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Telecommunications Statistics and Market Report 2019





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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 support the Authorities in prioritising their own resources as markets change and competition develops.

Previous 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 Statistical 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 2019 and is based primarily on data submitted by the licensed telecommunications operators during the first half of 2020. All 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 2019 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 2018 and 2019. Some of the calculations from the consolidated submissions from 2018 have also been reviewed and amended. 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.

Significant changes to the report were made in 2015 so as to reflect the changing nature of telecommunications technologies and the services provided to consumers.² Consequently, users of this report should be mindful that the figures shown for 2015 to 2019 are not necessarily comparable with data published prior to 2015. Notes are added to the text as appropriate. Statistics Jersey, 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.

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.

² For example, data was included from other licensed operators for whom telecommunications activities form a minor part of their businesses (Nitel, Business Telecom, Logicalis and C5) in addition to the main operators (JT, Sure, Airtel, Homenet and Newtel).



Overview of the Channel Islands Telecoms Market in 2019

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 2019



£64 million

Total revenues from Guernsey-based customers



£5.9 million



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



212 staff employed



In Guernsey in the supply of telecommunication services to Guernsey customers as at the end of 2019



£16 million



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



705



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



per 100 inhabitants with fixed or wireless broadband, compared to OECD average of 32



Contribution to Jersey's economy in 2019



£107 million

Total revenues from Jersey-based customers



£15.3 million



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



592 staff employed



In Jersey in the supply of telecommunications services to Jersey customers as at the end of 2019



£19 million



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



1,005



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

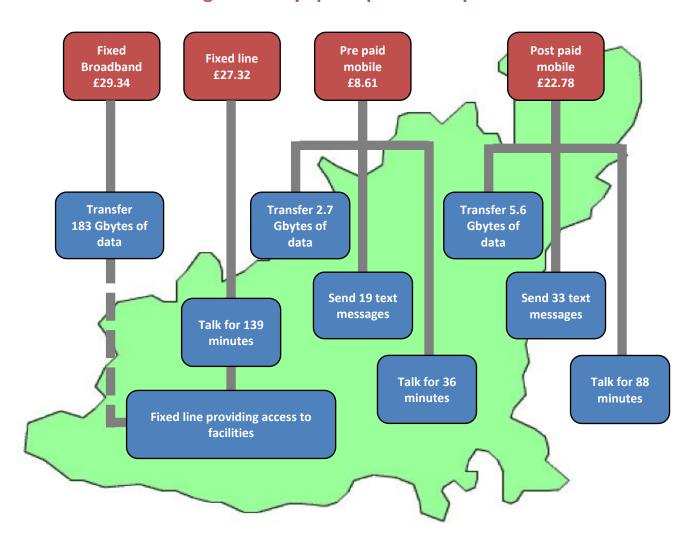


36 per 100 inhabitants with fixed or wireless broadband, compared to OECD average of 32



Guernsey Consumer Snapshot in 2019

Average monthly spend per subscription

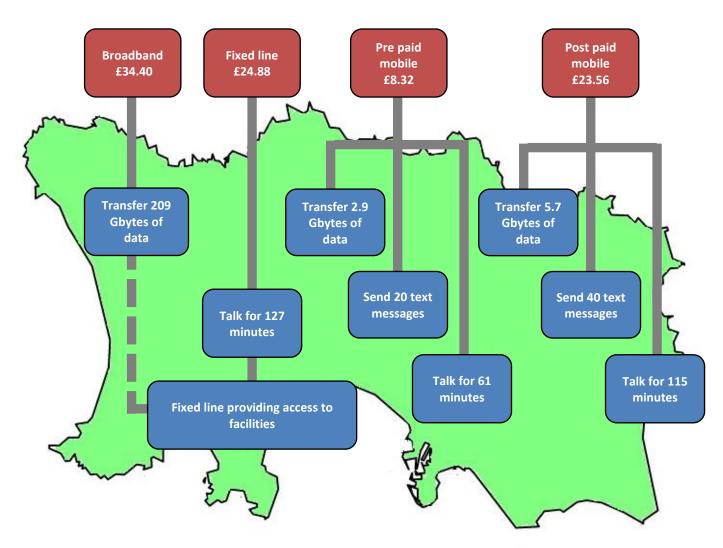


Average monthly consumption per subscription



Jersey Consumer Snapshot in 2019

Average monthly spend per subscription (excluding GST)



Average monthly consumption per subscription



Executive Summary

Overall economic impact of the telecommunications sector

In Guernsey during 2019, the main operators offering telecommunications services were Sure³ (the incumbent offering a full range of fixed and mobile services), JT⁴ (offering fixed and mobile services) and Airtel⁵ (offering mobile services).

In Jersey during 2019, 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), Homenet⁶ (offering residential services through various technologies) and Newtel⁷ (offering fixed business services).⁸

Other licensed operators providing retail telecommunications services to business customers across the Channel Islands include Nitel⁹, Logicalis¹⁰, Business Telecom¹¹ and C5¹².

The telecommunications industry in the Channel Islands in 2019:

- generated turnover, including fixed, mobile, Internet access, associated services and the sale of handsets of £171.0m¹³; £64.0m in Guernsey and £107.1m in Jersey
- employed 804 full time equivalent staff as at the end of 2019; 212 in Guernsey and 592 in Jersey
- contributed £21.2m to the exchequers through corporate, staff, and social taxes (including GST payments in Jersey); £5.9m in Guernsey and £15.3m in Jersey
- invested £34.7m in capital projects; £16.1m in Guernsey and £18.7m in Jersey

Compared to 2018, overall turnover, employment, tax contributions and capital investment have increased in the telecommunications industry across the Channel Islands. Turnover has increased in both Islands, but employment has fallen in Guernsey. In line with higher turnover, contribution to tax has increased in both Islands compared to 2018. Capital investment in Jersey decreased by a small amount due to a reduced investment in IT systems and networks, but has increased significantly in Guernsey, primarily on IT systems, following lower levels of investment over the previous 2 years.

³ Sure refers to Sure (Guernsey) Limited and Sure (Jersey) Limited as appropriate.

⁴ JT refers to JT (Guernsey) Limited (formerly known as Wave Telecom) and JT (Jersey) Limited as appropriate.

⁵ Airtel refers to Airtel-Vodafone being Guernsey Airtel Limited and Jersey Airtel Limited as appropriate.

 $^{^{\}rm 6}$ Homenet refers to Home Net Limited in Jersey.

⁷ Newtel refers to Newtel Limited in Jersey.

⁸ Homenet took over all residential services from Newtel in 2014.

⁹ Nitel refers to Nitel Limited in Jersey.

¹⁰ Logicalis refers to Logicalis Guernsey Limited and Logicalis Jersey Limited as appropriate.

¹¹ Business Telecom refers to Business Telecom Limited in Guernsey.

¹² C5 refers to C5 IT Services (Guernsey) Limited in Guernsey and C5 Alliance Limited in Jersey.

¹³ 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 2019 increased by 2.3% to £11.2m in Guernsey and decreased by 6.9% to £14.2m in Jersey.

The number of fixed lines and subscriptions decreased by 4.7% to 34,041 in Guernsey and decreased by 0.9% to 47,425 in Jersey.

In 2019, there were 54 fixed line subscriptions per 100 inhabitants in Guernsey and 44 per 100 inhabitants in Jersey compared to 57 and 45 respectively in 2018.

