

Telecommunications Statistics and Market Report 2020



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Introduction

As part of their work to promote competition and advance consumer interests in the Channel Islands, the Competition and Regulatory Authorities in Guernsey and Jersey (GCRA and JCRA) monitor and publish information on market developments. The availability of timely and relevant market intelligence improves the ability of stakeholders, including consumers, to make informed choices and supports the Authorities in prioritising their own resources as markets change and competition develops.

Prior to 2019, Telecoms Market Reports have been produced by the former combined Channel Islands Competition and Regulatory Authorities (CICRA). In 2019, Statistics Jersey was commissioned by the Authorities to independently compile and produce this yearly Statistics and Market Report, with previous historical data and questionnaire submissions being provided. This report presents statistics on the telecommunications sectors in the Bailiwicks of Guernsey¹ and Jersey. It covers the calendar year 2020 and is based primarily on data submitted by the licensed telecommunications operators during the first half of 2021. All currency numbers in this report are presented in nominal terms and have not been adjusted to account for inflation.

The data used to compile this report has been provided by the Channel Islands' licensed telecoms operators using an agreed set of data definitions. The accuracy of the data is the sole responsibility of the operators. Statistics Jersey has not audited the data, although it has compared the 2020 submissions with the previous year and provided the operators with the opportunity to review their data and to make adjustments where they feel necessary for both 2019 and 2020. Some of the calculations from the consolidated submissions from 2019 have also been reviewed and amended where updates have been submitted. Where appropriate, notes have been included to explain potential anomalies and any adjustments to previously released figures. It should also be noted that some of the figures presented within the graphs and text within the report have been rounded, but the year-on-year percentage differences are based upon the actual, unrounded consolidated figures.

Following a review of the 2019 analysis and report, the data requests for 2020 were further amended and a section was added to collate information from licensees on their approaches or initiatives designed to reduce their environmental impact. This data has been omitted from this report as deriving meaningful comparisons from the presently provided information requires further consideration. Nevertheless, the information received will help develop thinking in this area for potential use in the future. Statistics Jersey, the GCRA and JCRA will continue to review the scope of the report and data requested to ensure it reflects the needs of users and the evolving industry.

This report for 2020 should be considered in the context of the impacts of the COVID-19 pandemic and resultant measures taken by governments to reduce infection levels. In particular, usage of telecoms services will have been affected by increased home working, technology solutions to enable continued communication such as internet-based meetings, and fewer travellers both inbound and outbound.

Statistics Jersey, GCRA and JCRA would like to thank all operators for their contributions to this report.

¹ For the purposes of this report Guernsey includes the Bailiwick islands of Guernsey, Herm, Alderney and Sark.

Overview of the Channel Islands Telecoms Market in 2020

A high-level snapshot for the economic contribution of the telecoms market is shown over the next 2 pages, followed by an overview of telecoms consumers in each Island.

Contribution to Guernsey's economy in 2020



£63 million

Total revenues from Guernsey-based customers



£6.1 million

Contribution to Guernsey tax through staff income tax, social security, corporate tax and property rates & TRP



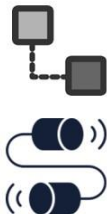
211 staff employed

In Guernsey in the supply of telecommunication services to Guernsey customers as at the end of 2020



£4 million

Capital investment in fixed and mobile networks, IT infrastructure and other telecoms activities



744

Retail leased lines, primarily used by organisations for voice or data services



40 per 100 inhabitants with fixed or wireless broadband, compared to OECD average of 33

Contribution to Jersey's economy in 2020



£104 million

Total revenues from Jersey-based customers



£14.4 million

Contribution to Jersey tax through staff income tax, social security, corporate tax, GST and property rates



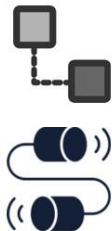
583 staff employed

In Jersey in the supply of telecommunications services to Jersey customers as at the end of 2020



£17 million

Capital investment in fixed and mobile networks, IT infrastructure and other telecoms activities



900

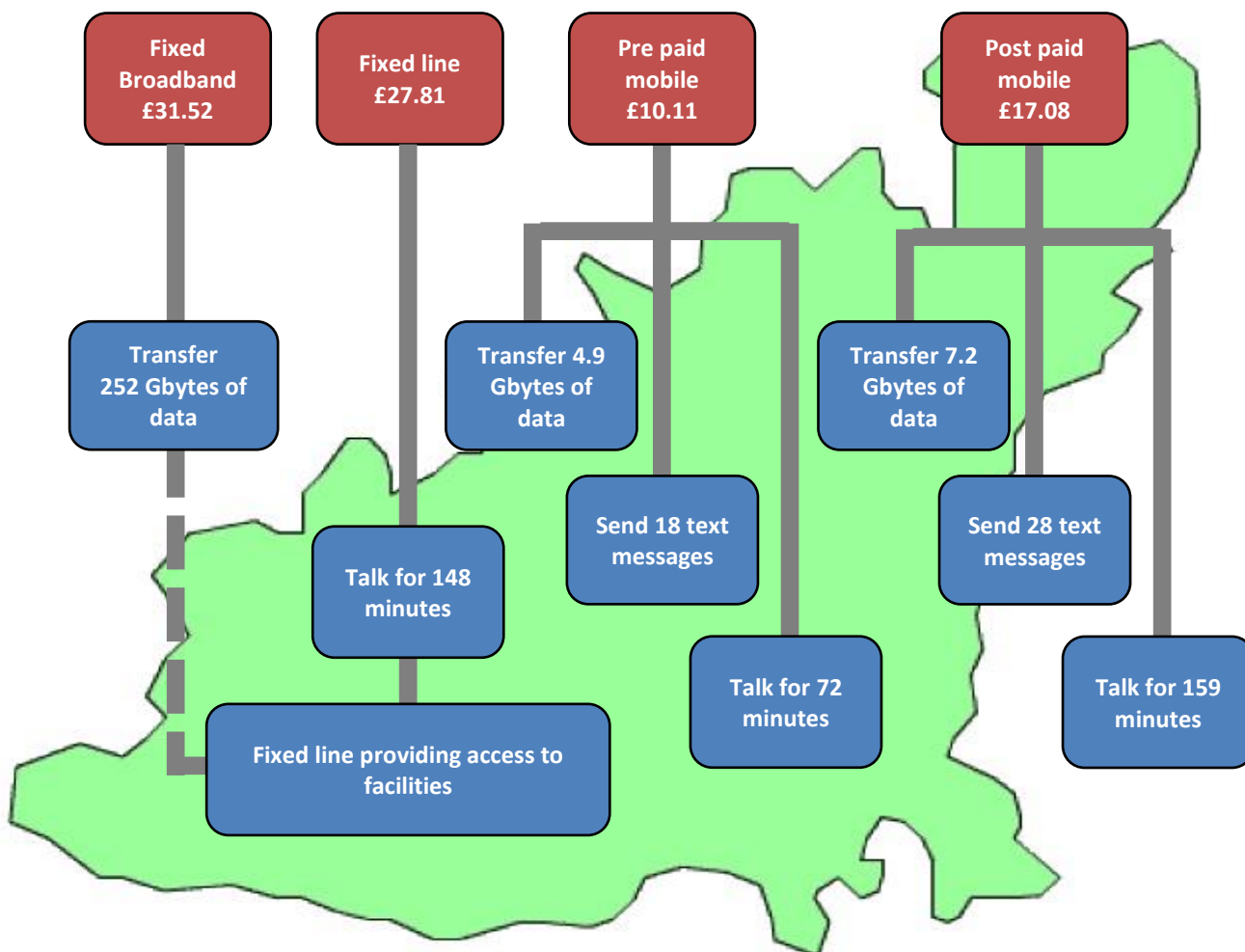
Retail leased lines, primarily used by organisations for voice or data services



37 per 100 inhabitants with fixed or wireless broadband, compared to OECD average of 33

Guernsey Consumer Snapshot in 2020

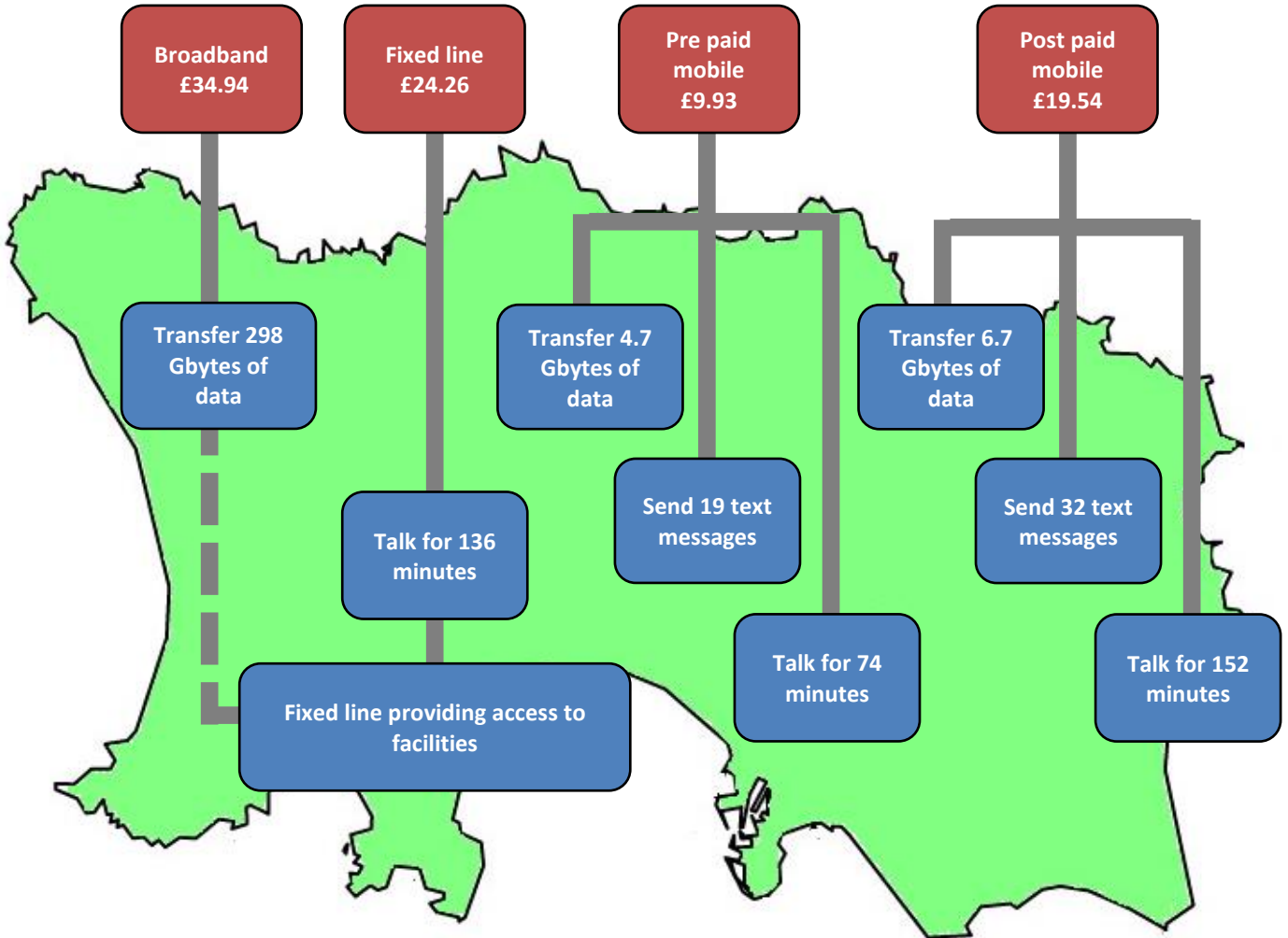
Average monthly spend per subscription



Average monthly consumption per subscription

Jersey Consumer Snapshot in 2020

Average monthly spend per subscription (excluding GST)



Average monthly consumption per subscription

Executive Summary

Overall economic impact of the telecommunications sector

In Guernsey during 2020, the main operators offering telecommunications services were Sure² (the incumbent offering a full range of fixed and mobile services), JT³ (offering fixed and mobile services) and Airtel⁴ (offering mobile services).

In Jersey during 2020, the main operators offering telecommunications services were JT (the incumbent offering a full range of fixed and mobile services), Sure (offering fixed and mobile services), Airtel (offering mobile services), Homenet⁵ (offering residential services through various technologies) and Newtel⁶ (offering fixed business services).⁷

Other licensed operators providing retail telecommunications services to business customers across the Channel Islands include Nitel⁸, Logicalis⁹, Business Telecom¹⁰ and C5¹¹.

The telecommunications industry in the Channel Islands in 2020:

- generated turnover, including fixed, mobile, Internet access, associated services and the sale of handsets of £166.6m¹²; £62.6m in Guernsey and £104.1m in Jersey
- employed 794 full time equivalent staff as at the end of 2020; 211 in Guernsey and 583 in Jersey
- contributed £20.5m to the exchequers through corporate, staff, and social taxes (including GST payments in Jersey); £6.1m in Guernsey and £14.4m in Jersey
- invested £21.1m in capital projects; £3.6m in Guernsey and £17.5m in Jersey

Compared to 2019, overall turnover, employment, tax contributions and capital investment have decreased in the telecommunications industry across the Channel Islands. Turnover has increased in Guernsey but fallen in Jersey. In line with turnover, contribution to tax has increased in Guernsey and decreased in Jersey compared to 2019. Employment has fallen slightly in Jersey. Capital investment in Jersey decreased by a small amount due to a reduced investment in networks, and has decreased significantly in Guernsey, primarily on IT systems and networks.

² Sure refers to Sure (Guernsey) Limited and Sure (Jersey) Limited as appropriate.

³ JT refers to JT (Guernsey) Limited (formerly known as Wave Telecom) and JT (Jersey) Limited as appropriate.

⁴ Airtel refers to Airtel-Vodafone being Guernsey Airtel Limited and Jersey Airtel Limited as appropriate.

⁵ Homenet refers to Home Net Limited in Jersey.

⁶ Newtel refers to Newtel Limited in Jersey.

⁷ Homenet took over all residential services from Newtel in 2014.

⁸ Nitel refers to Nitel Limited in Jersey.

