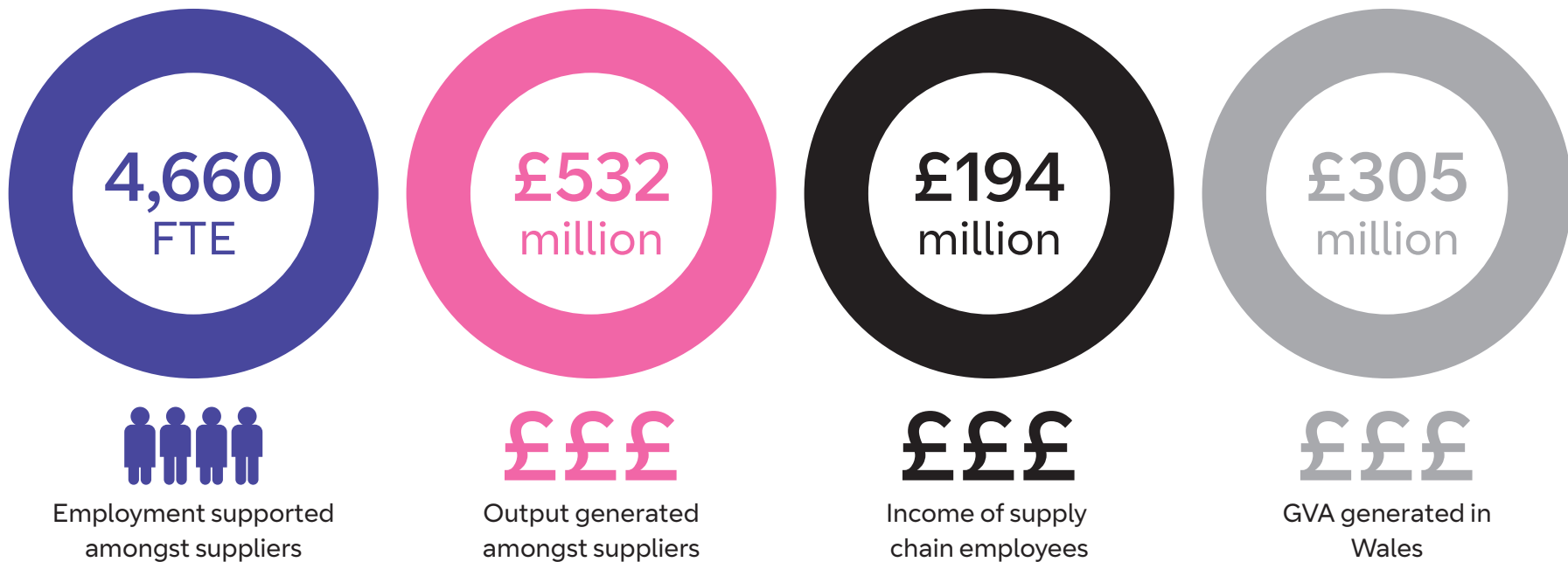


Figure 4-42: Indirect supply chain impact in Wales

Source: Hatch

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Impact of employee expenditure

BT Group employees and contractors living in Wales earned £164 million in 2019/20. In turn, their expenditure supports further employment and output in consumer industries in the nation. **Figure 4-43** below illustrates the wider induced employment and output supported through this employee expenditure.