Average revenue per fixed (wireline and wireless) subscription per month in Guernsey was £27.32 (+7.4%) and in Jersey it was £24.88 (-6.0%).

Fixed line call minutes fell in Guernsey by 8.6% to 62.3 million and in Jersey by 11.7% to 87.4 million.

In 2019, Sure was providing 19.3% of the fixed network wireline 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 9.5% of Guernsey's fixed network wireline connections by 2019. JT also has a fibre-optic network in Guernsey over which it provides some fixed line connections.

Broadband market

Total fixed broadband revenues in 2019 increased by 8.5% to £8.8m in Guernsey and increased by 11.3% to £15.8m in Jersey.

The number of fixed lines broadband subscriptions increased by 1.9% to 24,873 in Guernsey and increased by 1.2% to 38,391 in Jersey.

Fixed broadband¹⁴ penetration rates per 100 inhabitants were 39.3 in Guernsey and 35.6 in Jersey (not including mobile substitutions), compared with 40.1 in the UK. The OECD average is 31.8 15 . When data-only mobile access is included, penetration rates are 42.7 for Guernsey and 39.8 for Jersey.

Average monthly revenue per fixed network broadband subscription was £29.34 in Guernsey (+6.5%) and £34.40 in Jersey (+9.9%).

The total volume of data downloaded and uploaded in 2019 by broadband subscribers in Guernsey increased by 5.4% to 54,571,196 Gbytes. In Jersey, the volume of data in 2019 increased by 23.1% to 96,117,657 Gbytes.

The rise in data consumption seen in the UK is mirrored in the Channel Islands, although it has not been as great locally. In 2019, average consumption on the fixed network in Guernsey was 183 Gbytes/month, and in Jersey it was 209 Gbytes/month. In the UK it was 313 Gbytes/month¹⁶. UK data usage is very high compared to other jurisdictions: in the UK fixed broadband data per capita was 95

¹⁴ For this report, the terms 'broadband' and 'internet' interchangeably refer to internet access services.

¹⁵ OECD broadband statistics at: https://www.oecd.org/sti/broadband/broadband-statistics/

 $^{^{16}\} Of com\ report: Connected\ Nations\ 2019\ \underline{https://www.ofcom.org.uk/}\ \underline{data/assets/pdf}\ file/0023/186413/Connected-Nations-2019-UK-final.pdf$



Gbytes/month¹⁷, above any other comparator used by Ofcom in their International Broadband Scorecard. In 2019, Guernsey and Jersey were at 72 and 74 Gbytes/month respectively.

The technology and download speeds available for broadband internet access differ between the Islands. Guernsey subscribers are 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, most of the network had been converted to fibre and subscribers had access to products with advertised download speeds up to 1Gbps. Some copper lines were still providing voice services, and Homenet's WiMax and Fibre to the Home (FTTH) networks also serviced some subscribers, giving speeds of up to 20Mbps and up to 100Mbps.

In Guernsey, 74% of fixed network broadband subscription used services of up to 20Mbps, with the remaining 26% using services in a range up to 100Mbps. In Jersey 94% of fixed subscribers used up to 250Mbps services with the remaining 6% using services of up to 1Gbps.¹⁸

Leased lines market

The retail leased line market was worth £6.5m in Guernsey and £11.8m in Jersey in 2019; up from £5.1m and £10.8m respectively. These figures exclude wholesale leased lines.

The number of retail leased lines in Guernsey has increased from 622 lines in 2018 to 705 lines in 2019. In Jersey, the market has also increased from 937 lines in 2018 to 1,005 lines in 2019. The number of wholesale leased lines in Guernsey has increased from 281 to 314, while the number of wholesale leased lines has fallen from 306 to 249 in Jersey.

In Guernsey, 37% of Direct Internet Access (DIA) lines were enabled for bursting to higher data rates when demand requires it. In Jersey, 16% were enabled for bursting.¹⁹

Mobile market

Total mobile-related revenues in 2019 decreased in Guernsey by 4.1% to £23.4m and decreased in Jersey by 1.2% to £40.2m in Jersey.

The total number of mobile subscriptions in the Channel Islands in 2019 increased by 1.0% to 199,115, with both Islands showing a similar increase. In Guernsey, there were 72,006 mobile subscriptions representing 114 per 100 inhabitants, and in Jersey there were 127,109 mobile subscriptions representing 118 per 100 inhabitants. These are the same penetration rates as in 2018.

¹⁷ Ofcom: https://www.ofcom.org.uk/research-and-data/telecoms-research/broadband-research/eu-broadband-scorecard/2019-interactive-data

¹⁸ The Advertising Standards Agency has changed its guidelines on the reporting of broadband speeds. These classifications are in line with the older framework.

¹⁹ There is a large variability year-on-year in the data with which we have been provided. These variances could be real or related to accuracy problems.



In both Guernsey and Jersey, 2.5% of registered mobile numbers switched or "ported" between service providers in 2019. Sure has lost the highest number of mobile subscribers, with JT making the highest net gains in mobile subscribers in both Islands.

In 2019, average porting times for consumers switching mobile service provider was at 1.2 working days in both Guernsey and Jersey²⁰. These times compare to the European Commission's Universal Service Directive, which requires operators to provide porting within 1 working day.²¹ Porting times in Guernsey have remained at the same level over the past 4 years. Porting times in Jersey have increased to 1.2 working days from 0.9 days in both 2017 and 2018.

Average monthly revenues per subscription in Guernsey were £8.61 (-8.5%) for pre-paid and £22.78 (+2.6%) for post-paid in 2019. In Jersey, average monthly revenues were £8.32 (-0.2%) for pre-paid and £23.56 for post-paid (-2.6%).

In 2019, the average number of annual call minutes made for every pre-paid subscription in Guernsey decreased by 10.0% to 431 and the average number of annual call minutes for post-paid subscriptions also decreased by 10.0% to 1,059. In Jersey, pre-paid call minutes increased by 11.6% to 731 and post-paid call minutes decreased by 1.9% to 1,384.

The average number of SMS text messages sent for pre-paid subscribers in Guernsey during 2019 decreased from 266 to 224 and post-paid subscribers sent an average of 393 messages; down from 515. In Jersey, the number of text messages sent for pre-paid subscribers decreased from 282 to 242 and the number of text messages sent by post-paid subscribers decreased from 612 to 478.

In Guernsey, the average data volume sent and received per pre-paid mobile subscriber increased by 22.3% to 32.68 Gbytes and the average data volume for post-paid subscribers increased by 12.5% to 67.31 Gbytes. The equivalent figures for Jersey showed an increase for pre-paid subscribers of 21.0% to 34.43 Gbytes and an increase for post-paid subscribers of 15.5% to 68.26 Gbytes.

Sure supplied 56% of the mobile subscriptions in Guernsey, followed by Airtel (23%) and JT (20%). In Jersey, JT supplied 51% of total mobile subscriptions, with Sure and Airtel both supplying 24% each. Homenet had 1% of the mobile subscriptions market in Jersey.

In 2019, Channel Islands consumers generated revenues for local operators of £7.3m using mobile services while roaming abroad, £0.2m less than in 2018.

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.