⁹ Logicalis refers to Logicalis Guernsey Limited and Logicalis Jersey Limited as appropriate.

¹⁰ Business Telecom refers to Business Telecom Limited in Guernsey.

¹¹ C5 refers to C5 IT Services (Guernsey) Limited in Guernsey and C5 Alliance Limited in Jersey.

¹² Numbers combined for the Channel Islands may show small discrepancies to the addition of the figures for the individual islands due to rounding.

Fixed line market

Total fixed-line revenues in 2020 increased by 1.5% to £11.3m in Guernsey and decreased by 0.7% to £14.1m in Jersey.

The number of fixed lines and subscriptions decreased by 0.3% to 33,940 in Guernsey and increased by 1.9% to 48,310 in Jersey.

In 2020, there were 54 fixed line subscriptions per 100 inhabitants in Guernsey, the same as in 2019, and 45 per 100 inhabitants in Jersey compared to 44 in 2019.

Average revenue per fixed (wireline and wireless) subscription per month in Guernsey was £27.81 (+1.8%) and in Jersey it was £24.26 (-2.5%).

Fixed line call minutes increased in Guernsey by 7.6% to 67.0 million and in Jersey by 10.8% to 96.9 million.

In 2020, Sure was providing 20.3% of the fixed connections in Jersey. Homenet and Newtel also offer services relevant to the market for fixed telephony. JT launched its service in Guernsey in June 2016 and had acquired 11.3% of Guernsey's fixed connections by 2020. JT also has a fibre-optic network in Guernsey over which it provides some fixed line connections.

Broadband market

Total fixed broadband revenues in 2020 increased by 9.4% to £9.6m in Guernsey and increased by 5.0% to £16.6m in Jersey.

The number of fixed line broadband subscriptions increased by 1.9% to 25,336 in Guernsey and increased by 3.4% to 39,699 in Jersey.

Fixed broadband¹³ penetration rates per 100 inhabitants were 40.1 in Guernsey and 36.8 in Jersey (not including mobile substitutions), compared with 40.5 in the UK. The OECD average is 32.5¹⁴. When data-only mobile access is included, penetration rates are 43.6 for Guernsey and 40.4 for Jersey.

Average monthly revenue per fixed network broadband subscription was £31.52 in Guernsey (+7.4%) and £34.94 in Jersey (+1.6%).

The total volume of data downloaded and uploaded in 2020 by broadband subscribers in Guernsey increased by 40.6% to 76,753,779 Gbytes. In Jersey, the volume of data in 2020 increased by 47.6% to 141,898,894 Gbytes.

The rise in data consumption seen in the UK is mirrored in the Channel Islands. In 2020, average consumption per subscriber on the fixed network in Guernsey was 252 Gbytes/month, and in Jersey it was 298 Gbytes/month. In the UK it was 429 Gbytes/month¹⁵. Fixed broadband data per capita in Guernsey and Jersey were at 101 and 110 Gbytes/month respectively in 2020, below the UK. UK data usage is very high compared to other jurisdictions: in the UK, fixed broadband data per capita was 126

¹³ For this report, the terms 'broadband' and 'internet' interchangeably refer to internet access services.

¹⁴ OECD broadband statistics at: <https://www.oecd.org/sti/broadband/broadband-statistics/>

¹⁵ Ofcom report : Connected Nations 2020 [Connected Nations 2020: UK report \(ofcom.org.uk\)](https://www.ofcom.gov.uk/connected-nations-2020/)

Gbytes/month¹⁶, above any other comparator used by Ofcom in their International Broadband Scorecard.

The technology and download speeds available for broadband internet access differ between the Islands. Guernsey connections are mainly copper based, with subscribers predominantly able to access services via xDSL technologies with advertised download speeds of up to 20Mbps (based on ADSL technology) and up to 100Mbps (based on VDSL technology). However, there are some fibre connections. In Jersey, by the end of 2018, the JT network had been converted to fibre and subscribers had access to products with advertised download speeds up to 1Gbps. Homenet also have WiMax and Fibre to the Home (FTTH) networks to service some subscribers, giving speeds of up to 20Mbps and up to 100Mbps.

Leased lines market

The retail leased line market was worth £6.5m in Guernsey (equivalent to 2019) and £11.2m in Jersey (down from £11.8m in 2019). These figures exclude wholesale leased lines.

The number of retail leased lines in Guernsey has increased from 705 lines in 2019 to 744 lines in 2020, while the number of retail leased lines has decreased from 1,005 to 900 in Jersey. The number of wholesale leased lines in Guernsey has decreased from 314 to 287. In Jersey, the number of wholesale leased lines has decreased from 249 to 207. There has been significant growth in both Islands in subscriptions to leased lines in the faster band widths of over 100Gbps.

Mobile market

Total mobile-related revenues in 2020 decreased in Guernsey by 11.0% to £20.8m and decreased in Jersey by 8.8% to £36.2m.

The total number of mobile subscriptions in the Channel Islands in 2020 decreased by 1.6% to 195,884. In Guernsey, there were 71,622 mobile subscriptions representing 113 per 100 inhabitants, and in Jersey there were 124,262 mobile subscriptions representing 115 per 100 inhabitants. This is a decrease from 114 and 118 respectively in 2019.

In Guernsey 2.3% of registered mobile numbers switched or “ported” between service providers in 2020, whilst in Jersey the figure was 2.0%. Sure has lost the highest number of mobile subscribers, with JT making the highest net gains in mobile subscribers in Jersey, and Airtel gaining the most in Guernsey.

In 2020, average porting times for consumers switching mobile service provider was at 1.1 working days in both Guernsey and Jersey¹⁷. These times compare to the European Commission’s Universal Service Directive, which requires operators to provide porting within 1 working day.¹⁸ Porting times in Guernsey have decreased from 1.2 working days for the first time in 5 years. Porting times in Jersey have also decreased from 1.2 working days in 2019.

¹⁶ Ofcom: [International broadband scorecard 2020: interactive data - Ofcom](#)

¹⁷ Porting XS

¹⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0022&from=en>

Average monthly revenues per subscription in Guernsey were £10.11 (+17.5%) for pre-paid and £17.08 (-25.0%) for post-paid in 2020. In Jersey, average monthly revenues per subscription were £9.93 (+19.4%) for pre-paid and £19.54 for post-paid (-18.3%).

In 2020, pre-paid mobile subscribers in Guernsey talked for an average of 72 minutes per month, while post-paid subscribers talked for 159 minutes per month. The equivalent figures for Jersey were 74 minutes per pre-paid subscriber and 152 minutes per post-paid subscriber.

The average monthly number of SMS text messages sent for pre-paid subscribers in Guernsey in 2020 was 18, while post-paid subscribers sent 28 per month. In Jersey, pre-paid subscribers sent on average 19 text messages per month, while post-paid subscribers sent 32 messages per month.

Pre-paid mobile subscribers in Guernsey transferred on average 4.9 Gbytes of data per month, while post-paid subscribers transferred 7.2 Gbytes per month. The equivalent figures for Jersey were 4.7 Gbytes per month per pre-paid subscriber and 6.7 Gbytes per month per post-paid subscriber.

Over the whole of 2020, Sure supplied 55% of the mobile subscriptions in Guernsey, followed by Airtel (24%) and JT (21%). In Jersey, JT supplied 52% of total mobile subscriptions, with Airtel supplying 24% and Sure 23%. Homenet had 1% of the mobile subscriptions market in Jersey.

In 2020, Channel Islands consumers generated revenues for local operators of £2.3m using mobile services while roaming abroad, £5.0m less than in 2019.

Off-Island links

Guernsey and Jersey have high resilience and capacity in their external telecommunications links. With various fibre-optic submarine cables linking the two Bailiwicks, the U.K. and France from multiple landing points, and high-capacity modern transmission technology, the Channel Islands would be able to maintain connectivity in the event of total failure of more than one cable without a noticeable impact on consumers.

Changes from 2019 to 2020

The 2020 figures should be considered in the context of the impacts of the COVID-19 pandemic and resultant measures taken by governments to reduce infection levels. In particular, usage of telecoms services will have been affected by increased home working, technology solutions to enable continued communication such as internet-based meetings, and fewer inbound and outbound travellers.

- In 2020, both Islands showed a rise in the number of fixed call network minutes (Guernsey by 7.6% and Jersey by 10.8%) following a period of continuing decline over the last 6 years
- Continuing a strong upward trend, both Islands experienced accelerated increases in data usage per subscriber per month in 2020: in Guernsey data usage rose by 38.1% while in Jersey it increased by 42.8%
- The total number of mobile call minutes increased by 26.9% in Guernsey in 2020 and 22.5% in Jersey
- Mobile data volumes have increased by 38.2% in Guernsey and by 25.6% in Jersey
- Despite increases in mobile minutes and data volume, mobile revenue has fallen, driven partly by a 69% decrease in out-roaming revenues

Economic impact of the telecommunications sector

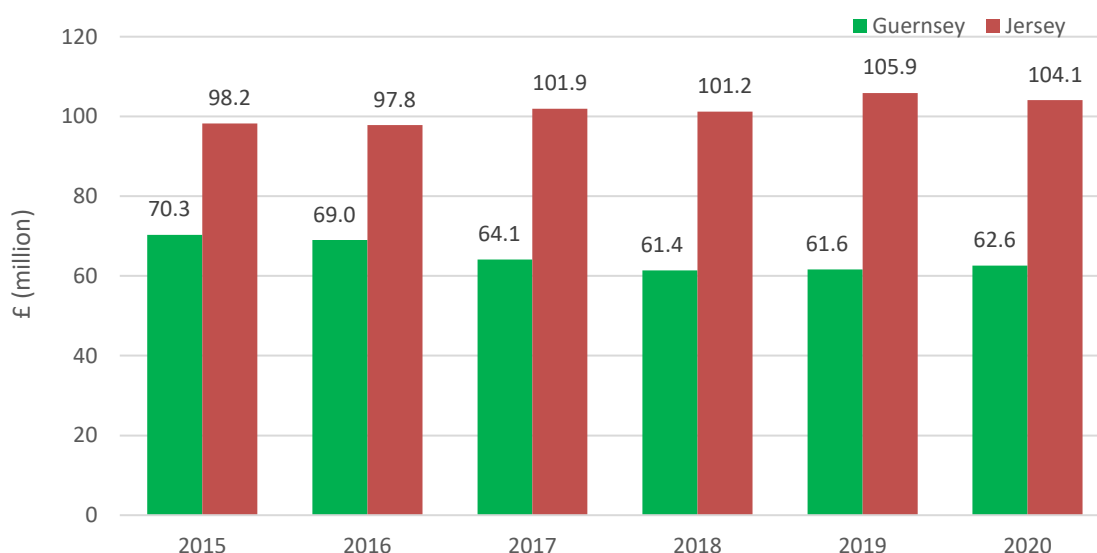
This section of the report presents general data about the Jersey and Guernsey telecommunications sectors for 2020.

As noted in the introduction, statistics in this report are comparable across the Channel Islands, but care is required when comparing trends because of changes made to the reporting over time.

Total turnover for telecommunication services in the Channel Islands

Total turnover of the telecommunications industry in the Channel Islands (including fixed, mobile, Internet, the sale of handsets and the provision of telecommunications associated with data centre/hosting services¹⁹) was £166.6m in 2020; down from £167.5m in 2019. Turnover includes revenues associated with Channel Island subscribers while on and off the Islands, plus revenue from visitors to the Islands in 2020.

Figure 1 – Total turnover of the telecommunications industry in the Channel Islands, 2015 to 2020



Source: Industry questionnaires

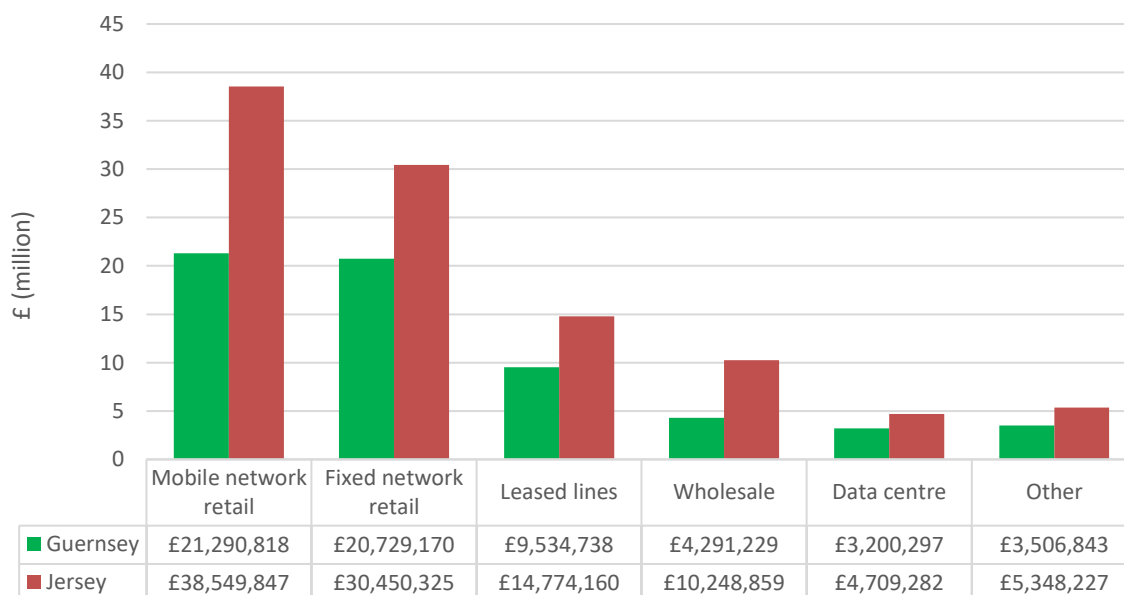
- Figures from 2016 to 2019 have been revised subsequent to publication of the respective annual reports based upon updated information provided by the operators.

Total turnover in Guernsey increased by 1.6% in 2020 compared to 2019, while total turnover decreased by 1.7% in Jersey.

¹⁹ The reports for years before 2016 stated revenues from all data centre activities and not just telecommunications activities within them.

Figure 2 below shows the total turnover segmented into different types of telecommunications activity in 2020. The fixed and mobile figures include revenues from both voice and data services, and for both retail and corporate customers.