Salaries of BT Group employees and contractors in Wales = **£164 million**

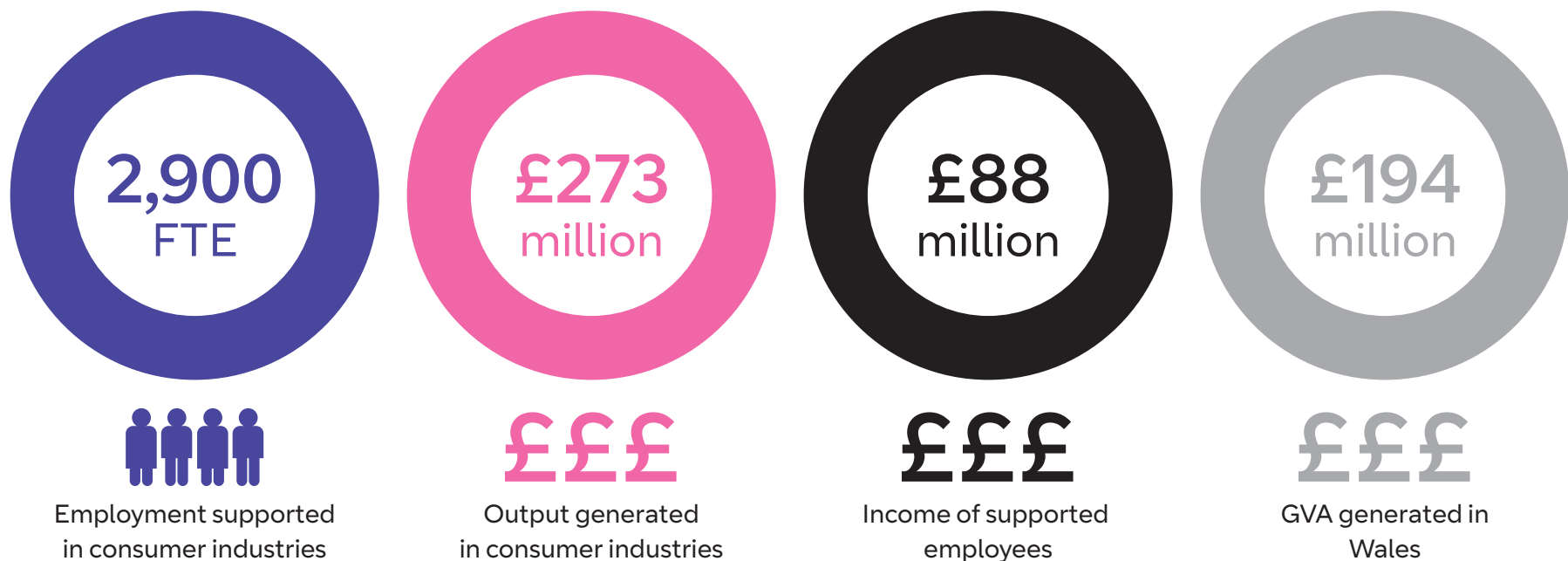


Figure 4-43: Induced (wage expenditure) impacts in Wales

Source: Hatch

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Total impact in Wales

Combining BT Group's direct impact and employment with the indirect supply chain impact and induced wage expenditure impact gives the total impact of the firm's operations in Wales. This is summarised in **Figure 4-44** below.