²⁰ Porting XS

²¹ http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0022&from=en



Economic impact of the telecommunications sector

This section of the report presents general data about the Jersey and Guernsey telecommunications sectors for 2019.

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 services²²) was £171.0m in 2019; up from £162.6m in 2018. Turnover includes revenues associated with Channel Island subscribers while on and off the Islands, plus revenue from visitors to the Islands in 2019.

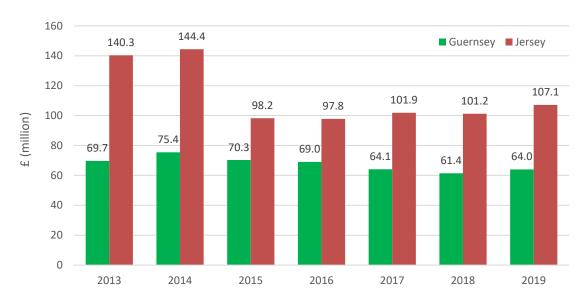


Figure 1 – Total turnover of the telecommunications industry in the Channel Islands, 2013 to 2019

Source: Industry questionnaires

N.b. All years prior to 2015 include significant revenues from JT's international business (as well as that generated from Channel Island customers) and the total revenues associated with data centres (rather than the telecommunications activities associated with them). These elements have been removed from later figures and represent a large part of the considerable difference in revenue demonstrated.

- 2016 figures have been adjusted since the 2016 report based on updated information provided.
- 2017 figures have been adjusted since the 2017 report based on updated information provided.
- 2018 figures have been adjusted since the 2018 report based on updated information provided.

Total turnover in Guernsey increased by 4.2% in 2019 compared to 2018, while total turnover increased by 5.8% in Jersey.

²² 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 2019. The fixed and mobile figures include revenues from both voice and data services, and for both retail and corporate customers.

£45 £40 £35 £30 £25 £20 £15 £10 £5 £0 Fixed network Mobile Leased lines Other Wholesale Data centre network retail retail Guernsev £22,793,027 £4,011,450 £19,384,114 £10,716,478 £2,617,311 £4,431,063 £40,842,959 £28,917,276 £17,097,944 £9,943,090 £4,479,920 £4,797,147 Jersey

Figure 2 – Total turnover by type of telecommunication activity, 2019

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; notably for leased lines which are specifically related to retail leased lines within the executive summary on page 10 and in the relevant section on page 26.

In both Guernsey and Jersey, the highest turnover was generated from mobile network retail, with this activity being a larger proportion of turnover (38.5%) 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, 2018 vs. 2019 (£ million)

| | Guernsey | | Jersey | | Total | | |
|--------|----------|------|--------|-------|-------|-------|--|
| | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | |
| Fixed | 36.8 | 36.7 | 62.8 | 61.4 | 99.5 | 98.2 | |
| Mobile | 22.4 | 22.8 | 37.7 | 40.8 | 60.2 | 63.6 | |
| Other | 2.2 | 4.4 | 0.7 | 4.8 | 2.9 | 9.2 | |
| Total | 61.4 | 64.0 | 101.2 | 107.1 | 162.6 | 171.0 | |

Source: Industry questionnaires

The biggest share of revenue in Guernsey and Jersey was generated in the fixed sector. In 2019 in both Guernsey and Jersey, it accounted for 57% of total industry turnover. However, the growth over recent years has been in the mobile sector.



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 2013.

■ Guernsey ■ Jersey Number of employees

Figure 3 – Full-time equivalent employees in the telecommunications sector, 2013 to 2019

Source: Industry questionnaires

In 2019, 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 nearly 10%, while the number of employees in Jersey has increased by over 40%.

Taxation contributions

Figure 4 shows that the telecommunications sector contributed £21.2m in taxation in 2019 (£20.3m in 2018); £5.9m in Guernsey (£5.4m in 2018) and £15.3m in Jersey (£14.9m in 2018).



Figure 4 – 2019 contributions by type of taxation

Source: Industry questionnaires

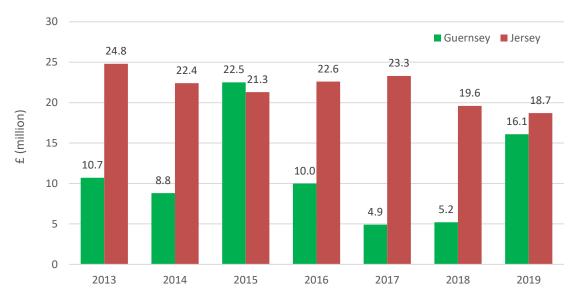
N.b. Social security includes staff and employer contributions paid by the employer. Sales tax is not applicable in Guernsey.



Capital investment

Figure 5 shows the levels of capital investment in telecommunications in Guernsey and Jersey in the years 2013 to 2019.

Figure 5 – Capital investment in the telecommunications industry in the Channel Islands, 2013 to 2019

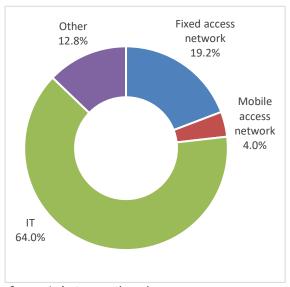


Source: Industry questionnaires

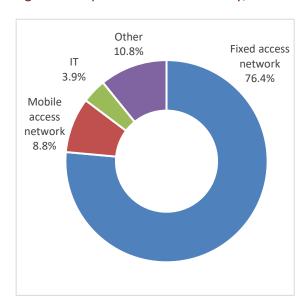
Capital investment expenditure has varied significantly in Guernsey over the 7 years but increased to £16.1m in 2019. Jersey has seen more consistent ongoing investment with much of this related to the fibre roll-out over recent years.

Figures 6 and 7 show where the investment was made in each Island. A much higher level of investment has been made in IT systems in Guernsey in 2019 than in the previous year.

Figure 6 – Capital investment in Guernsey, 2019 Figure 7 – Capital investment in Jersey, 2019



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 8 shows the number of fixed wireline lines in the Islands during the period 2013 to 2019. The apparent sudden falls in Guernsey in 2015 and Jersey in 2018 are likely to be a result of reporting differences which have not been adjusted for prior years.

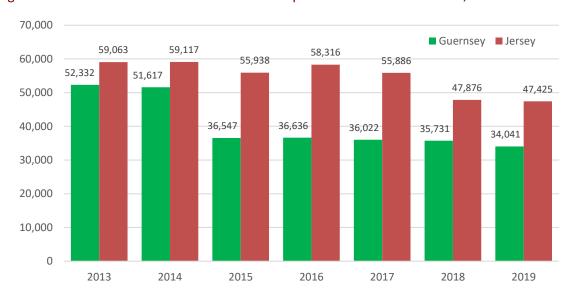


Figure 8 – Number of retail fixed lines and subscriptions in the Channel Islands, 2013 to 2019

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 2019. Subscription to these services have increased in both Islands compared to 2018.

Table 2 – Subscriptions to alternative carriers

| | Guernsey | Jersey |
|-----------------------|----------|--------|
| Carrier select | 188 | 672 |
| Wholesale Line Rental | 3,064 | 9,482 |
| Total | 3,252 | 10,154 |

Source: Industry questionnaires



Fixed telephony minutes

Figures 9 and 10 show the numbers of minutes carried by operators in Guernsey and Jersey annually between 2013 and 2019. Both show a continuing decline in the number of fixed network call minutes originating in the Islands. Possible causes of this fall are substitution of traditional PSTN/ISDN services by mobile phones and alternative forms of communications such as VoIP and messaging services. In Guernsey, the incumbent has lost market share to a greater extent than in Jersey over recent years.

