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International Communications Market Report 2016: EU5 Broadband Scorecard

Research Document

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EU5: Broadband scorecard

This annex provides comparisons for the EU5 on a number of broadband metrics, using the same data sources as the Telecoms and Networks chapter of the ICMR.

It is important to note that these results are not comparable to previous EU5 scorecards which were based on different data sources, namely data taken from the European Commission's Digital Agenda Scoreboard and Eurostat.

1.1 Summary

We have benchmarked the UK against EU5 countries as summarised in Figure 1.1.

Figure 1.1 **Broadband Scorecard: UK's rank relative to EU5 countries: 2015**

		2015		2014	
		Data	UK ranking	Data	UK ranking
COVERAGE	ADSL	99.9%	1	99.9%	1
	CABLE	47%	3	47%	3
	FTTx	84%	1	80%	1
	VDSL	83%	1	79%	1
	FTTB/H	1%	5	1%	5
	Advertised speed >=10Mbit/s	97%	1	96%	1
	Advertised speed >=30Mbit/s	88%	1	86%	1
	Advertised speed >=100Mbit/s	48%	3	48%	3
	3G mobile	99.0%	3	99.0%	3
	4G mobile	93%	2	84%	2
CONNECTIONS	ADSL	59%	4	65%	4
	CABLE	19%	2	19%	2
	FTTx	22%	2	15%	2
	FTTB/H	0.3%	5	0.2%	5
	>=10Mbit/s and <30Mbit/s	53%	3	59%	3
	>=30Mbit/s and <100Mbit/s	32%	1	26%	1
	>=100Mbit/s	7%	3	6%	3
	3G mobile	48%	4	65%	2
	4G mobile	36%	1	19%	1
USAGE	Fixed data per capita per month	27 GB	1	22 GB	1
	Mobile data per capita per month	1.2 GB	1	0.7 GB	1

Source: IHS. Notes: (1) For the purposes of this table most of the figures have been rounded to the nearest whole number; (2) coverage and connections data are for the year-end 2015; (3) mobile broadband includes all data connections made via 3G or 4G cellular networks, including those made via mobile handsets and using dedicated mobile data dongles and SIMs; (4) in order to provide a comparative benchmark across all 19 countries, 4G (93%) and 3G (99%) mobile coverage encompasses outdoor population coverage from at least one operator. This differs from the 4G (72.2%) and 3G (78.1%) coverage stated in our Connected Nations 2016 report, which focuses on the *percentage of premises that have indoor coverage from all operators. The report can be found at: https://www.ofcom.org.uk/research-and-data/infrastructure-research/connected-nations-2016*

1.2 Coverage

In 2015, the UK ranked first on household availability of ADSL (99.9%) [1] and FTTx networks, although it ranked last in availability of FTTH/B networks[2].

The UK continued to lead the EU5 in both standard and superfast broadband coverage. Standard fixed broadband with advertised speeds of 'up to' 10Mbit/s or more was available to 97% households in the UK while superfast broadband with advertised speeds of 'up to' 30Mbit/s or more was available to 88% households. However, the UK ranked third in availability of broadband with headline speeds of 100Mbit/s or more (48%) behind Spain (74%) and Germany (64%).