Figure 2 – Total turnover by type of telecommunication activity, 2020



Source: Industry questionnaires

N.b. The turnover figures within the chart above should be considered as the total turnover amounts for each activity. Definitions for revenue within each individual section of the report differ from the above.

In both Guernsey and Jersey, the highest turnover was generated from mobile network retail, with this activity being a larger proportion of turnover (37.0%) in Jersey.

The table below summarises total turnover by key service categories, with “fixed” combining fixed network retail, leased lines, wholesale and data centres.

Table 1 – Total turnover by key service category, 2019 vs. 2020 (£ million)

	Guernsey		Jersey		Total	
	2019	2020	2019	2020	2019	2020
Fixed	35.3	37.8	60.1	60.2	95.4	97.9
Mobile	22.8	21.3	40.8	38.5	63.6	59.8
Other	3.5	3.5	5.0	5.3	8.5	8.9
Total	61.6	62.6	105.9	104.1	167.5	166.6

Source: Industry questionnaires

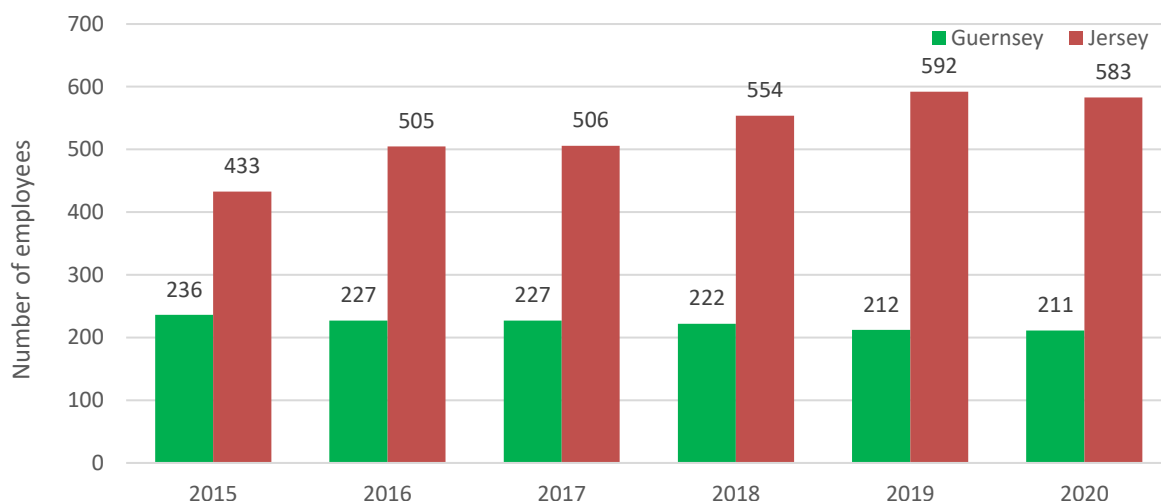
- 2019 figures have been adjusted since the 2019 report based on updated information provided.

The biggest share of revenue in Guernsey and Jersey was generated in the fixed sector. In 2020 in Guernsey, it accounted for 60% of total turnover, whilst in Jersey it accounted for 58%. Growth over recent years had been in the mobile sector, but in 2020 mobile revenue fell as fixed revenue increased.

Employment in the telecommunications sector

Figure 3 shows the number of full-time equivalent staff employed in the supply of telecommunication services to Guernsey and Jersey customers at the end of each year since 2015.

Figure 3 – Full-time equivalent employees in the telecommunications sector, 2015 to 2020



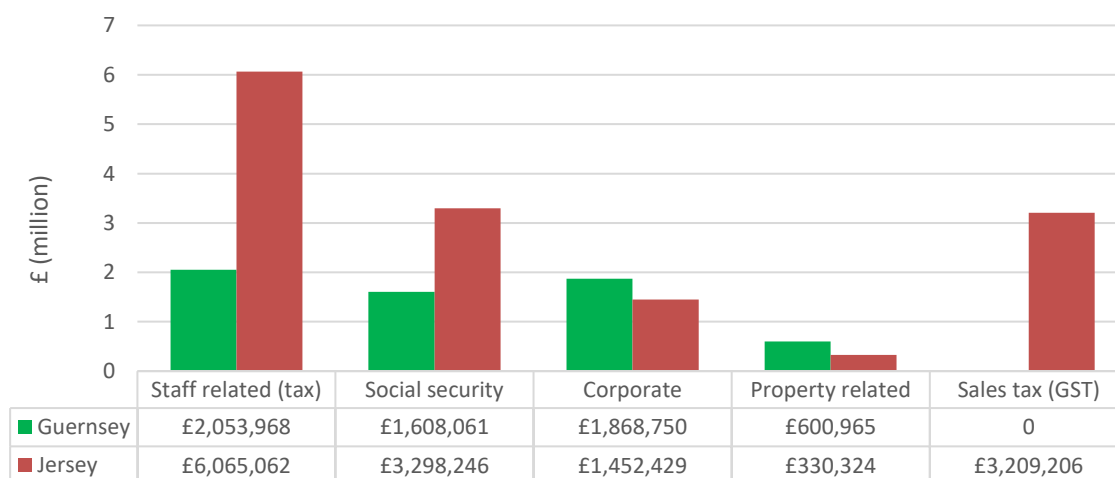
Source: Industry questionnaires

In 2020, there were almost 3 times as many staff employed in the telecommunications sector in Jersey than in Guernsey. Since 2013, the number of employees in the telecommunications sector in Guernsey has fallen by 10%, while the number of employees in Jersey has increased by over 40% despite a small decrease in employees in 2020.

Taxation contributions

Figure 4 shows that the telecommunications sector contributed £20.5m in taxation in 2020 (£21.2m in 2019); 6.1m in Guernsey (£5.9m in 2019) and £14.4m in Jersey (£15.3m in 2019).

Figure 4 – 2020 contributions by type of taxation



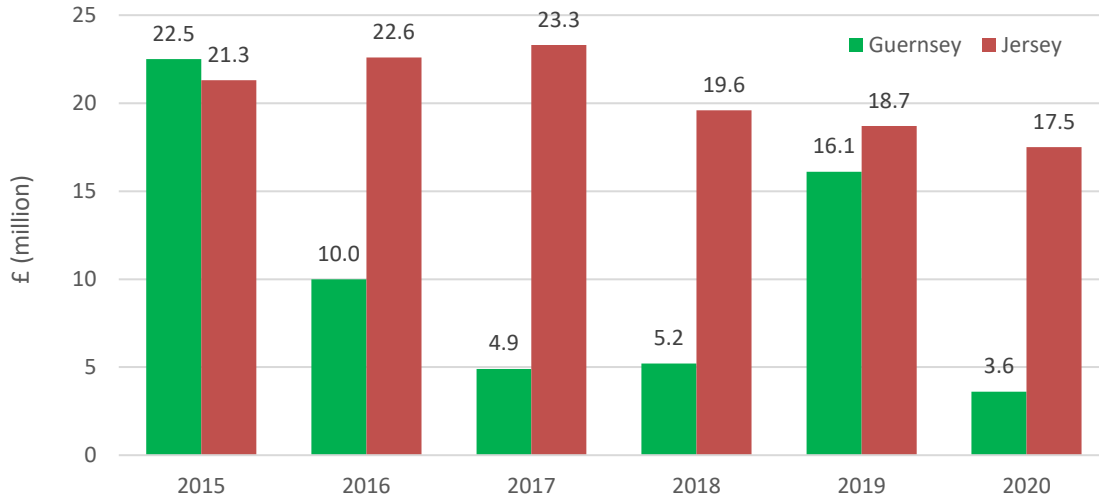
Source: Industry questionnaires

N.b. Social security includes staff and employer contributions paid by the employer. Sales tax is not applicable in Guernsey.

Capital investment

Figure 5 shows the levels of capital investment in telecommunications in Guernsey and Jersey in the years 2015 to 2020.

Figure 5 – Capital investment in the telecommunications industry in the Channel Islands, 2015 to 2020

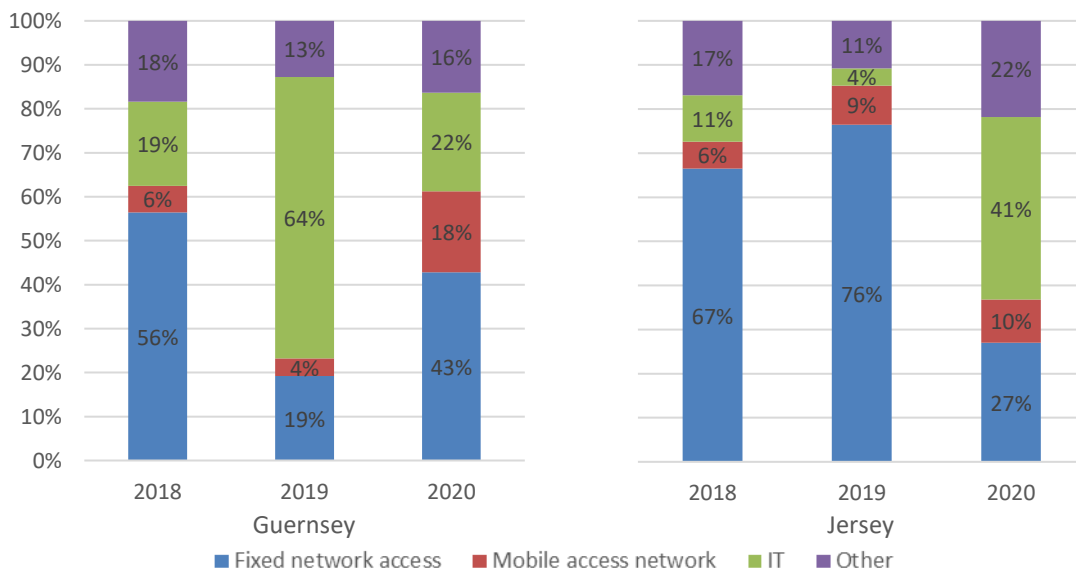


Source: Industry questionnaires

Capital investment expenditure has varied significantly in Guernsey over the years but decreased to £3.6m in 2020. Jersey has seen more consistent ongoing investment with much of this related to the fibre roll-out over recent years.

Figure 6 shows where the investment was made in each Island. A much lower level of investment has been made in IT systems in Guernsey in 2020 than in the previous year, whereas there has been increased investment in this area in Jersey.

Figure 6 – Capital investment in the Channel Islands, 2018 to 2020



Source: Industry questionnaires

Fixed network market

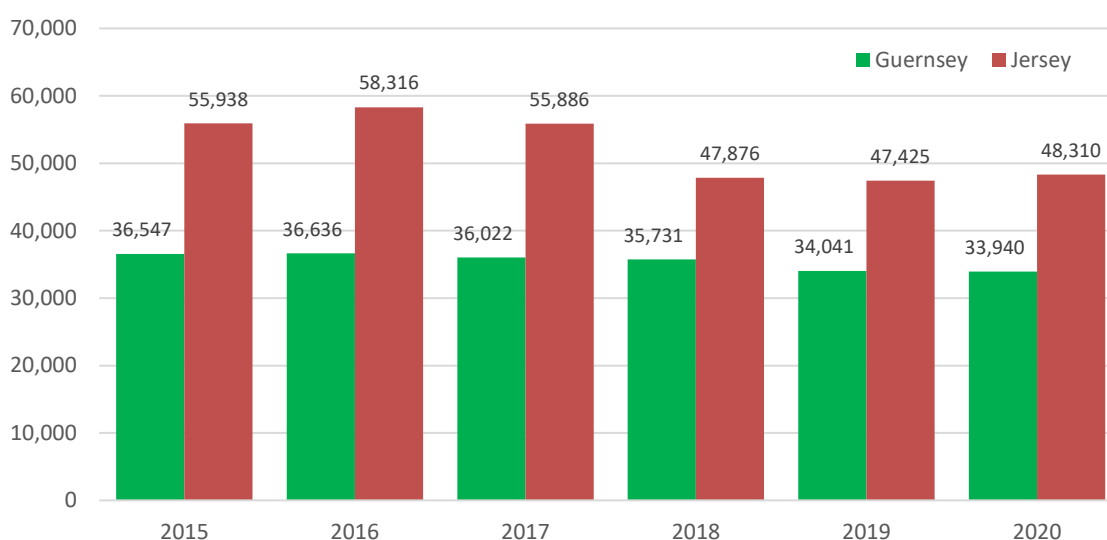
The fixed network market is characterised by consumer equipment that is in a fixed geographic location and used to make/receive voice calls, send/receive faxes and to support broadband and leased line services. In contrast, the consumer equipment in the mobile market is not fixed to a single geographic location and moves easily from place to place. Various technologies are used in fixed networks including traditional copper circuits, fibre optics and wireless links.

Information on fixed network broadband and fixed network leased line services is contained in later sections of this report.

Total number of lines and subscriptions

Figure 7 shows the number of fixed wire lines in the Islands during the period 2015 to 2020. The apparent sudden fall in Jersey in 2018 is likely to be a result of reporting differences which have not been adjusted for in prior years.

Figure 7 – Number of retail fixed lines and subscriptions in the Channel Islands, 2015 to 2020



Source: Industry questionnaires

In addition to fixed wireline connections, Homenet has a fixed wireless network (WiMax), and a number of operators retail data-only sim cards, which can be used in place of a fixed connection for broadband internet access. This type of internet access is considered in the Mobile market section of this report.

Alternative carrier services

Carrier select style services have been available in the Channel Islands for a number of years and, in 2015, Wholesale Line Rental (WLR) services also became available. Table 2 shows the number of subscriptions to such services at the end of 2020. Subscription to the WLR services have increased in both Islands compared to 2019, while carrier select subscriptions have fallen.