80 73.3 Sure (incumbent) 67.3 70 64.5 63.0 Other (predominantly JT) 58.1 60 54.5 46.5 50 Minutes (million) 40 30 15.8 20 13.7 12.1 11.6 9.6 9.1 9.1 10 0

2016

2017

2018

2019

Figure 9 – Number of fixed line minutes in Guernsey by operator, 2013 to 2019

Source: Industry questionnaires

2013

N.b. The 2018 figure for "Other" has been updated in 2020 $\,$

2014

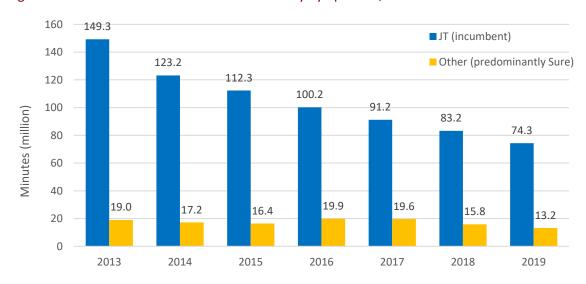


Figure 10 – Number of fixed line minutes in Jersey by operator, 2013 to 2019

2015

Source: Industry questionnaires

The continuing decline in the numbers of fixed line call minutes in both Islands is similar to declines seen in the U.K.²³

²³ Ofcom: Communications Market Report 2019, https://www.ofcom.org.uk/ data/assets/pdf file/0028/155278/communications-market-report-2019.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 gradual decline in penetration rates for fixed line connections in both Islands.

Table 3 – Fixed and wireless fixed retail line connections per 100 inhabitants, 2013 to 2019

| | Guernsey | Jersey |
|------|----------|--------|
| 2013 | 85 * | 60 ** |
| 2014 | 83 * | 59 ** |
| 2015 | 60 | 58 ** |
| 2016 | 59 | 59 ** |
| 2017 | 58 | 59 ** |
| 2018 | 57 | 45 |
| 2019 | 54 | 44 |

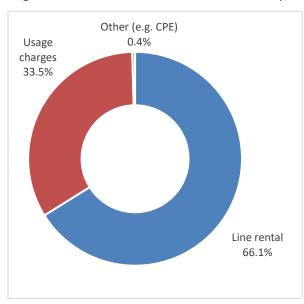
Source: Industry questionnaires, government population statistics

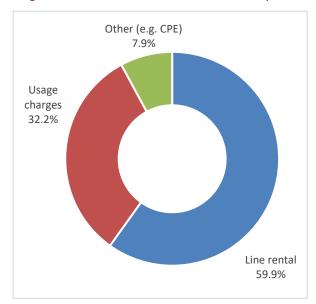
Revenues

Excluding broadband and leased line services, revenues associated with fixed networks in 2019 were £11.2m in Guernsey (£10.9m in 2018) and £14.2m in Jersey (£15.2m in 2018).

Figures 11 and 12 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 11 – Fixed network revenues Guernsey, 2019 Figure 12 – Fixed network revenues Jersey, 2019





N.b. The above charts exclude broadband and leased lines Source: Industry questionnaires

The main difference compared to 2018 is a reduction in the contribution of "other" charges in Guernsey in 2019.

^{*} The penetration rates in Guernsey for 2013 and 2014 are thought to have been overstated.

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



Average revenues

The average revenue per fixed line (wireline and wireless) from line rental, usage charges and associated equipment and services in Guernsey in 2019 was £327.89 (£27.32 per month). Although the number of subscriptions and call minutes has fallen, this still shows an increase of 7.4% compared to 2018.

Excluding GST, the equivalent annual figure for 2019 in Jersey was £298.54 (£24.88 per month), showing a decrease of 6.0% compared to 2018.

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, 2013 to 2019

| | Gu | ernsey | Je | ersey |
|------|--------------------------------------|--------------------------------------|--------------------------------------------|--------------------------------------|
| | Excluding data only mobile broadband | Including data only mobile broadband | Excluding data only mobile broadband | Including data only mobile broadband |
| 2013 | 22,757 | | 35,004 | |
| 2014 | 23,484 | | 36,420 | |
| 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 |

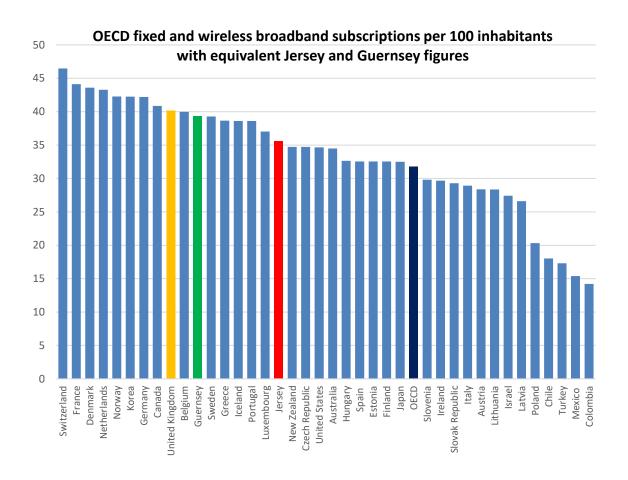
Source: Industry questionnaires

There has been a gradual upward trend in broadband subscriptions in both Islands, although a reduced number of data only mobile broadband subscriptions in 2019 has led to small declines in the combined totals for 2019.



As illustrated in figure 13, the Islands continue to benefit from above OECD average broadband penetration rates per 100 inhabitants of 31.8 but are lower than the UK penetration rate of 40.1. In 2019, Guernsey had 39.3 subscriptions per 100 inhabitants and Jersey 35.6.

Figure 13 - Guernsey and Jersey broadband penetration rates compared to OECD countries



Sources: Industry questionnaires, OECD (updated December 2019)²⁴

²⁴ OECD broadband statistics at: https://www.oecd.org/sti/broadband/broadband-statistics/



Market share by numbers of fixed broadband subscriptions

Figures 14 and 15 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 14 – Fixed network broadband market share by number of subscriptions – Guernsey

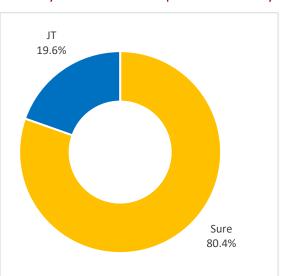
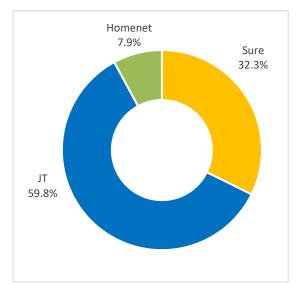


Figure 15 – Fixed network broadband market share by number of subscriptions – Jersey



Source: Industry questionnaires

Table 5 shows historic market shares in the fixed broadband market in Guernsey and Jersey between 2013 and 2019.