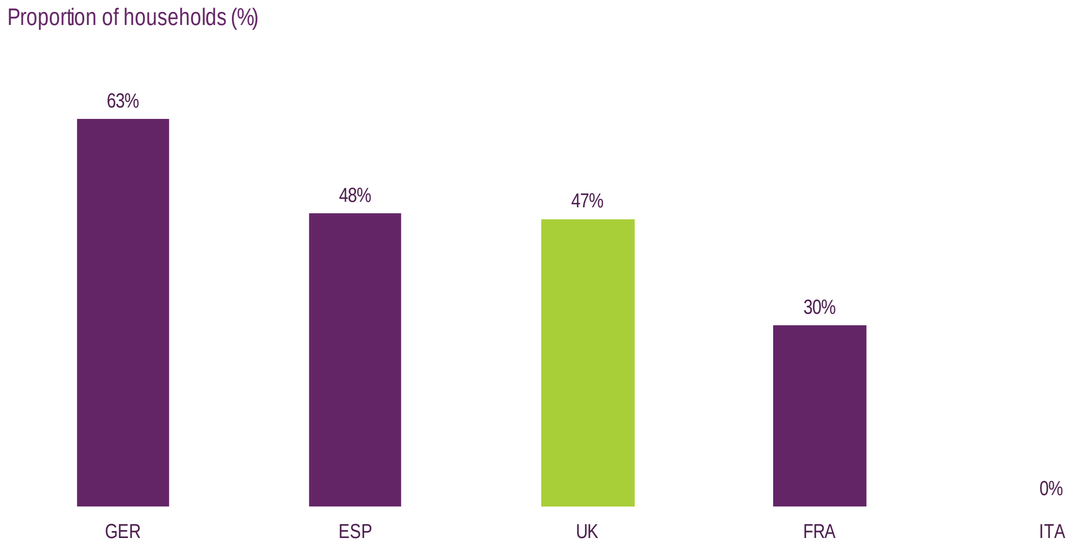
The UK ranked second behind Germany, which had the highest households in areas with 4G mobile broadband coverage among the EU5, at 95%, largely because of the emphasis placed by providers on rural coverage at the time of the launch of LTE networks.

Figure 1.2 Percentage of households in areas served by ADSL broadband: year-end 2015

Source: IHS
Note: All figures have been rounded to the nearest whole number.

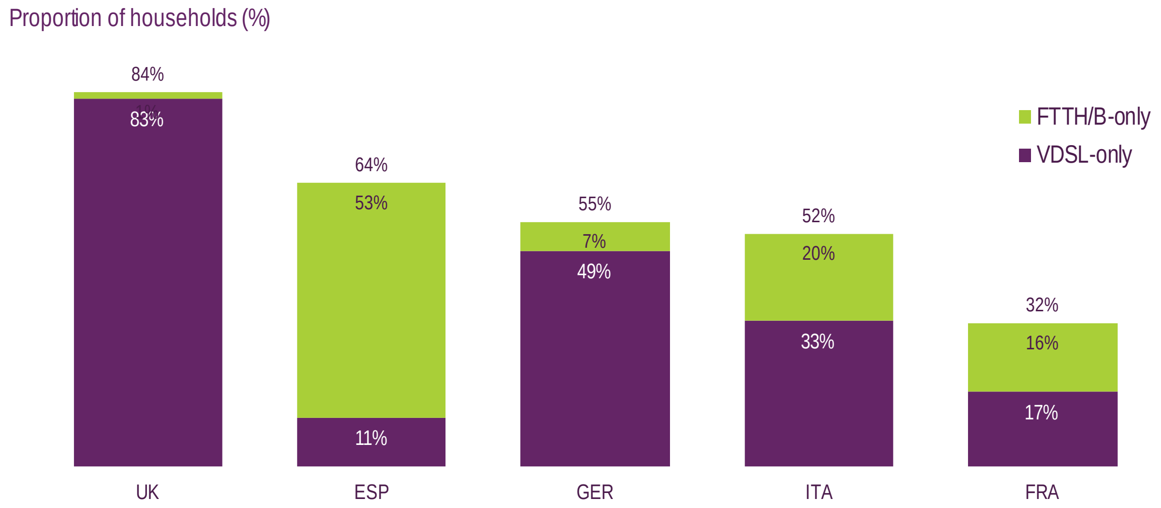
[1] It is important to note that some premises in ADSL-enabled areas may not be able to receive broadband services, or may only be able to access very low speeds due to reasons such as long length, or poor quality, of the copper telephone line from the premises to the local exchange.
[2] In the UK a number of providers, of varying scale and reach, are committed to deploying full fibre services and we would expect to see coverage increase over the coming year.

Figure 1.3 **Percentage of households in areas served by cable broadband: year-end 2015**



Source: IHS
Note: All figures have been rounded to the nearest whole number.