Table 2 – Subscriptions to alternative carriers

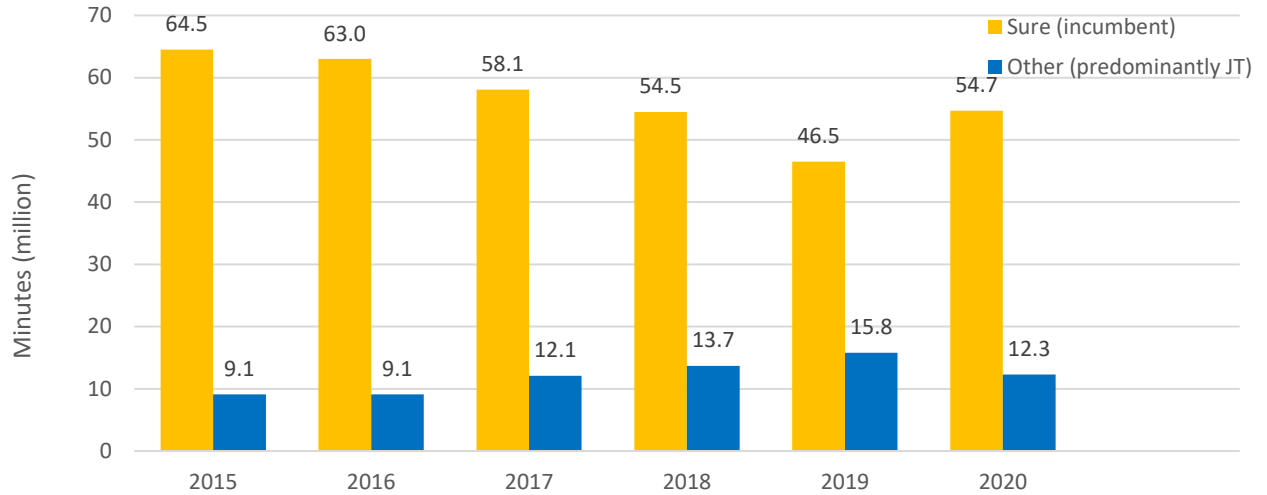
	Guernsey	Jersey
Carrier select	168	635
Wholesale Line Rental	3,598	10,273
Total	3,776	10,908

Source: Industry questionnaires

Fixed telephony minutes

Figures 8 and 9 show the numbers of minutes carried by operators in Guernsey and Jersey annually between 2015 and 2020. For 2020, both show a rise in the number of fixed network call minutes originating in the Islands after a continuing decline. This compares to the UK²⁰ where the decline in fixed line call minutes has continued.

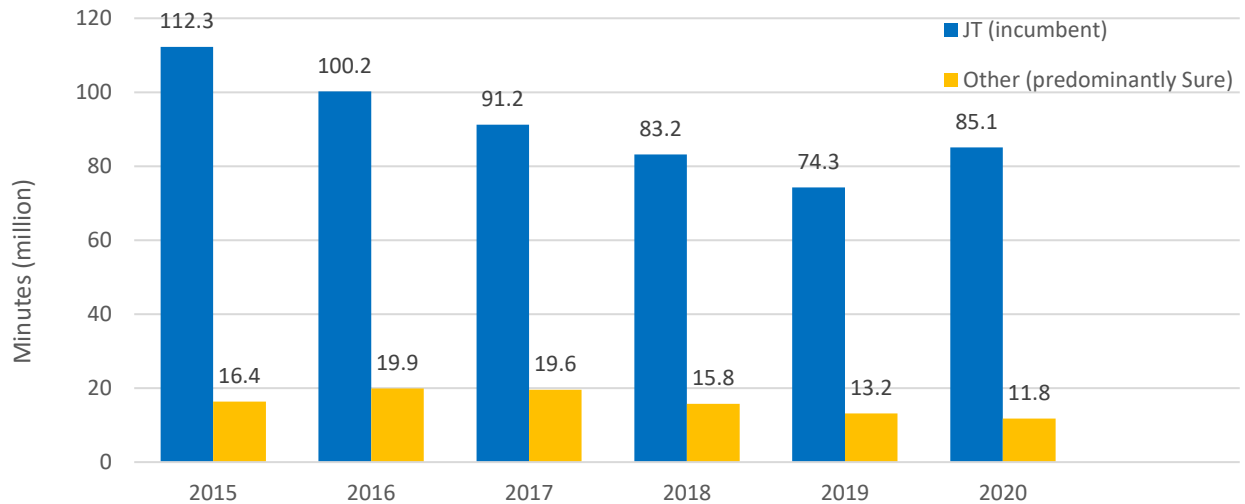
Figure 8 – Number of fixed line minutes in Guernsey by operator, 2015 to 2020



Source: Industry questionnaires

N.b. The 2018 figure for “Other” has been updated since the 2018 report

Figure 9 – Number of fixed line minutes in Jersey by operator, 2015 to 2020



Source: Industry questionnaires

The above shows that the incumbent operators in both Islands have gained market share of fixed line calls in 2020.

²⁰ Ofcom: Communications Market Report 2020, [Communications Market Report 2020 \(ofcom.org.uk\)](https://www.ofcom.gov.uk/consult/condocs/cm20/cm20.pdf)

Fixed network penetration rates

Table 3 shows the number of fixed network connections (wireline and wireless combined) per 100 inhabitants in Guernsey and Jersey.

The trend shows a stagnation in penetration rates after a gradual decline in fixed line connections in both Islands.

* The penetration rates in Jersey prior to 2018 are thought to have been overstated.

Table 3 – Fixed and wireless fixed retail line connections per 100 inhabitants, 2015 to 2020

	Guernsey	Jersey
2015	60	58 *
2016	59	59 *
2017	58	59 *
2018	57	45
2019	54	44
2020	54	45

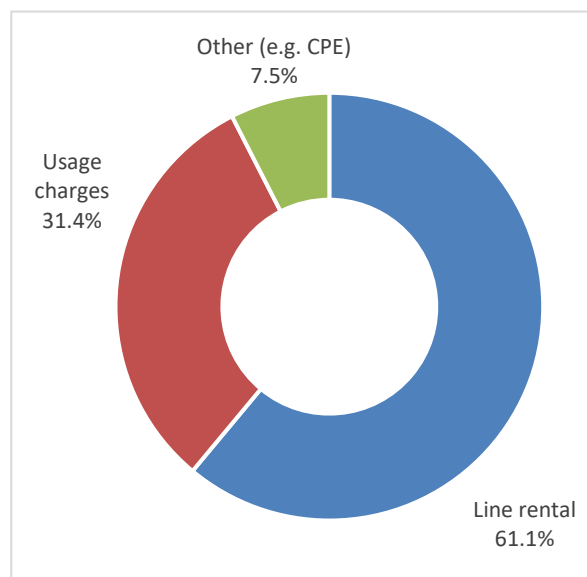
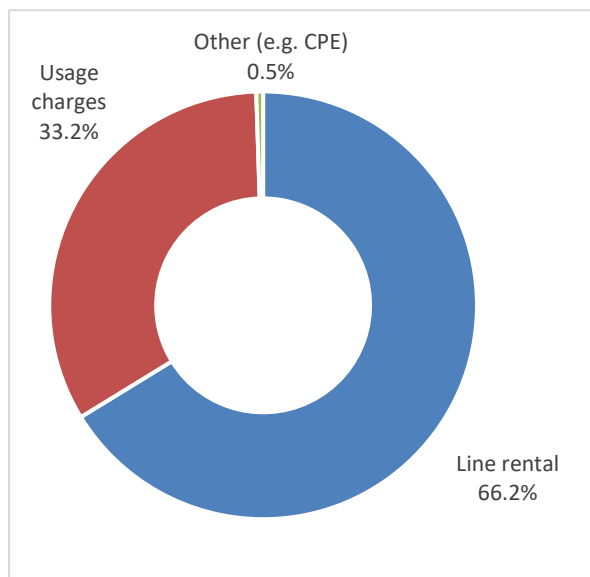
Source: Industry questionnaires, government population statistics

Revenues

Excluding broadband and leased line services, revenues associated with fixed networks in 2020 were £11.3m in Guernsey (£11.2m in 2019) and £14.1m in Jersey (£14.2m in 2019).

Figures 10 and 11 show these revenue totals broken down into line rental, usage charges and other charges e.g. for customer premises equipment and support services (CPE).

Figure 10 – Fixed network revenues Guernsey, 2020 Figure 11 – Fixed network revenues Jersey, 2020



N.b. The above charts exclude broadband and leased lines

Source: Industry questionnaires

The breakdown of revenue in both Islands in 2020 was very similar to 2019.

Average revenues

The average revenue per fixed line (wireline and wireless) from line rental, usage charges and associated equipment and services in Guernsey in 2020 was £333.73 (£27.81 per month), showing an increase of 1.8% compared to 2019.

Excluding GST, the equivalent annual figure for 2020 in Jersey was £291.15 (£24.26 per month). Although the number of subscriptions and call minutes has increased, this still shows a decrease of 2.5% compared to 2019.

Charges for services such as broadband are in addition to these.

Fixed network broadband market

Fixed network broadband services are those delivered over physical copper connections, fibre connections and fixed wireless communications links (e.g. WiMax). They do not include services delivered over 2G, 3G and 4G mobile networks.

While the majority of broadband subscribers in both Islands can be categorised as residential users rather than business users, it is difficult to draw a clear distinction because of the tendency for small businesses to use services primarily designed for residential use. Historically, the proportion of business users is thought to be of the order of 5% of the total subscriber base. No attempt is made in this report to distinguish between the two groups.

Subscriptions and penetration rates

Table 4 shows historic levels in both Islands for fixed broadband subscriptions and overall broadband subscriptions (including mobile substitutions).

Table 4 – Numbers of fixed broadband subscriptions in the Channel Islands, 2015 to 2020

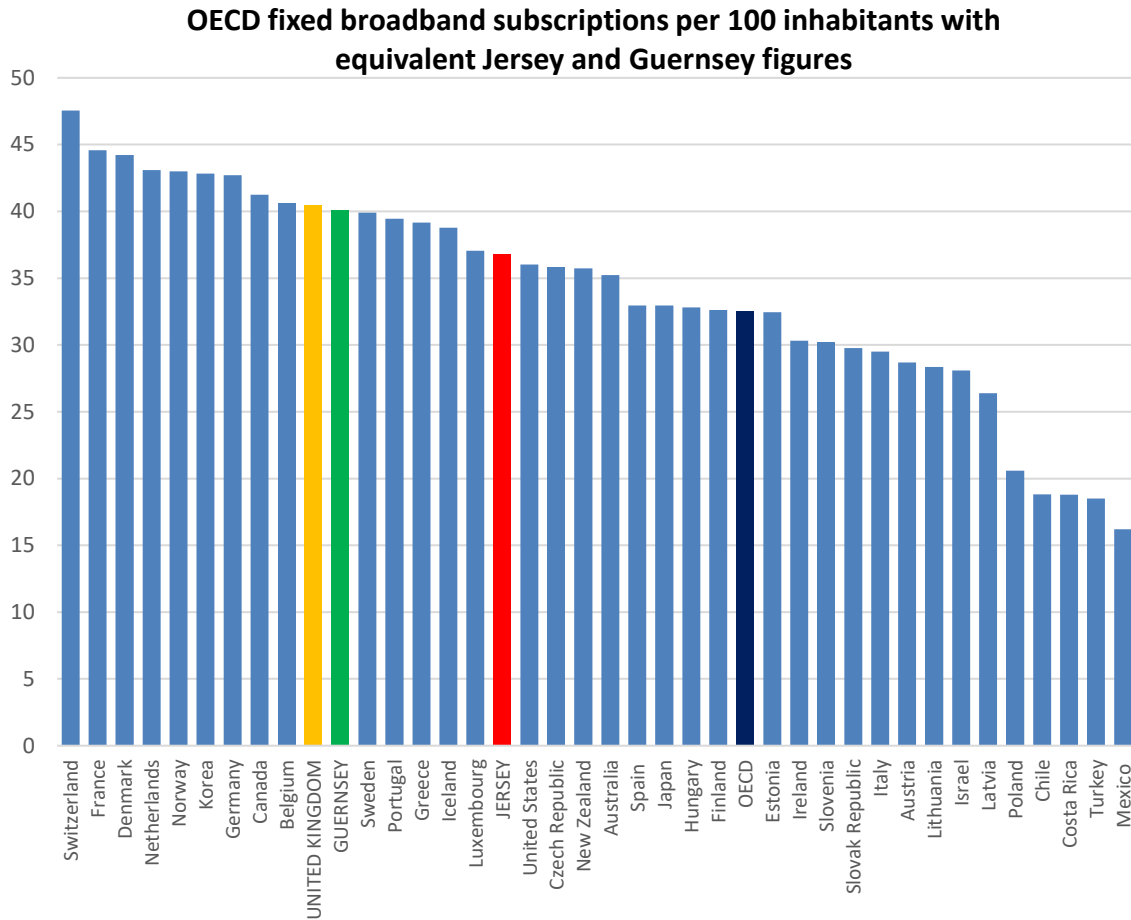
	Guernsey		Jersey	
	Excluding data only mobile broadband	Including data only mobile broadband	Excluding data only mobile broadband	Including data only mobile broadband
2015	23,779	24,582	36,134	37,861
2016	23,226	24,558	35,877	39,228
2017	23,971	25,520	37,233	41,160
2018	24,410	26,763	37,928	43,568
2019	24,873	26,706	38,391	42,910
2020	25,336	27,559	39,699	43,544

Source: Industry questionnaires

From 2015, there has been a gradual upward trend in broadband subscriptions in both Islands. The small declines in the combined totals for 2019 have been reversed in 2020.

As illustrated in Figure 12, the Islands continue to benefit from above OECD average broadband penetration rates per 100 inhabitants of 32.5 but are lower than the UK penetration rate of 40.5. In 2020, Guernsey had 40.1 subscriptions per 100 inhabitants and Jersey 36.8.