Table 5 – Fixed broad band market share (%) in Guernsey and Jersey, 2013 to 2019

| | Guer | nsey | | Jersey | |
|------|------|------|------|--------|----------------------|
| | Sure | JT | Sure | ΤL | Homenet (and others) |
| 2013 | 81 | 19 | 11 | 76 | 13 |
| 2014 | 82 | 18 | 16 | 72 | 12 |
| 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 |

Source: Industry questionnaires

In Guernsey, JT has been gradually gaining share of the broadband market over the past 4 years.

In Jersey, Sure has gained a greater market share primarily from JT, although this remained unchanged at 32% in 2019.



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 16 and 17 show the proportions of fixed network broadband subscriptions by download speed on the historically reported basis of 'up to' speeds²⁵ 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 16 – Fixed broadband subscriptions by download speed, Guernsey 2019

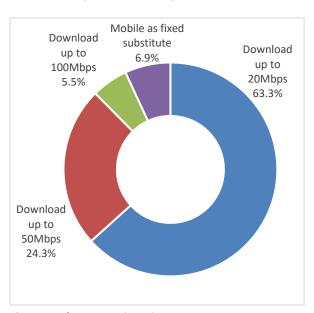
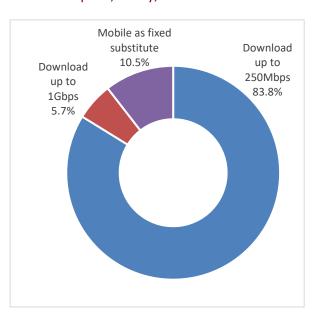


Figure 17 – Fixed broadband subscriptions by download speed, Jersey, 2019



Source: Industry questionnaires

The proportion of broadband subscriptions in Guernsey with download speeds of up to 50 and 100 Mbps has increased from 21.8% in 2018 to 29.8% in 2019.

In Jersey there has been growth in 2019 in the proportion of subscriptions with download speeds of up to 250 Mbps but a smaller proportion of subscriptions with download speeds of up to 1 Gbps compared with 2018.

²⁵ 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 183 Gbytes of data per month in 2019 while subscribers in Jersey each sent and received an average of 209 Gbytes per month. The equivalent figures for 2018 were 177 Gbytes in Guernsey and 172 Gbytes in Jersey. Data usage continues to rise rapidly, as has been seen in the UK where data usage per subscriber per month has risen to 315 Gbytes per month in 2019 (up from 240 Gbytes in 2018).²⁶

Revenues

Total retail revenues in 2019 from fixed broadband services were £8.8m in Guernsey; up from £8.1m in 2018. Revenues in Jersey in 2019 have increased to £15.8m from £14.2m in 2018.

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. 96.7% of revenues were derived from basic subscriptions and 3.3% 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, 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. 95.1% of revenues in Jersey were derived from basic subscriptions and 4.9% from other sources.

Average revenue per subscription

Estimated²⁷ average revenue per fixed network broadband subscription in Guernsey was £352 for the year (£29.34 per month). This shows an increase of 6.5% compared to 2018.

The equivalent 2019 figures in Jersey were £413 for the year (£34.40 per month), showing an increase of 14.6% compared to 2018.

The above figures exclude revenues from associated line rental.

²⁶ Ofcom report : Connected Nations 2019 https://www.ofcom.org.uk/ data/assets/pdf file/0023/186413/Connected-Nations-2019-UK-final.pdf

²⁷ 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.

1,200

1,005

1,000

800

705

600

400

Retail

Wholesale

Figure 18 – Number of retail and wholesale leased lines in the Channel Islands, 2019

Source: Industry questionnaires

The number of retail leased lines has increased in Guernsey to 705 from 622 lines in 2018 and the number of retail leased lines in Jersey has increased to 1,005 from 937. Wholesale leased lines in Guernsey have also increased to 314 from 281 in 2018, but have decreased to 249 from 306 in Jersey.

Table 6 shows how leased lines were used in 2019.²⁸

Table 6 – Numbers of leased lines by usage, 2019

| | | Guernsey | | Jersey | | |
|-----------|-----------|--------------|------------|-----------|--------------|------------|
| | On-Island | Inter-Island | Off-Island | On-Island | Inter-Island | Off-Island |
| Retail | 588 | 37 | 80 | 778 | 47 | 180 |
| Wholesale | 276 | 1 | 37 | 184 | 1 | 64 |

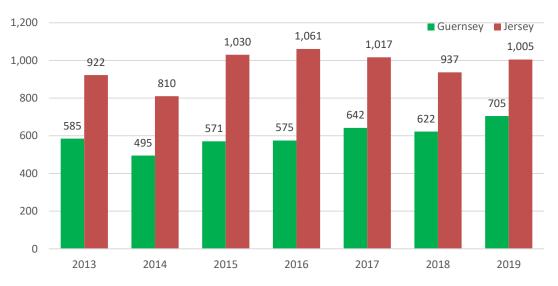
Source: Industry questionnaires

²⁸ 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 19 shows the number of retail leased lines in the Islands during the period 2013 to 2019.

Figure 19 - Number of retail leased lines in the Channel Islands, 2013 to 2019



Source: Industry questionnaires

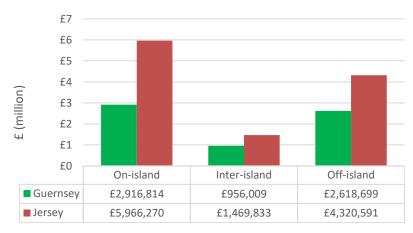
The number of lines in Guernsey is continuing to grow while the number of lines in Jersey appears to have stabilised.

Retailed leased line revenues

Total revenues from retailed leased lines in Guernsey in 2019 were £6.5m (£5.1m in 2018), and in Jersey in 2019 were £11.8m (£10.8m in 2018).

Figure 20 shows the breakdown of these totals by on-Island, inter-Island and off-Island services.

Figure 20 – Revenues from retailed leased lines by activity, 2019



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.

The main increases compared to 2018 have been from inter-Island revenues and off-Island revenue in Guernsey.



Direct Internet Access (DIA)

An increasing use of leased lines is to provide access to the Internet. Such usage is an alternative to broadband and is typically used by organisations with large demand, a requirement for guaranteed service levels and/or a need for symmetrical services. Direct Internet Access (DIA) lines connect the customer's computer equipment to their service provider's core network where access to the global Internet is obtained.

DIA lines are provided at different data rates to match the customer's specific requirements. Table 7 provides a breakdown of the numbers of DIA lines provided in each Island by data rate.

Table 7 – Number of Direct Internet Access lines, 2019

| DIA Lines | ≤ 2Mbps | >2Mbps & ≤ 4Mbps | >4Mbps & ≤ 6Mbps | >6Mbps & ≤ 8Mbps | >8Mbps & ≤ 10Mbps | > 10Mbps & ≤100Mbps | >100Mbps & <1Gbps | > 1Gbps |
|-----------|---------|------------------------|------------------------|------------------------|-------------------------|---------------------------|-------------------------|---------|
| Guernsey | 22 | 8 | 4 | 2 | 32 | 46 | 9 | 3 |
| Jersey | 14 | 11 | 3 | 2 | 49 | 74 | 5 | 0 |

Source: Industry questionnaires

Since 2018, the number of DIA lines has decreased in both Guernsey and Jersey.

Bursting

Bursting is a facility whereby a customer can exceed the normal data rate of their DIA line for a period of time. This assists them to cater for occasional periods of higher than usual demand. Tables 8 and 9 show the numbers of DIA lines with bursting capability in Guernsey and Jersey respectively, again by data rate.