Figure 1.4 **Percentage of households in areas served by FTTx broadband networks (including VDSL and FTTH/B): year-end 2015**

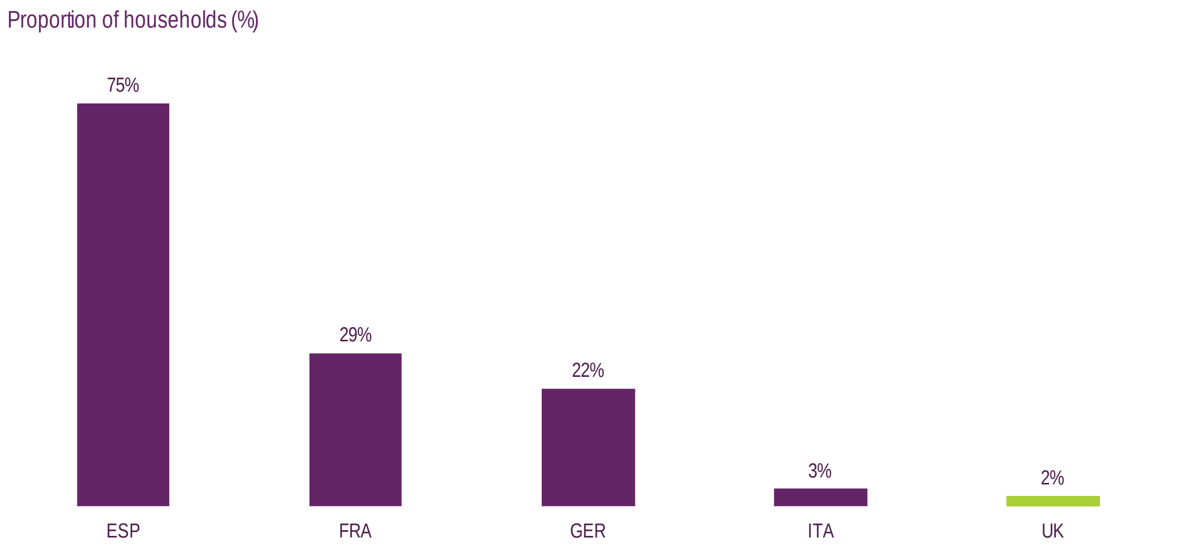


Source: IHS
Note: All figures have been rounded to the nearest whole number

Figure 1.5 **Percentage of households passed by fixed broadband networks: year-end 2015**

Source: IHS
Note: All figures have been rounded to the nearest whole number

Figure 1.6 **Percentage of households in areas served by ultrafast broadband products (with advertised speeds of 300Mbit/s or more): September 2016**



Source: Analysys Mason
Note: All figures have been rounded to the nearest whole number.

Figure 1.7 **Percentage of population in areas served by 3G and 4G mobile broadband: year-end 2015**

		GER	UK	ITA	ESP	FRA
Year-on-year change (pp)	4G	2	13	14	4	5
	3G	1	0	1	0	0

Source: IHS
Note: The data for UK in this chart differs from the 4G (72.2%) and 3G (78.1%) coverage stated in our Connected Nations' Report, which focuses on the percentage of premises that have indoor coverage from all operators.

1.3 Take-up and use

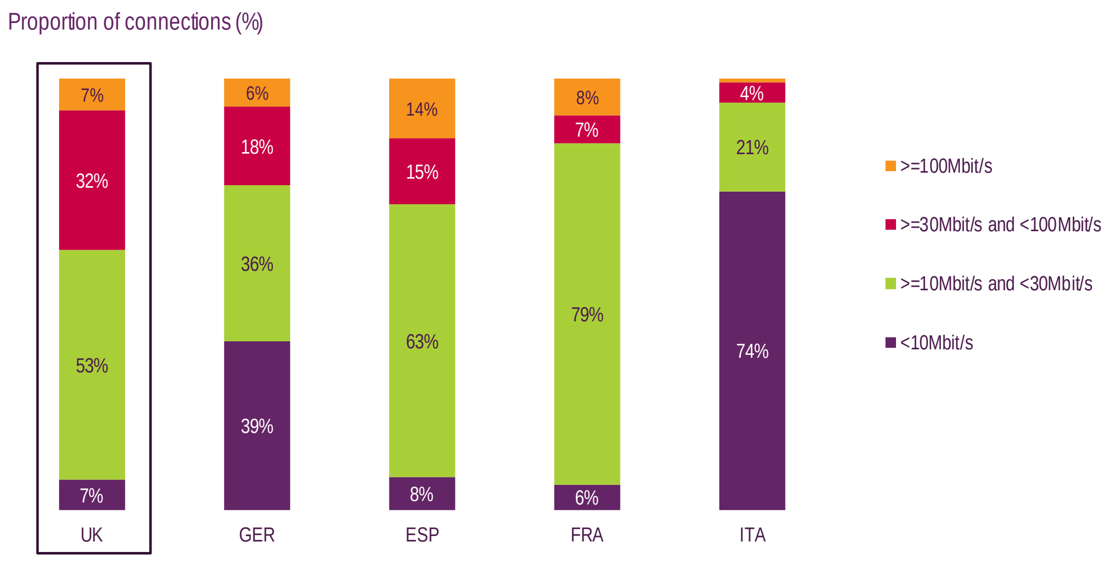
Among EU5, the UK had the highest share of broadband connections with headline speeds of 30Mbit/s or more. Spain had the highest share of connections with headline speeds of 100Mbit/s or higher due to the emphasis on deployment of FTTP while the UK ranked third behind France. The UK was ranked fourth in proportion of ADSL connections as more customers moved to superfast broadband and was ranked second in FTTx connections behind Spain. However, the UK had the lowest share of FTTH/B connections among EU5, ranking fifth.