Figure 12 – Guernsey and Jersey broadband penetration rates compared to OECD countries



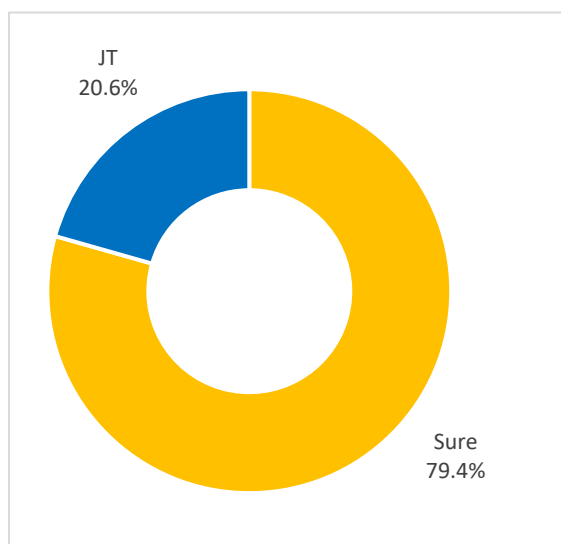
Sources: Industry questionnaires, OECD (updated June 2020)²¹

²¹ OECD broadband statistics at: <https://www.oecd.org/sti/broadband/broadband-statistics/>

Market share by numbers of fixed broadband subscriptions

Figures 13 and 14 show the retail market shares of the fixed network broadband providers in Guernsey and Jersey respectively by numbers of subscriptions. The incumbent operators remained dominant in their respective home markets.

Figure 13 – Fixed network broadband market share by number of subscriptions – Guernsey



Source: Industry questionnaires

Figure 14 – Fixed network broadband market share by number of subscriptions – Jersey

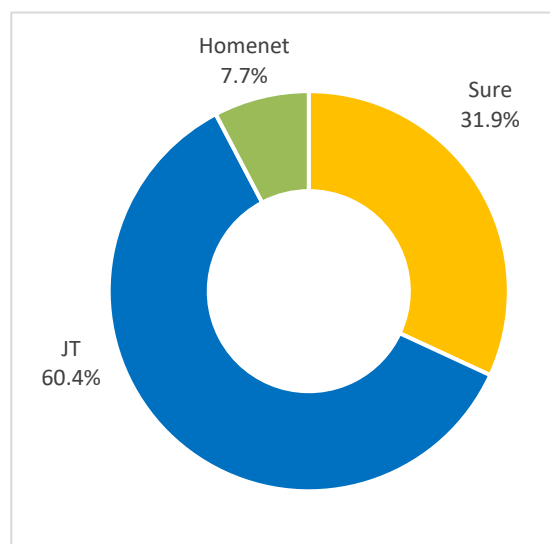


Table 5 shows historic market shares in the fixed broadband market in Guernsey and Jersey between 2015 and 2020.

Table 5 – Fixed broad band market share (%) in Guernsey and Jersey, 2015 to 2020

	Guernsey		Jersey		
	Sure	JT	Sure	JT	Homenet (and others)
2015	83	17	22	72	6
2016	85	15	27	68	5
2017	82	18	30	61	9
2018	82	18	32	60	8
2019	80	20	32	60	8
2020	79	21	32	60	8

Source: Industry questionnaires

In Guernsey, JT has been gradually gaining share of the broadband market over the past 5 years.

In Jersey, Sure has gained a greater market share primarily from JT, although this has remained unchanged at 32% over the last 3 years.

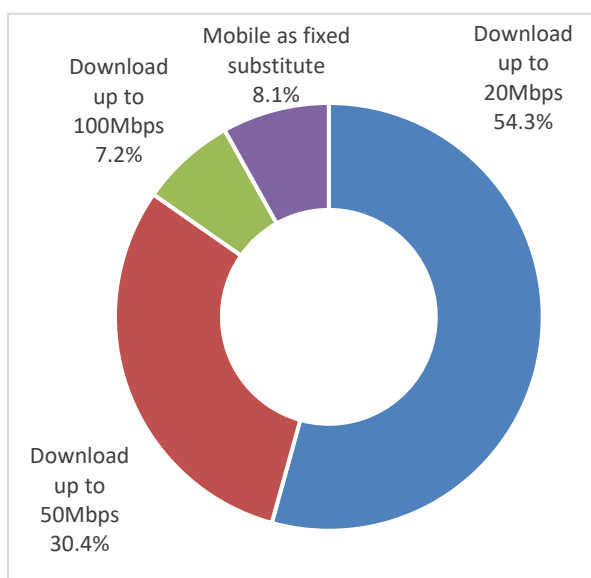
Broadband download speeds

In Guernsey, Sure owns all the physical lines and JT obtains services through wholesale arrangements but also has some fibre customers. Services with download speeds of up to 20Mbps are delivered using ADSL technology, while higher speeds in a range up to 100Mbps are delivered using VDSL technology.

In Jersey, there are a number of separate local access network infrastructures. JT owns the majority of the fibre connections (providing services up to 1Gbps). Other licenced operators gain access to JT's network through wholesale arrangements. Homenet also provides services through its WiMax and Fibre to the Home (FTTH) networks providing services up to 20Mbps and 100Mbps.

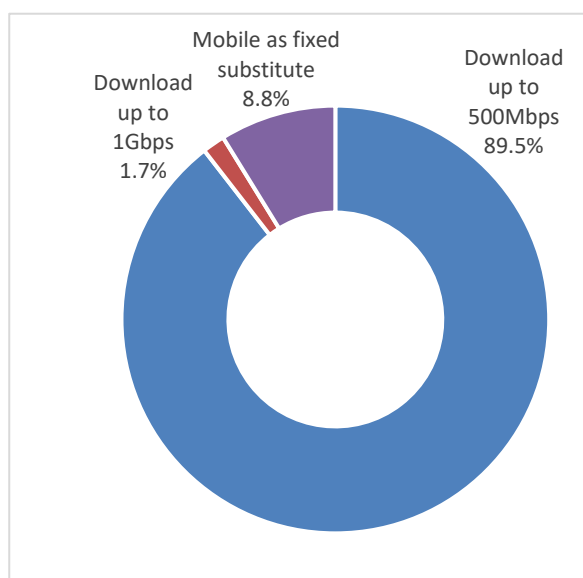
Figures 15 and 16 show the proportions of fixed network broadband subscriptions by download speed on the historically reported basis of 'up to' speeds²² in Guernsey and Jersey respectively. Fibre-based services are included in this classification, notwithstanding that fibre connections have different characteristics from those delivered by xDSL over copper.

Figure 15 – Fixed broadband subscriptions by download speed, Guernsey 2020



Source: Industry questionnaires

Figure 16 – Fixed broadband subscriptions by download speed, Jersey, 2020



The proportion of broadband subscriptions in Guernsey with download speeds of up to 50 and 100 Mbps has increased from 29.8% in 2019 to 37.6% in 2020.

In Jersey, changes in product classification from 250Mbps to 500Mbps download speeds mean that direct comparison to prior years is not possible, but all consumers with fixed broadband benefit from download speeds of at least 500 Mbps. In March 2020, in response to the COVID-19 pandemic, all customers on the JT network had their speed boosted to symmetrical 1Gb/s at no extra cost.

²² The Advertising Standards Agency has changed its guidelines on the reporting of broadband speeds. These classifications are in line with the older framework.

Data volumes

Not all service providers were able to provide information on the volumes of data consumed by their customers but, from the information that was provided, it can be estimated that, on average, fixed network broadband subscribers (including mobile substitutions) in Guernsey each sent and received an average of 252 Gbytes of data per month in 2020 while subscribers in Jersey each sent and received an average of 298 Gbytes per month. The equivalent figures for 2019 were 183 Gbytes in Guernsey and 209 Gbytes in Jersey, demonstrating a significant increase (38.1% and 42.8% respectively). Data usage continues to rise rapidly, as has been seen in the UK where data usage per subscriber per month has risen to 429 Gbytes per month in 2020 (up from 315 Gbytes in 2019).²³

There had been a strong upward trend prior to 2020, but the large increases in data usage in 2020 compared to 2019 in both Islands are likely to be related to changes in consumer needs brought about by COVID-related lockdowns with increased home working and schooling.

Revenues

Total retail revenues in 2020 from fixed broadband services were £9.6m in Guernsey; up from £8.8m in 2019. Revenues in Jersey in 2020 have increased to £16.6m from £15.8m in 2019.

Fixed network broadband services in Guernsey were, subject to fair usage policies, generally uncapped, meaning that consumers could download and upload as much data as they wish for a fixed monthly subscription. 97.8% of revenues were derived from basic subscriptions and 2.2% from other sources such as usage above the basic subscription, any bolt-ons such as overage and out-of-bundle charges, and equipment sales.

In Jersey, some fixed network broadband services retailed by JT are subject to caps on the amount of data its customers can download, with the allowed amount depending on the monthly subscription; customers can also buy bolt-on packages for extra data allowances and/or pay overage charges. Sure and Homenet sell subscriptions with unlimited usage, subject to fair usage policies. 96.2% of revenues in Jersey were derived from basic subscriptions and 3.8% from other sources.

Average revenue per subscription

Estimated²⁴ average revenue per fixed network broadband subscription in Guernsey was £378 for the year (£31.52 per month). This shows an increase of 7.4% compared to 2019.

The equivalent 2020 figures in Jersey were £419 for the year (£34.94 per month), showing an increase of 1.6% compared to 2019.

The above figures exclude revenues from associated line rental.

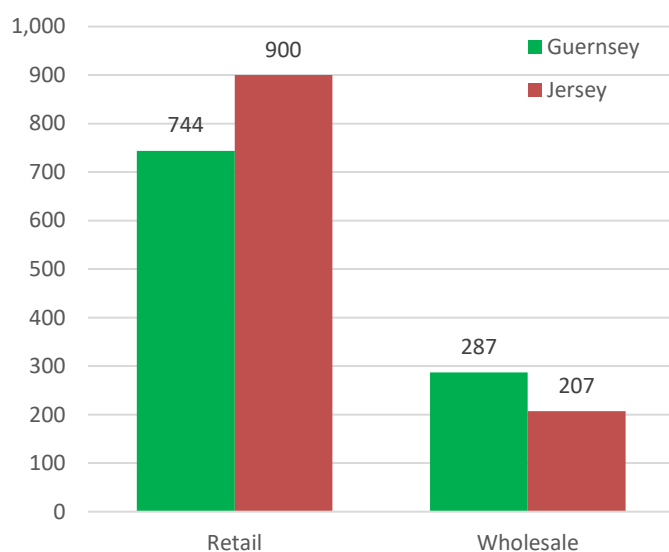
²³ Ofcom report : Connected Nations 2020 [Connected Nations 2020: UK report \(ofcom.org.uk\)](https://www.ofcom.gov.uk/consult/condocs/cn20/cn20_full_report.pdf)

²⁴ Not all operators were able to separate retail revenues derived from true fixed network broadband activities from those derived from broadband provided by fixed network substitution. It is therefore only possible to estimate the average revenues per fixed broadband subscription. Figures here as elsewhere exclude GST where relevant.

Leased line market

Leased lines (sometimes called private circuits) are private, bi-directional, symmetric telecommunications links between two or more locations. Usually used by corporate and governmental organisations, they can be used for voice or data services. Leased lines are also used by licensed operators to provide mobile network backhaul.

Figure 17 – Number of retail and wholesale leased lines in the Channel Islands, 2020



Source: Industry questionnaires

The number of retail leased lines has increased in Guernsey to 744 from 705 lines in 2019, but has decreased to 900 from 1,005 in Jersey. Wholesale leased lines have decreased in both islands: to 287 from 314 in 2019 in Guernsey, and to 207 from 249 in Jersey. There has been significant growth in both Islands in subscriptions to leased lines in the faster band width of over 100 Gbps.

Table 6 shows how leased lines were used in 2020.²⁵

Table 6 – Numbers of leased lines by usage, 2020

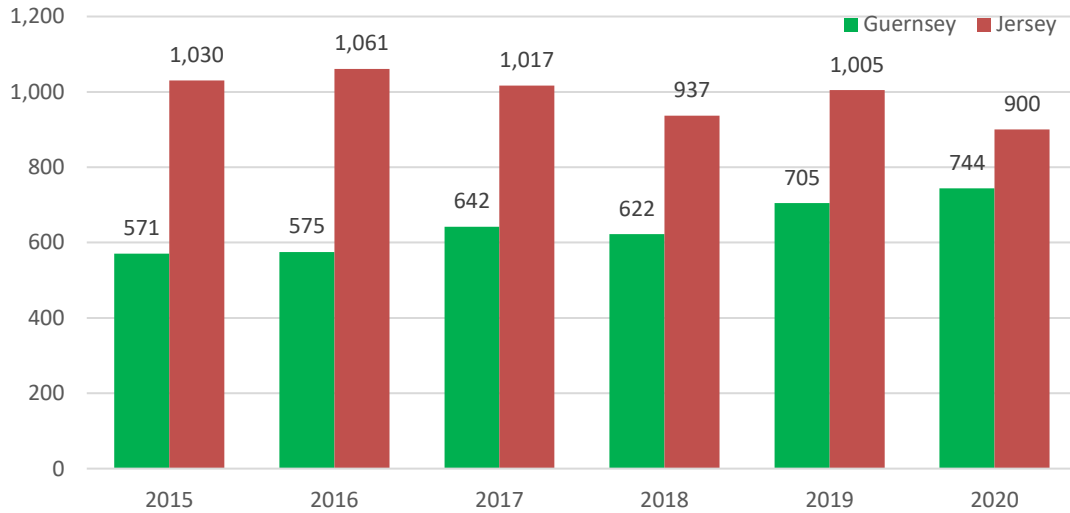
	Guernsey			Jersey		
	On-Island	Inter-Island	Off-Island	On-Island	Inter-Island	Off-Island
Retail	629	37	78	727	43	130
Wholesale	253	1	33	150	1	56

Source: Industry questionnaires

²⁵ On-Island leased lines are defined as lines that originate and terminate in the same Island. Inter-Island leased lines originate in one Island and terminate in another. Off-Island leased lines connect Channel Islands locations with non-Channel Island locations.

Figure 18 shows the number of retail leased lines in the Islands during the period 2015 to 2020.

Figure 18 – Number of retail leased lines in the Channel Islands, 2015 to 2020



Source: Industry questionnaires

The number of lines in Guernsey is continuing to grow while the number of lines in Jersey has decreased by 10% in 2020.

Market share by numbers of leased line subscriptions

Figures 19 and 20 show the retail market shares of the structured leased line providers in Guernsey and Jersey respectively by numbers of leased line subscriptions. In 2020, JT was the main provider in both Islands.