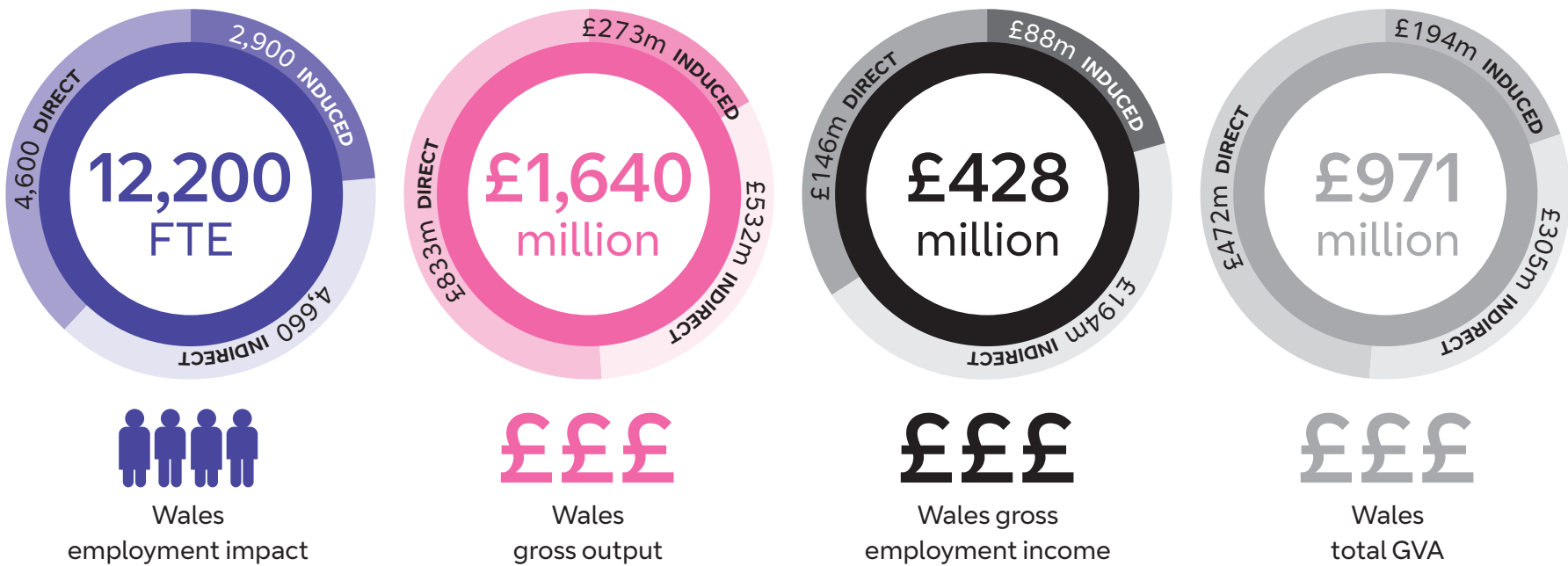


Figure 4-44: Total impact of BT Group in Wales

Source: Hatch

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Sub-national impact

Table 4-20 below shows the economic impact of BT Group for four key regions within Wales.

	BT Group employees & contractors		Total impact		
	Work in area	Resident in area	Employment	Output £ million	GVA £ million
South East Wales	2,830	2,980	9,160	1,180	704
South West Wales	992	1,060	1,110	185	106
North Wales	573	746	1,690	228	136
Mid Wales	213	267	217	45	26

Table 4-20: Sub-national impacts within Wales

Source: Hatch

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Technical appendices

5 Technical appendices

Here we set out the methodology used to estimate the economic impact of BT Group and the data sources that have been drawn upon.

Definitions

There are three sources of economic impact that a company like BT Group 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 Group'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 Group's initial expenditure injection creates further wealth, and supports jobs and income.

Induced impacts

Further economic activity and employment is created as BT Group 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 Group 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:

- **GVA** = turnover minus bought in goods and services (known as the production approach)
- **GVA** = operating profit + depreciation and amortisation + taxes less subsidies on production + 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 Group'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 Group, including NI and pension contributions, and PAYE taxes.

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Methodology and data sources

The methodology used to estimate BT Group's economic impacts for 2019/20 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 Group's financial accounts for 2019/20 and BT Group'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 Group), plus social security costs (sourced from BT Group).

* Earnings before interest, tax, depreciation and amortisation

Employment numbers have been sourced from a snapshot of information provided by BT Group, with data on the number of people employed directly by BT Group 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 37.5 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. The employment numbers are consistent with those in the 2019/20 annual accounts.

The BT Group 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 Group.

Employment income has been estimated using data from BT Group, 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 Group by location and by sector. Each supplier to BT Group 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 were matched to the Companies House Database. This provides the sector for each supplier at the 2 digit Standard Industrial Classification (SIC) code.

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 Hatch Urban Solutions' input-output tables for the UK and the regions.

Induced impacts

Data on wages and salaries of BT Group 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 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 Group 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.

5

Benchmarking the results

The report sets the key results in their wider socio-economic context, in order to illustrate the relative scale of BT Group'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, 2018).

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, 2018).

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, 2018).

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, 2019) multiplied by the average gross annual pay for all employees in that geographical area (source: Annual Survey of Hours and Earnings, 2019).

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, 2018) multiplied by the average gross annual pay for all employees in that geographical area (source: Annual Survey of Hours and Earnings, 2019).

6. Total GVA - Total gross value added generated by businesses based in the area: GVA data has been provided for regions and selected LEP areas (source: ONS, Headline Workplace Based GVA at Current Basic Prices, 2018 and ONS, GVA for Local Enterprise Partnerships, 1998-2018).

Offices Worldwide

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