The UK had the largest share of 4G mobile broadband connections as more customers migrated to 4G, and as a result had a lower proportion of 3G connections than Spain, Germany and Italy. The UK also led in terms of data volumes consumed per capita for fixed broadband and mobile data (3G and 4G).

Figure 1.8 **Household penetration of fixed broadband services: year-end 2015**

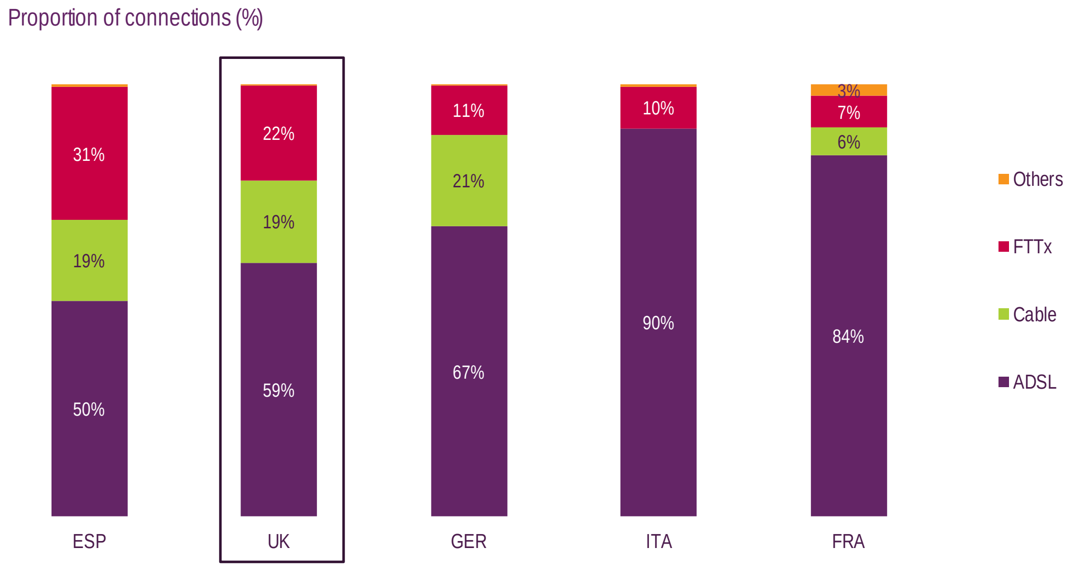
Source: IHS
Note: All figures have been rounded to the nearest whole number.