Table 8 – Number of Direct Internet Access lines in Guernsey with bursting capabilities, 2019

| Burst To → | ≤ | >2Mbps | >4Mbps | >6Mbps | >8Mbps | = | >100Mbps | >1Gbps |
|-------------------------|-------|--------------|--------------|--------------|---------------|---------------|-------------|--------|
| From ↓ | 2Mbps | & ≤ 4Mbps | & ≤ 6Mbps | & ≤ 8Mbps | & ≤ 10Mbps | & ≤100Mbps | & <1Gbps | |
| ≤ 2Mbps | - | 1 | - | 2 | - | - | - | - |
| >2Mbps & ≤4Mbps | - | - | - | - | - | 2 | - | - |
| >4Mbps & ≤ 6Mbps | - | - | - | 2 | - | 2 | - | - |
| >6Mbps & ≤8Mbps | - | - | - | - | 1 | - | - | - |
| >8Mbps & ≤ 10Mbps | - | - | - | - | 1 | 2 | - | - |
| > 10Mbps & ≤ 100Mbps | - | - | - | - | - | 23 | 5 | - |
| >100 & < 1Gbps | - | - | - | - | - | - | 4 | - |
| > 1Gbps | - | - | - | - | - | - | - | 2 |

Source: Industry questionnaires



Table 9 – Number of Direct Internet Access lines in Jersey with bursting capabilities, 2019

| Burst To→ | ≤ | >2Mbps | >4Mbps | = | >8Mbps | >10Mbps | >100Mbps | >1Gbps |
|-------------------------|-------|--------------|--------------|--------------|---------------|---------------|-------------|--------|
| From ↓ | 2Mbps | & ≤ 4Mbps | & ≤ 6Mbps | & ≤ 8Mbps | & ≤ 10Mbps | & ≤100Mbps | & <1Gbps | |
| ≤ 2Mbps | - | 2 | - | 2 | - | - | - | - |
| >2Mbps & ≤4Mbps | - | - | - | - | - | - | - | - |
| >4Mbps & ≤ 6Mbps | - | - | - | - | - | - | - | - |
| >6Mbps & ≤8Mbps | - | - | - | - | 1 | - | - | - |
| >8Mbps & ≤ 10Mbps | - | - | - | - | 2 | 4 | - | - |
| > 10Mbps & ≤ 100Mbps | - | - | - | - | - | 12 | - | - |
| >100 & < 1Gbps | - | - | - | - | - | - | 1 | - |
| > 1Gbps | - | - | - | - | - | - | - | - |

Source: Industry questionnaires

In 2019, 37% of Guernsey DIA lines were enabled for bursting and 15% of Jersey DIA lines were enabled for bursting.

No consistent figures are available for the volumes of data being passed over DIA and other leased lines.



Mobile market

Subscriptions, penetration rates and market shares

In 2019, 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 21 shows the total number of mobile subscriptions in the Islands during the period 2013 to 2019. The figures include pre-paid (i.e. pay as you go) and post-paid (i.e. contract) subscriptions.

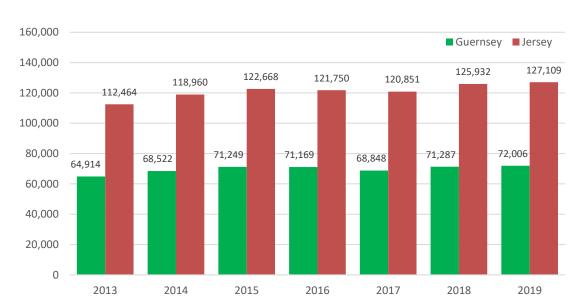


Figure 21 – Number of active mobile subscriptions in the Channel Islands, 2013 to 2019

Source: Industry questionnaires

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

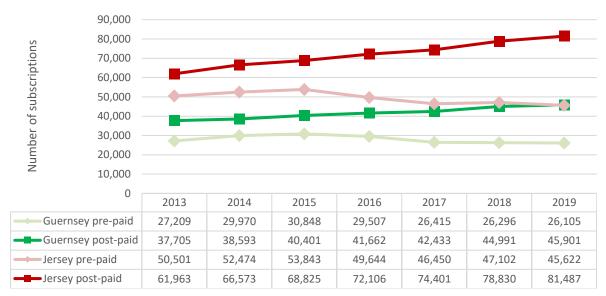
Overall, mobile subscriptions have continued to grow gradually in both Islands. In 2019, there was an increase in mobile subscriptions in Guernsey of 1.0% compared to 2018 and in Jersey there was an increase of 0.9%.

The general increase in post-paid subscriptions continues in both Islands, whilst there has been a decrease in pre-paid subscriptions. Figure 22 on the next page provides a breakdown of pre-paid and post-paid mobile subscriptions in each Island over the period 2013 to 2019.²⁹

²⁹ 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 arears 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 22 – Pre- and post-paid mobile subscriptions, 2013 to 2019



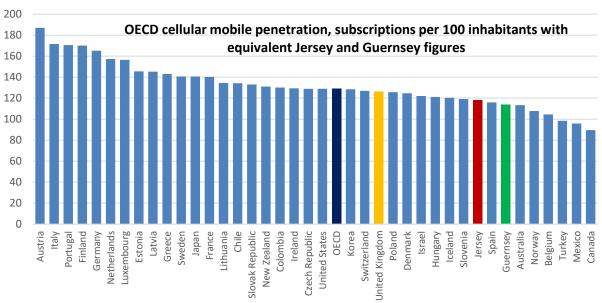
Source: Industry questionnaires

N.b. Jersey figures for 2018 have been adjusted in 2020

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 2019 in Guernsey there were 114 active subscriptions per 100 inhabitants, and in Jersey there were 118 subscriptions per 100 inhabitants. These penetration rates in 2019 were the same as in 2018.

Figure 23 shows the mobile penetration rates in Guernsey and Jersey compared to the penetration rates within OECD countries.

Figure 23 - Mobile penetration rates in Guernsey and Jersey compared to OECD countries



Sources: Industry questionnaires, OECD³⁰ (April 2020). N.b. The comparative data set used in the 2018 report was incorrect.

. .

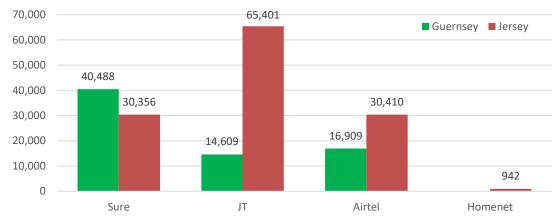
³⁰ OECD data updated April 2020: https://www.oecd.org/sti/ieconomy/oecdkeyictindicators.htm



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 24 provides a breakdown of the total number of mobile subscriptions for the 4 mobile operators in the Islands.³¹

Figure 24 – Number of mobile subscriptions by operator, 2019



Source: Industry questionnaires

Compared to 2018, Sure and JT have grown their number of subscriptions in both Islands. Airtel had a reduced number of subscriptions in Guernsey in 2019 and a very similar number of subscriptions in Jersey.

Table 10 shows the market shares of each operator in Guernsey and Jersey respectively between 2013 and 2019.