Figure 19 – Retail leased line market share by number of subscriptions – Guernsey

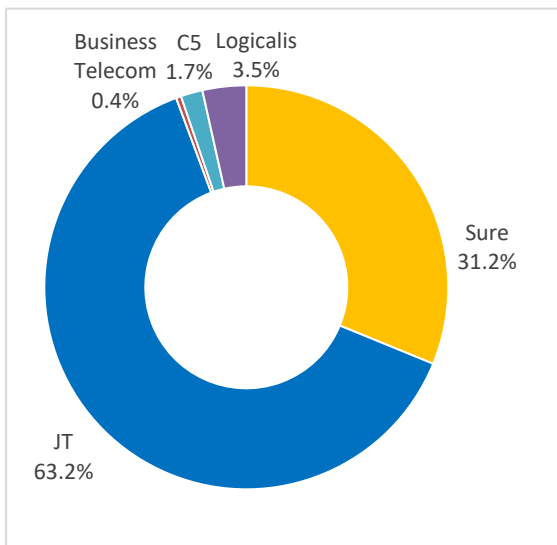
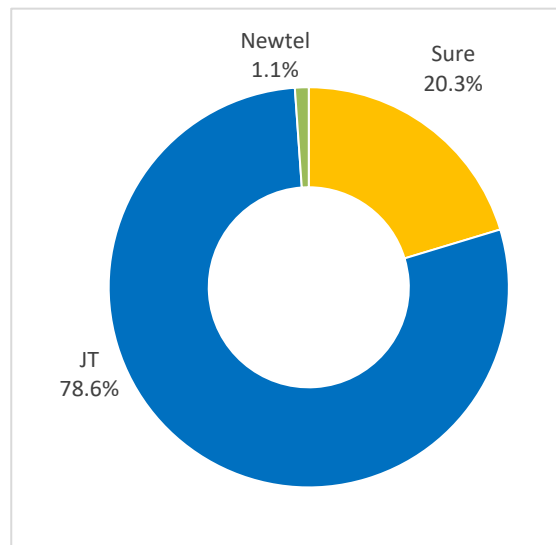


Figure 20 – Retail leased line market share by number of subscriptions – Jersey



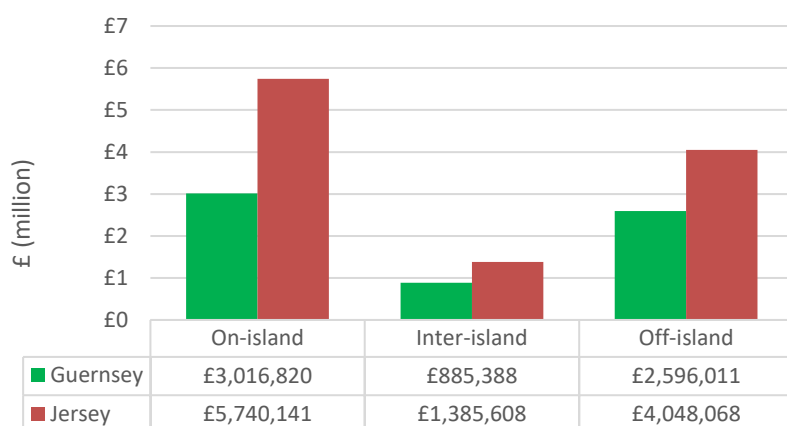
Source: Industry questionnaires

Retail leased line revenues

Total revenues from retail leased lines in Guernsey in 2020 were £6.5m (equivalent to 2019), and in Jersey in 2020 were £11.2m (£11.8m in 2019).

Figure 21 shows the breakdown of these totals by on-Island, inter-Island and off-Island services.

Figure 21 – Revenues from retail leased lines by activity, 2020



Source: Industry questionnaires

N.b. The figures within the chart exclude wholesale leased line revenue and do not represent the total revenue derived from leased lines in each Island.

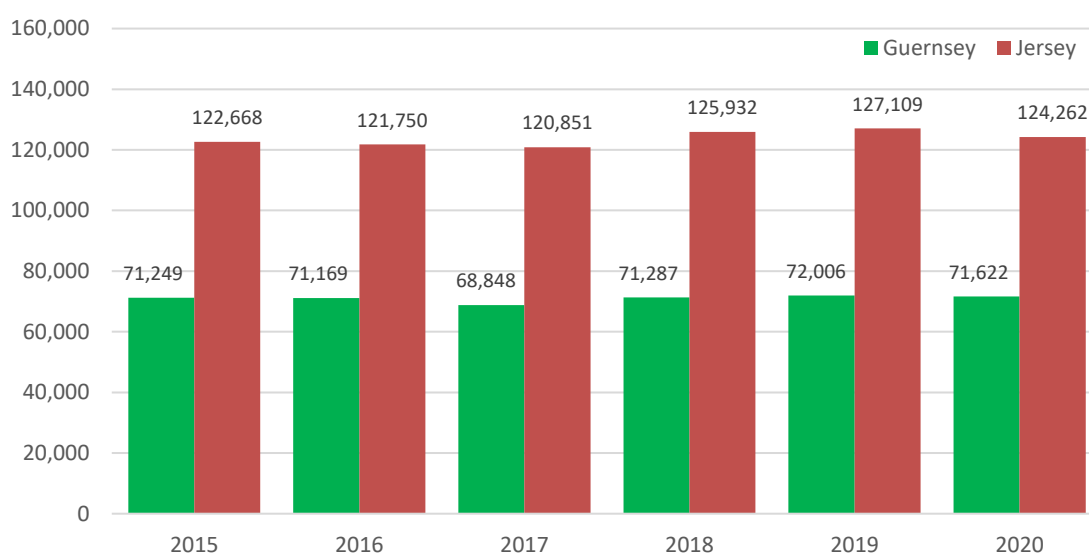
Mobile market

Subscriptions, penetration rates and market shares

In 2020, there were three mobile network operators (MNO) with commercial activities in Jersey and Guernsey: Sure, JT and Airtel. Homenet retail access to these MNO networks for data only.

Figure 22 shows the total number of mobile subscriptions in the Islands during the period 2015 to 2020. The figures include pre-paid (i.e. pay as you go) and post-paid (i.e. contract) subscriptions.

Figure 22 – Number of active mobile subscriptions in the Channel Islands, 2015 to 2020



Source: Industry questionnaires

N.b. The figure for Jersey in 2016 is estimated due to reporting difficulties for one operator.

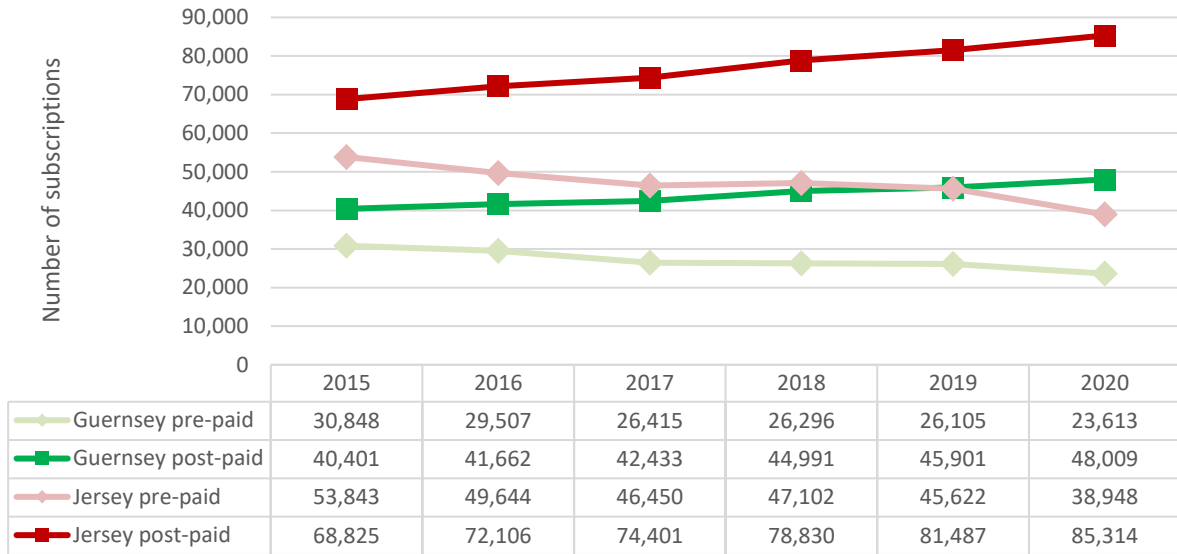
Overall, mobile subscriptions decreased in 2020 after continued gradual growth in both Islands. In 2020, there was a decrease in mobile subscriptions in Guernsey of 0.5% compared to 2019 and in Jersey there was a decrease of 1.6%.

The upward trend in post-paid subscriptions continued in both Islands in 2020, whilst there has been a continued decrease in pre-paid subscriptions; down by 9.5% in Guernsey and 14.6% in Jersey compared to 2019. These larger falls in 2020 could again be explained to an extent by the reduced number of inbound travellers as a consequence of the COVID-19 pandemic.

Figure 23 on the next page provides a breakdown of pre-paid and post-paid mobile subscriptions in each Island over the period 2015 to 2020.²⁶

²⁶ Pre-paid subscribers make payment in advance of using the service; typically they are not business users and have low levels of usage. In contrast post-paid subscribers tend to have higher usage levels and are charged monthly in arrears paying by direct debit. Figures in this report exclude pre-paid customers that have been deactivated in the last 12 months due to inactivity.

Figure 23 – Pre- and post-paid mobile subscriptions, 2015 to 2020

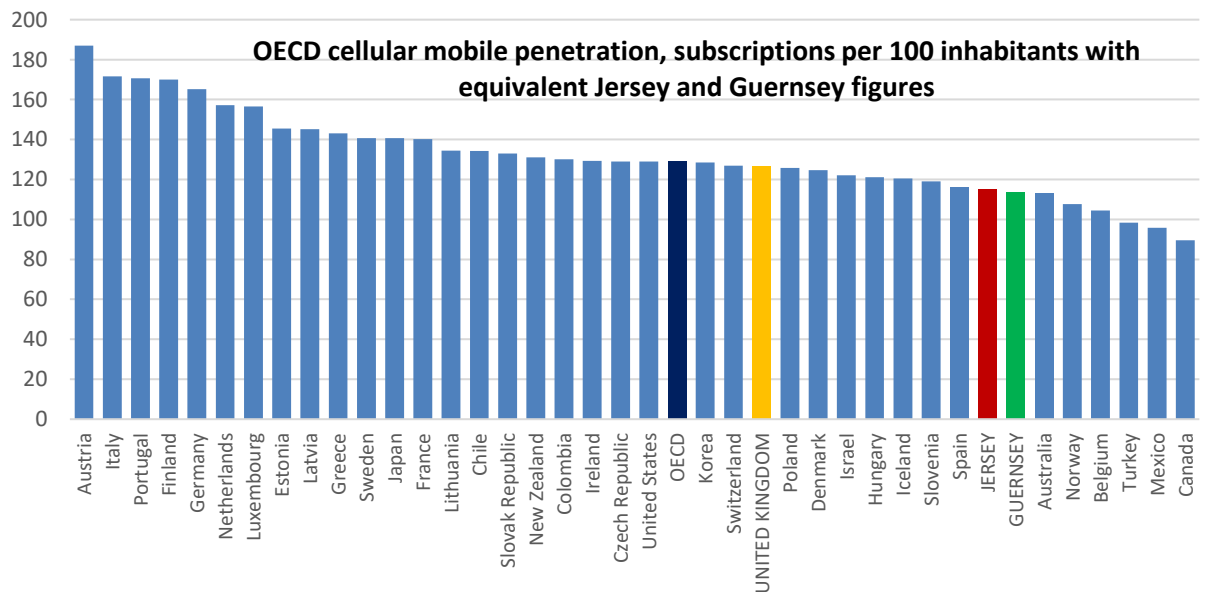


Source: Industry questionnaires
 N.b. Jersey figures for 2018 have been adjusted since the 2018 report

In common with many developed countries, the number of active mobile subscriptions in the Channel Islands is greater than the number of inhabitants. At the end of 2020 in Guernsey there were 113 active subscriptions per 100 inhabitants, and in Jersey there were 115 subscriptions per 100 inhabitants. These penetration rates in 2020 represent a slight decrease on 2019.

Figure 24 shows the mobile penetration rates in Guernsey and Jersey compared to the penetration rates within OECD countries.

Figure 24 - Mobile penetration rates in Guernsey and Jersey compared to OECD countries



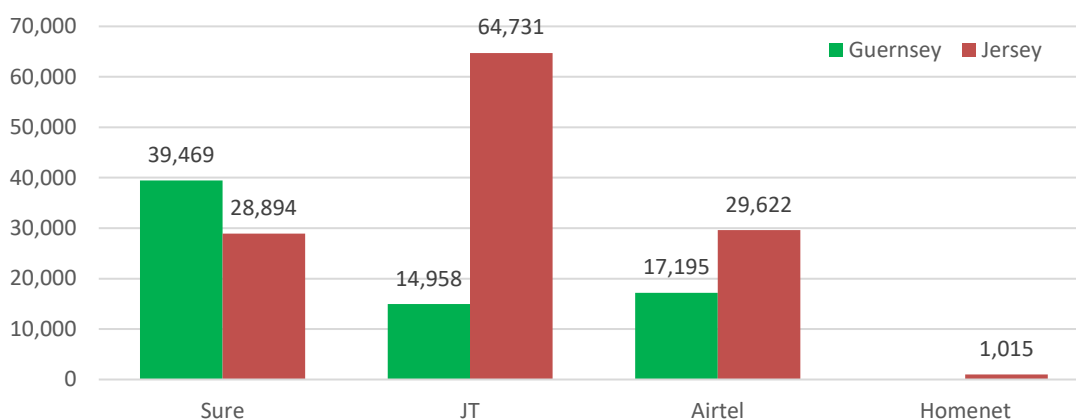
Sources: Industry questionnaires, OECD²⁷ (April 2020). N.b. The comparative data set used in the 2018 report was incorrect.

²⁷ OECD data updated April 2020: <https://www.oecd.org/sti/ieconomy/oecdkeyvictindicators.htm>

The chart shows that mobile penetration rates in the Channel Islands were lower than in the UK (126) and also than the OECD average (129).