Table 10 – Mobile market share (%) of subscriptions in Guernsey and Jersey, 2013 to 2019

| | | Guernsey | | | Je | rsey | |
|------|------|----------|--------|------|----|--------|---------|
| | Sure | JT | Airtel | Sure | JT | Airtel | Homenet |
| 2013 | 66 | 20 | 14 | 23 | 60 | 17 | 0 |
| 2014 | 63 | 16 | 21 | 24 | 55 | 21 | 0 |
| 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 |

Source: Industry questionnaires

The incumbent operators of Sure in Guernsey and JT in Jersey have gradually been losing market share to the other operators over the past 7 years although this trend appears to have slowed between 2018 and 2019.

³¹ 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. If consumers switch, it suggests that telecom operators are innovative, competitive and creating new offerings that entice consumers. 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 25 and Table 11, 'porting-in' describes the number of consumers moving to a new supplier and 'porting-out' describes the number of consumers leaving their existing supplier.

Consumer switching behaviour in the past few years has been varied, suggesting, in line with the above, that there is adaptation of products and that consumers are responding to different offerings.

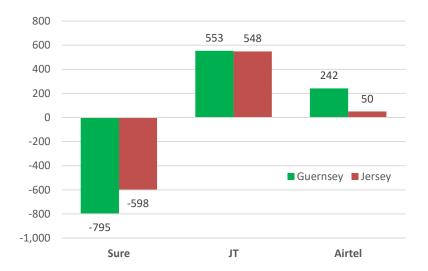


Figure 25 – Net number of consumers switching mobile service provider, 2019

Source: Porting XS MNP Channel Islands data 2019

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. JT has also made net gains of subscribers from Airtel in both Islands.

Table 11 – Mobile number porting activity in Guernsey and Jersey, 2019

| | | Guernsey | | | Jersey | | |
|-------------|-------|----------|--------|-------|--------|--------|--|
| | Sure | JT | Airtel | Sure | JT | Airtel | |
| Port in | 299 | 817 | 689 | 727 | 1,478 | 964 | |
| Port out | 1,094 | 264 | 447 | 1,325 | 930 | 914 | |
| Net benefit | -795 | 553 | 242 | -598 | 548 | 50 | |

Source: Porting XS MNP Channel Islands data 2019



Table 12 shows the percentage of registered mobile numbers that switched service provider in Guernsey and Jersey from 2013 to 2019. Porting activity remains at a level below that in the UK, where 10% of the active subscriber base ported in 2015.³²

Table 12 – Levels of mobile number switching in Guernsey and Jersey, 2013 to 2019

| % of mobile subscribers switching provider | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------------------------------|------|------|------|------|------|------|------|
| Guernsey | 1.8 | 3.5 | 1.9 | 1.6 | 2.8 | 2.8 | 2.5 |
| Jersey | 3.0 | 4.5 | 3.4 | 2.4 | 3.7 | 3.1 | 2.5 |

Source: Porting XS MNP Channel Islands data 2013 to 2019 and Industry questionnaires

1,805 mobile subscribers in Guernsey switched or "ported" between service providers in 2019. In Jersey, the equivalent figure was 3,169. For both Islands, these represented 2.5% of total mobile subscriptions.

In 2019, the number of working days required to complete a successful port from one service provider to another was at 1.2 working days in both Guernsey and Jersey.³³ These times compare to the European Commission's Universal Service Directive, which requires operators to provide porting within 1 working day.³⁴

Average porting times in Guernsey have remained at 1.2 working days for the past 4 years. Average porting times in Jersey were at 0.9 working days in both 2017 and 2018 but have increased to 1.2 days in 2019.

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

³² https://www.ofcom.org.uk/ data/assets/pdf file/0023/38543/annex.pdf Page 38

³³ Porting XS



Voice traffic - numbers of minutes

Figure 26 shows the number of mobile voice minutes originating on each operator's network in each Island in 2019. 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.

80 72.6 Guernsey 70 Jersey 60 53.8 Minutes (million) 50 38.4 37.8 40 30 18.0 17.0 20 10 0 JT Sure Airtel

Figure 26 – Total number of mobile minutes originating on CI mobile networks, 2019

Source: Industry questionnaires

The total number of mobile minutes has increased by 3.8% in Guernsey to 72.9 million in 2019 and has increased by 9.3% in Jersey to 164.9 million.

Table 13 shows the average number of mobile voice minutes in 2019 for pre-paid and post-paid subscriptions. On the assumption that out-roaming minutes are overwhemingly 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 13 – Average mobile voice minutes per pre-paid and post-paid subscription, 2019

| | Guernsey | Jersey |
|----------------------------------|----------|--------|
| Minutes per pre-paid subscriber | 431 | 731 |
| Minutes per post-paid subscriber | 1,059 | 1,384 |

Source: Industry questionnaires

Compared to 2018, in Guernsey the number of minutes per pre-paid and post-paid subscriber have both decreased by 10.0%. In Jersey, minutes per pre-paid subscriber have increased by 11.6% but minutes per post-paid subscriber have decreased by 1.9%.



SMS traffic - numbers of messages

Figure 27 shows the number of SMS text messages originating on each operator's network in each Island in 2019. These include SMS messages associated with in-roaming activities.

30 Guernsey 26.5 Jersey 25 Fext messages (million) 20 16.1 15.6 15 10.5 10 5.6 4.7 5 0 Sure JΤ Airtel

Figure 27 – Total number of SMS text messages originating on CI mobile networks, 2019

Source: Industry questionnaires

Overall, text volumes have continued to reduce in both Islands. In Guernsey, the number of messages decreased by 15.6% to 26.4 million, and in Jersey the number of messages decreased by 17.8% to 52.6 million.

Table 14 shows the average number of SMS text messages sent in 2019 for pre-paid and post-paid subscriptions. On the assumption that out-roaming text messages are overwhemingly associated with post-paid subscribers, these include all out-roaming messages.

Table 14 – Average SMS text messages per pre-paid and post-paid subscription, 2019

| | Guernsey | Jersey |
|---------------------------------------|----------|--------|
| SMS messages per pre-paid subscriber | 224 | 242 |
| SMS messages per post-paid subscriber | 393 | 478 |

Source: Industry questionnaires

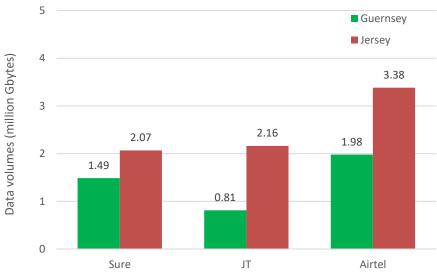
Compared to 2018, in Guernsey the number of SMS messages per pre-paid subscriber decreased by 15.8% and the number of SMS messages per post-paid subscriber decreased by 23.7%. In Jersey, the number of SMS messages per pre-paid subscriber decreased by 14.2% and the number of SMS messages per per post-paid subscriber decreased by 21.9%.



Mobile data

Figure 28 shows the volume of data (in Gbytes) sent and received over each operator's network in each Island in 2019. These include data associated with in-roaming activities.

Figure 28 – Mobile data volumes (Gbytes) sent and received on CI mobile networks, 2019



Source: Industry questionnaires

Overall, data volumes have continued to increase in both Islands. In Guernsey, the volume of data increased by 12.9% to 4.28 million Gbytes, and in Jersey the volume of data increased by 20.7% to 7.61 million Gbytes.

Table 15 shows the average data volume (in Gbytes) consumed in 2019 per Guernsey and Jersey prepaid and post-paid subscription. On the assumption that out-roaming data activities are overwhemingly associated with post-paid subscribers, this includes all out-roaming data activities.

Table 15 – Average data volumes sent and received per pre-paid and post-paid subscription, 2019

| | Guernsey | Jersey |
|-----------------------------------------|----------|--------|
| Gbytes of data per pre-paid subscriber | 32.68 | 34.43 |
| Gbytes of data per post-paid subscriber | 67.31 | 68.26 |

Source: Industry questionnaires

Compared to 2018, in Guernsey the volume of data per pre-paid subscriber increased by 22.3% and the volume of data per post-paid subscriber increased by 22.9%. In Jersey, the volume of data per pre-paid subscriber increased by 21.0% and the volume of data per post-paid subscriber increased by 15.5%.

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



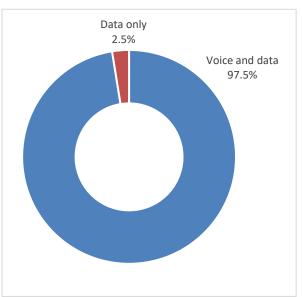
Data only mobile SIMs

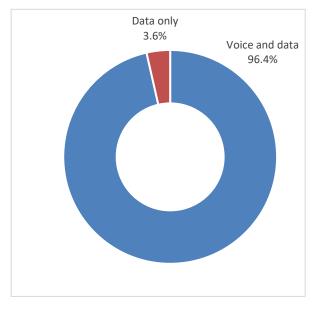
To monitor the changing nature of the mobile market, data is now collected on SIM card types to understand how many subscriptions there are for different types of SIM card.

In 2019, there were 1,833 mobile subscriptions for data only and in Jersey there were 4,519.

Figures 29 and 30 show the proportions of mobile subscriptions by product type in Guernsey and Jersey respectively for 2019. Operators were unable to provide information on whether data only SIMs were sold as fixed access substitutes or for mobile devices.

Figure 29 – Mobile subscription type in Guernsey Figure 30 – Mobile subscription type in Jersey





Source: Industry questionnaires

No voice only subscriptions were available in either Island in 2019.

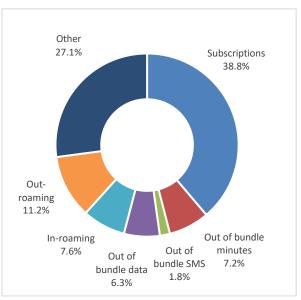
Compared to 2018, the proportion of data only subscriptions has decreased in both Islands.

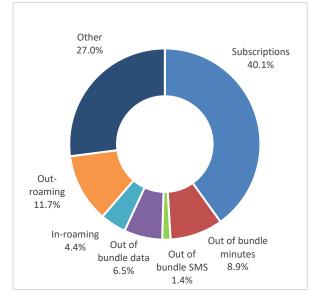


Mobile revenue

Total revenues from mobile related activities in Guernsey in 2019 were £23.4m and in Jersey £40.2m. Revenue has fallen slightly in both Islands compared to 2018. 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 "boltons" 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 16. For this purpose all out-roaming revenues are assumed to be associated with post-paid subscribers.

Table 16 – Annual and monthly spend per pre-paid and post-paid subscription, 2019

| | | Guernsey | Jersey |
|-----------|-------------|----------|---------|
| Pre-paid | During 2019 | £103.27 | £99.81 |
| | Per month | £8.61 | £8.32 |
| Post-paid | During 2019 | £273.39 | £282.73 |
| | Per month | £22.78 | £23.56 |
| | | | |

Source: Industry questionnaires

In Guernsey, the spend per pre-paid subscriber has decreased by 8.5% compared to 2018, while the spend per post-paid subscriber has increased by 2.6%. In Jersey, the equivalent changes were a decrease of 0.2% and a decrease of 2.6% 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

Out-roaming outgoing call minutes relate to calls made by the mobile customers of Channel Island operators while roaming on networks outside the Channel Islands. Similarly, out-roaming SMS texts are those sent by Channel Island customers from non-Channel Island networks.

Out-roaming incoming refers to call minutes and SMS texts received by Channel Island customers while using non-Channel Island networks.

Out-roaming data is data both sent and received by Channel Island customers while using non- Channel Island networks.

Table 17 – Out-roaming minutes, SMS texts and data volumes in the Channel Islands, 2019

| | Guernsey | Jersey |
|---------------|-----------|-----------|
| Minutes | 2,532,262 | 5,817,219 |
| SMS texts | 1,378,284 | 3,059,172 |
| Data (Gbytes) | 8,459 | 24,337 |

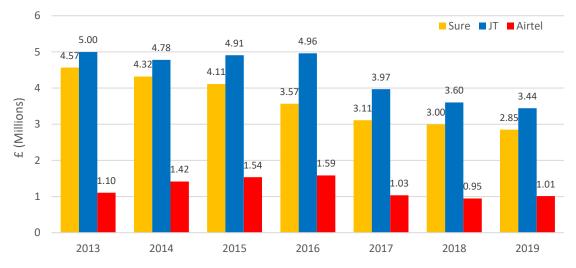
Source: Industry questionnaires

Out-roaming revenues

In 2019, operators in the Channel Islands generated total revenues of £7.3m from out-roaming activities (£7.5m in 2018); 11.5% of total mobile revenue (excluding in-roaming revenues).

Figure 33 shows total out-roaming revenues in the period 2013 to 2019, combining Guernsey and Jersey.

Figure 33 – Total out-roaming revenues in the Channel Islands, 2013 to 2019



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.

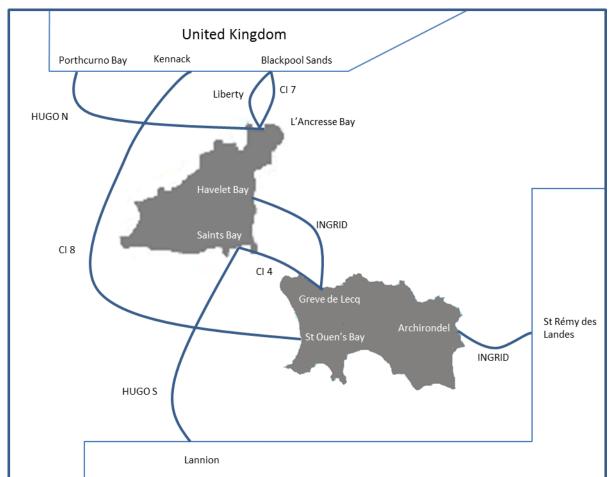


Figure 34 – Schematic representation of cable links (excluding UK to France)

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.
- Inhabitants the number of inhabitants of the Islands is used to standardise various metrics throughout the report. The numbers are as follows:

Guernsey 63,276 estimated at 30 September 2019 35 Jersey 107,800 estimated at 31 December 2019 36

- 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.
- 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

15 October 2020

³⁵ Guernsey Annual Electronic Census Report, 30st September 2019, https://www.gov.gg/CHttpHandler.ashx?id=129452&p=0

³⁶ Population estimates for 2019 at www.gov.je/Government/JerseyInFigures/Population/Pages/Population.aspx