Figure 25 provides a breakdown of the total number of mobile subscriptions for the 4 mobile operators in the Islands.²⁸

Figure 25 – Number of mobile subscriptions by operator, 2020



Source: Industry questionnaires

Compared to 2019, JT and Airtel have experienced a reduction in their number of subscriptions in Jersey but have grown their subscriptions by a small amount in Guernsey. Sure has experienced the largest decrease in subscriptions in both islands.

Table 7 shows the market shares of each operator in Guernsey and Jersey respectively between 2015 and 2020.

Table 7 – Mobile market share (%) of subscriptions in Guernsey and Jersey, 2015 to 2020

	Guernsey			Jersey			
	Sure	JT	Airtel	Sure	JT	Airtel	Homenet
2015	60	19	21	24	55	21	0
2016	59	20	21	24	55	21	0
2017	60	19	22	25	54	21	0
2018	57	19	24	24	51	24	1
2019	56	20	23	24	51	24	1
2020	55	21	24	23	52	24	1

Source: Industry questionnaires

The incumbent operators of Sure in Guernsey and JT in Jersey have gradually been losing market share to the other operators although this trend appears to have slowed between 2018 and 2020, with JT regaining some of their market share in Jersey in 2020.

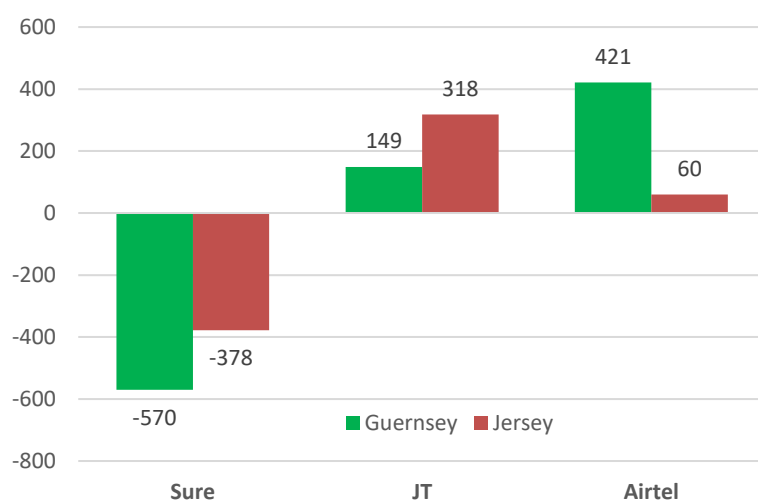
²⁸ All mobile operators report “Active Subscribers” based on a 90-day cycle period.

Switching activity in the Guernsey and Jersey mobile markets

One measure of the competitive dynamics apparent in markets is the extent to which consumers switch from one supplier to another. Switching is usually associated with the process called ‘porting’ whereby consumers can switch from one supplier to another while keeping their telephone number; in effect, consumers ‘port’ their mobile telephone number from one telecommunications supplier to another. In the Channel Islands, number porting is available intra-Island but not inter-Island.

In Figure 26 and Table 8, ‘porting-in’ describes the number of consumers moving to a new supplier and ‘porting-out’ describes the number of consumers leaving their existing supplier.

Figure 26 – Net number of consumers switching mobile service provider, 2020



Source: Porting XS MNP Channel Islands data 2020

Since 2018, and continuing the trend from the previous year, Sure has made a net loss of mobile consumers to JT and Airtel in both Islands. In 2020, JT made net gains of subscribers from Airtel in Jersey, while Airtel gained from JT in Guernsey.

Table 8 – Mobile number porting activity in Guernsey and Jersey, 2020

	Guernsey			Jersey		
	Sure	JT	Airtel	Sure	JT	Airtel
Port in	328	525	777	604	1,068	817
Port out	898	376	356	982	750	757
Net benefit	-570	149	421	-378	318	60

Source: Porting XS MNP Channel Islands data 2020

Table 9 shows the percentage of registered mobile numbers that switched service provider in Guernsey and Jersey from 2015 to 2020. Porting activity remains at a level below that in the UK, where 10% of the active subscriber base ported in 2015.^{29 30}

Table 9 – Levels of mobile number switching in Guernsey and Jersey, 2015 to 2020

% of mobile subscribers switching provider	2015	2016	2017	2018	2019	2020
Guernsey	1.9	1.6	2.8	2.8	2.5	2.3
Jersey	3.4	2.4	3.7	3.1	2.5	2.0

Source: Porting XS MNP Channel Islands data 2015 to 2020 and Industry questionnaires

1,630 mobile subscribers in Guernsey switched or “ported” between service providers in 2020. In Jersey, the equivalent figure was 2,489. This represented 2.3% of total mobile subscriptions in Guernsey, and 2.0% in Jersey.

In 2020, the number of working days required to complete a successful port from one service provider to another was at 1.1 working days in both Guernsey and Jersey.³¹ These times compare to the European Commission’s Universal Service Directive, which requires operators to provide porting within 1 working day.³²

Average porting times in Guernsey have decreased from 1.2 working days between 2016 and 2019. Average porting times in Jersey were at 0.9 working days in both 2017 and 2018, increasing to 1.2 days in 2019, with have decreased to 1.1 days in 2020.

²⁹ https://www.ofcom.org.uk/_data/assets/pdf_file/0023/38543/annex.pdf Page 38.

³⁰ Ofcom has not published data on porting since 2015 – the level of porting activity may have changed since.

³¹ Figures provided to the JCRA and GCRA by Porting XS

³² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0022&from=en>

Voice traffic - numbers of minutes

Figure 27 shows the number of mobile voice minutes originating on each operator’s network in each Island in 2020. This included traffic derived from in-roaming activities. In-roaming is the use of mobile services by customers of operators outside of the Channel Islands while roaming on networks within the Channel Islands.

Figure 27 – Total number of mobile minutes originating on CI mobile networks, 2020



Source: Industry questionnaires

The total number of mobile minutes has increased by 26.9% in Guernsey to 121.9 million in 2020 and has increased by 22.5% in Jersey to 202.0 million.

Table 10 shows the average number of mobile voice minutes in 2020 for pre-paid and post-paid subscriptions. On the assumption that out-roaming minutes are overwhelmingly associated with post-paid subscribers, these include all out-roaming voice minute activities. Out-roaming is the use of mobile services by customers of Channel Island operators while roaming on networks outside of the Channel Islands.

Table 10 – Average mobile voice minutes per pre-paid and post-paid subscription, 2020

	Guernsey	Jersey
Minutes per pre-paid subscriber	859	892
Minutes per post-paid subscriber	1,910	1,824

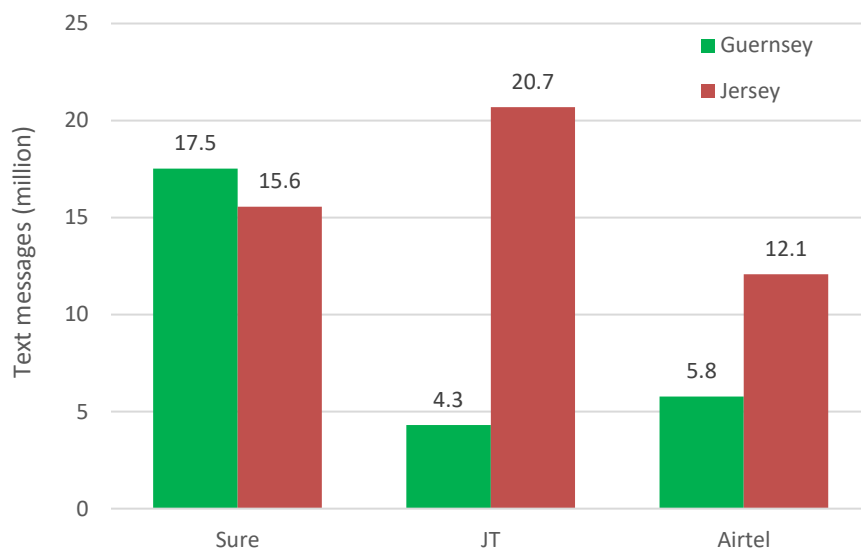
Source: Industry questionnaires

Compared to 2019, in Guernsey the number of minutes per pre-paid and post-paid subscriber have both increased by 32.5% and 27.8% respectively. In Jersey, minutes per pre-paid subscriber have increased by 21.9% and minutes per post-paid subscriber have increased by 25.3%.

SMS traffic – numbers of messages

Figure 28 shows the number of SMS text messages originating on each operator’s network in each Island in 2020. These include SMS messages associated with in-roaming activities.

Figure 28 – Total number of SMS text messages originating on CI mobile networks, 2020



Source: Industry questionnaires

Overall, text volumes have continued to fall in both Islands. In Guernsey, the number of messages decreased by 14.4% to 27.6 million, and in Jersey the number of messages decreased by 16.2% to 48.3 million.

Table 11 shows the average number of SMS text messages sent in 2020 for pre-paid and post-paid subscriptions. On the assumption that out-roaming text messages are overwhelmingly associated with post-paid subscribers, these include all out-roaming messages.

Table 11 – Average SMS text messages per pre-paid and post-paid subscription, 2020

	Guernsey	Jersey
SMS messages per pre-paid subscriber	215	224
SMS messages per post-paid subscriber	334	388

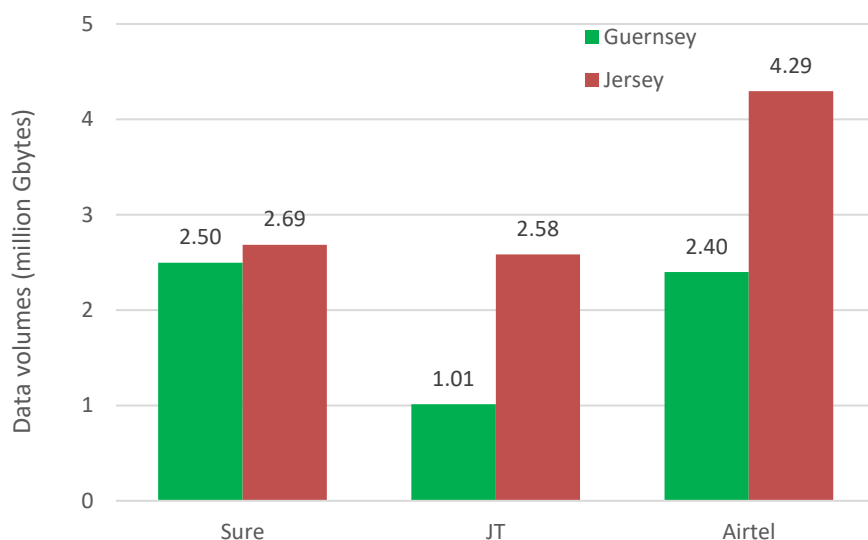
Source: Industry questionnaires

Compared to 2019, in Guernsey the number of SMS messages per pre-paid subscriber decreased by 4.1% and the number of SMS messages per post-paid subscriber decreased by 15.0%. In Jersey, the number of SMS messages per pre-paid subscriber decreased by 7.4% and the number of SMS messages per post-paid subscriber decreased by 17.5%.

Mobile data

Figure 29 shows the volume of data (in Gbytes) sent and received over each operator’s network in each Island in 2020. These include data associated with pre-paid and post-paid mobile sims and in-roaming activities.

Figure 29 – Mobile data volumes (Gbytes) sent and received on CI mobile networks, 2020



Source: Industry questionnaires

Overall, data volumes have continued to increase in both Islands. In Guernsey, the volume of data increased by 38.2% to 5.91 million Gbytes, and in Jersey the volume of data increased by 25.6% to 9.56 million Gbytes.

Table 12 shows the average data volume (in Gbytes) consumed in 2020 per Guernsey and Jersey pre-paid and post-paid subscription. On the assumption that out-roaming data activities are overwhelmingly associated with post-paid subscribers, this includes all out-roaming data activities.

Table 12 – Average data volumes sent and received per pre-paid and post-paid subscription, 2020

	Guernsey	Jersey
Gbytes of data per pre-paid subscriber	58.44	56.65
Gbytes of data per post-paid subscriber	86.48	79.81

Source: Industry questionnaires

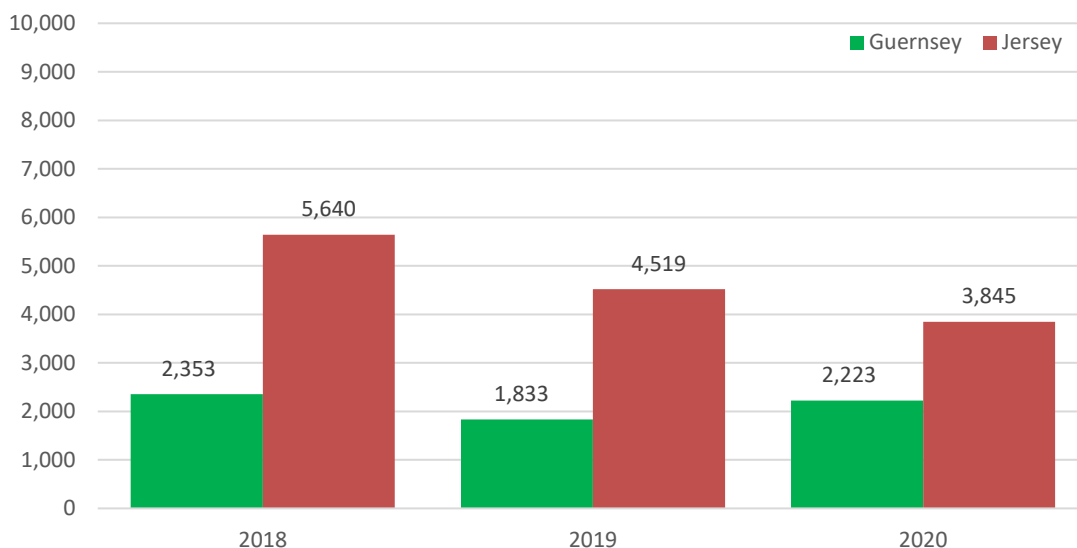
Compared to 2019, in Guernsey the volume of data per pre-paid subscriber increased by 78.8% and the volume of data per post-paid subscriber increased by 28.5%. In Jersey, the volume of data per pre-paid subscriber increased by 64.5% and the volume of data per post-paid subscriber increased by 16.9%.

As with most countries, the use of mobile for data purposes has been increasing rapidly while the number of SMS text messages has been falling.

Data only mobile SIMs

To monitor the changing nature of the mobile market, data is now collected on SIM card types to understand how many subscriptions there are for different types of SIM card.

Figure 30 – Number of data only subscriptions, 2018 to 2020



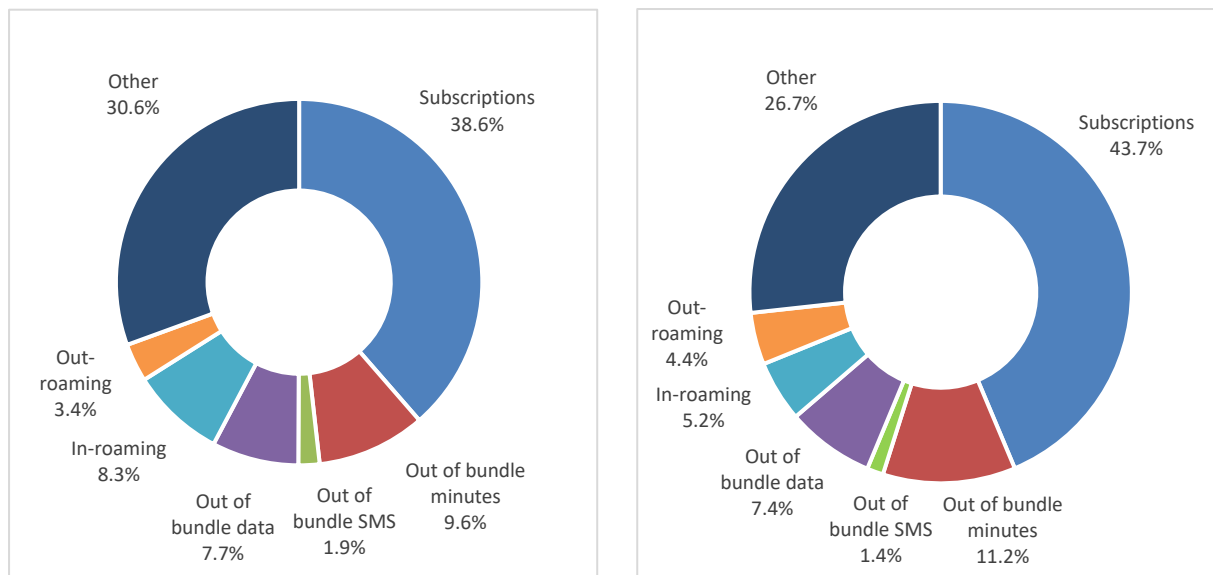
Source: Industry questionnaires

In 2020, there were 2,223 mobile subscriptions for data only in Guernsey and in Jersey there were 3,845. This represents an increase of 21.3% in Guernsey, but a decrease of 14.9% in Jersey.

Mobile revenue

Total revenues from mobile related activities in Guernsey in 2020 were £20.8m and in Jersey £36.2m. Revenue has fallen in both Islands compared to 2019. Figures 31 and 32 provide a breakdown of the sources of mobile revenues.

Figure 31 – Sources of mobile revenue in Guernsey Figure 32 – Sources of mobile revenue in Jersey



Source: Industry questionnaires

Subscriptions include basic packages (with inclusive amounts of minutes, texts and data) and all “bolt-ons” for additional minutes, texts and data. Other revenues include items such as handsets and mobile termination charges.

Taking account of the different ways that operators structure their retail offerings, estimates of the average annual spend on usage related charges (as opposed to handsets and other ancillary services) are shown in Table 13. For this purpose, all out-roaming revenues are assumed to be associated with post-paid subscribers.

Table 13 – Annual and monthly spend per pre-paid and post-paid subscription, 2020

		Guernsey	Jersey
Pre-paid	During 2020	£121.37	£119.15
	Per month	£10.11	£9.93
Post-paid	During 2020	£204.99	£234.46
	Per month	£17.08	£19.54

Source: Industry questionnaires

In Guernsey, the spend per pre-paid subscriber has increased by 17.5% compared to 2019, while the spend per post-paid subscriber has decreased by 25.0%. In Jersey, the equivalent changes were an increase of 19.4% and a decrease of 18.3% respectively.

Out-roaming

Out-roaming is the use of mobile services by customers of Channel Island operators while roaming on networks outside of the Channel Islands.

Out-roaming traffic levels

In Table 14, out-roaming call minutes relate to calls made and received by the mobile customers of Channel Island operators while roaming on networks outside the Channel Islands. Similarly, out-roaming SMS texts are those sent and received by Channel Island customers while using non-Channel Island networks and out-roaming data is data both sent and received by Channel Island customers while using non-Channel Island networks.

Table 14 – Out-roaming minutes, SMS texts and data volumes in the Channel Islands, 2020

	Guernsey	Jersey
Minutes	1,011,794	2,857,153
SMS texts	262,490	642,433
Data (Gbytes)	2,441	11,827

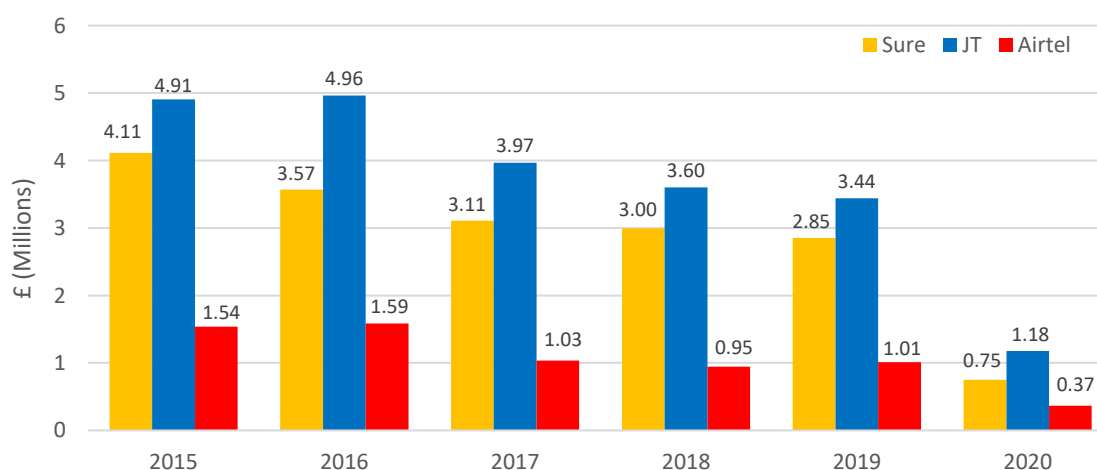
Source: Industry questionnaires

Out-roaming revenues

In 2020, operators in the Channel Islands generated total revenues of £2.3m from out-roaming activities (£7.3m in 2019); 4.3% of total mobile revenue (excluding in-roaming revenues).

Figure 33 shows total out-roaming revenues in the period 2015 to 2020, combining Guernsey and Jersey. Out-roaming revenues for the Channel Islands have fallen 68.6% since 2019. This fall should be viewed in the context of the reduced number of travellers as a result of the COVID-19 pandemic

Figure 33 – Total out-roaming revenues in the Channel Islands, 2015 to 2020



Source: Industry questionnaires

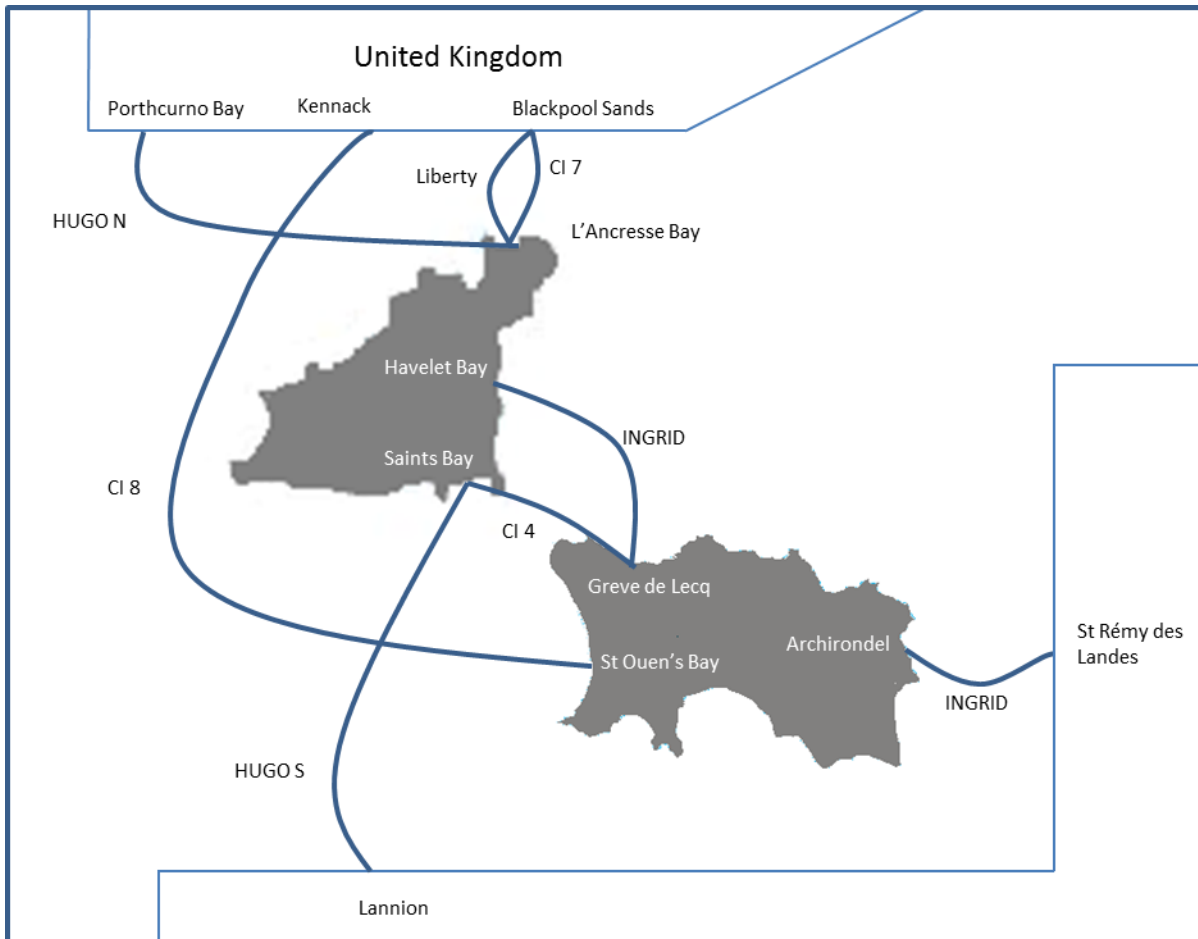
Off-Island links

Cable dispositions

Jersey and Guernsey have multiple submarine cables carrying voice, data and internet traffic between the Islands and to the U.K. and France. The existence of multiple routes for the transmission of information gives resilience, with different possibilities for the routing of traffic.

Not only are there multiple connections with the U.K. and France, but the four cables connecting the Channel Islands and the U.K. have three different landing points. The cables to France also have different termination points. Figure 34 gives a representation of the geographic distribution of cables and shows the multiple routes possible for traffic between Islands and outside of Guernsey and Jersey.

Figure 34 – Schematic representation of cable links (excluding UK to France)



Source: Industry questionnaires and various public sources

Cable capacities and utilisation

Modern systems for the transmission of information allow large amounts of data to be passed over fibre-optic cables. Dense Wavelength Division Multiplexing (DWDM) allows the transmission of multiple wavelengths over the same fibre strand, thus making the available bandwidth extremely large. The DWDM equipment fitted to most of the cables allows multiple 10Gbps wavelengths per fibre. Multiple fibres are present in each cable.

The management of traffic over cables is dynamic, and the amount of traffic is not measured in the same way by all operators, however the number of wavelengths in use and the information with which we have been provided makes clear that capacity is well in excess of usage at peak times. It is also clear that the re-routing of traffic in the event of damage to individual or even multiple cables is entirely achievable, as was demonstrated in 2016 when more than one cable to Jersey was severed in a marine incident but there was no significant impact on the Island's communications traffic as a result of effective co-operation between operators.

Glossary of terms

- Broadband connection - active high-speed Internet access connection, provided by either wireline or wireless delivery technologies, which could be provided with other fixed or mobile services.
- Bytes – a measure of bandwidth in a digital system.
1 Kilobyte (KB) = 1,024 Bytes. 1 Megabyte (MB) = 1,024 KB. 1 Gigabyte (GB) = 1,024 MB.
- Fixed calls - calls billed as part of a monthly subscription allowance and billed separately (when charged per minute) of all outgoing calls originating on a fixed network in the Channel Islands during the year, to all destinations i.e., Channel Islands, international, non-geographic, fixed and mobile.
- Fixed connection – active telephone line (PSTN or ISDN) retailed by a telecommunications operator, identified by having a fixed line telephone number (area code + 6-digit local number) plus fixed wireless connections which may or may not have an associated telephone number.
- Inhabitants – the number of inhabitants of the Islands is used to standardise various metrics throughout the report. The numbers are as follows:

Guernsey	63,155 estimated at 30 March 2020 ³³
Jersey	107,800 estimated at 31 December 2019 ³⁴
- Mobile connection – mobile phone retail connection on a telecommunications operator’s network with a mobile telephone number that has been active within the previous 90 days.
- Roaming – the practice of using a mobile phone on another operator’s network.
In-roaming refers to the use of mobile services by customers of operators outside of the Channel Islands while roaming on networks within the Channel Islands.
Out-roaming refers to the use of mobile services by customers of Channel Island operators while roaming on networks outside of the Channel Islands.
- Subscription - individual telephone number or connection, whether fixed or mobile. It is important to bear in mind that it does not apply to an individual; a person or a business may use a number of connections and telephone numbers each of which counts as one subscription.

Statistics Jersey

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³³ Guernsey Annual Electronic Census Report, 28th January 2021, <https://www.gov.gg/CHttpHandler.ashx?id=135941&p=0>

³⁴ Population estimates for 2019 at www.gov.je/Government/JerseyInFigures/Population/Pages/Population.aspx