Figure 1.9 **Proportion of fixed broadband connections, by advertised speed: year-end 2015**



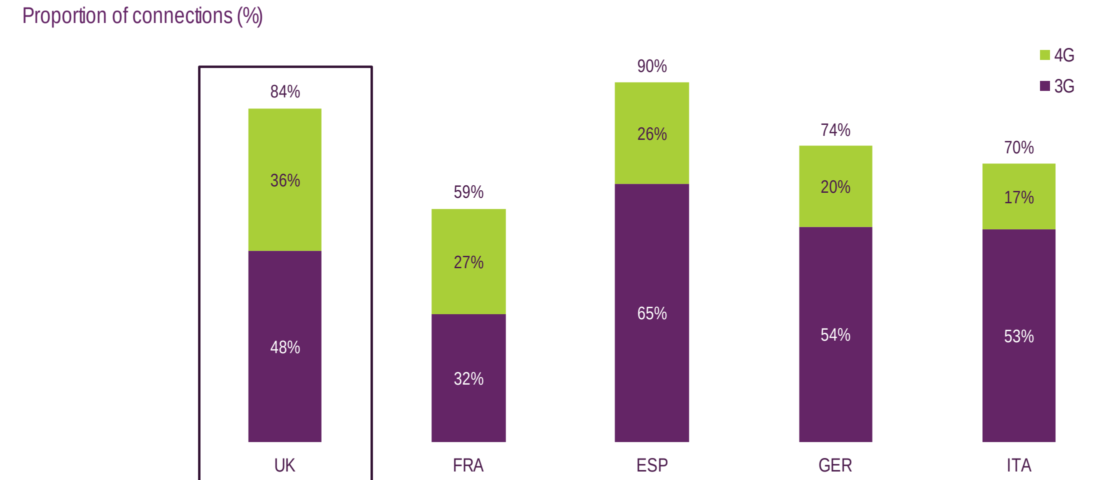
Source: IHS
Note: All figures have been rounded to the nearest whole number.

Figure 1.10 Percentage of fixed broadband connections, by technology: year-end 2015



Source: IHS
Note: All figures have been rounded to the nearest whole number. 'Other' connections include fixed broadband technologies such as fixed wireless technologies (WiMAX, BWFA), satellite and/or powerline connections

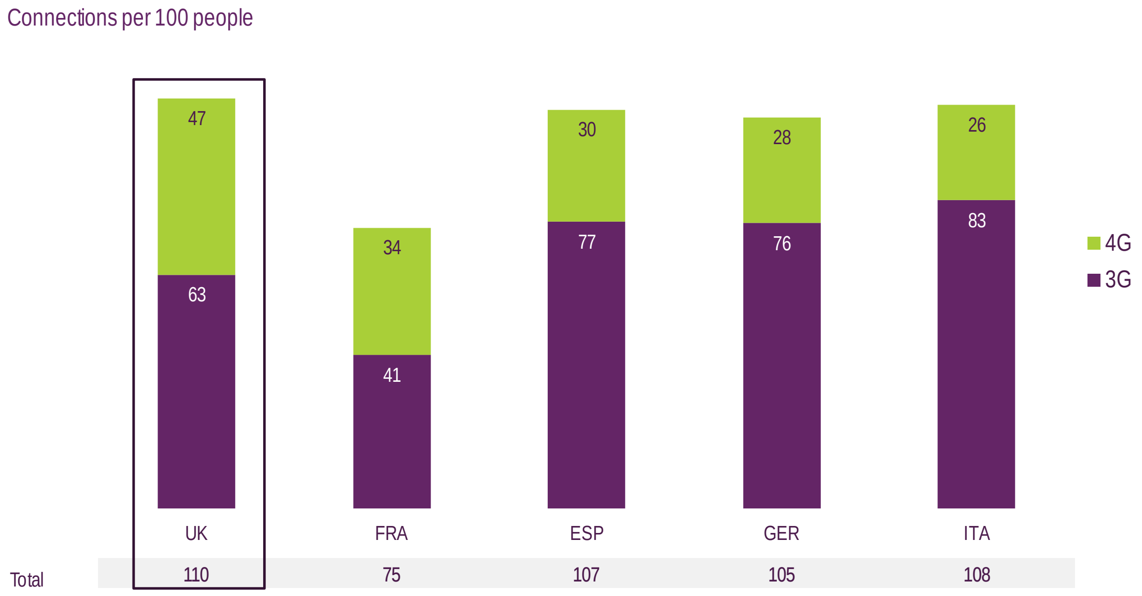
Figure 1.11 Percentage of 3G and 4G connections as a proportion of total mobile connections: year-end 2015



		UK	FRA	ESP	GER	ITA
Year-on-year change (pp)	4G	17	13	14	9	12
	3G	-17	-8	-9	-2	-7

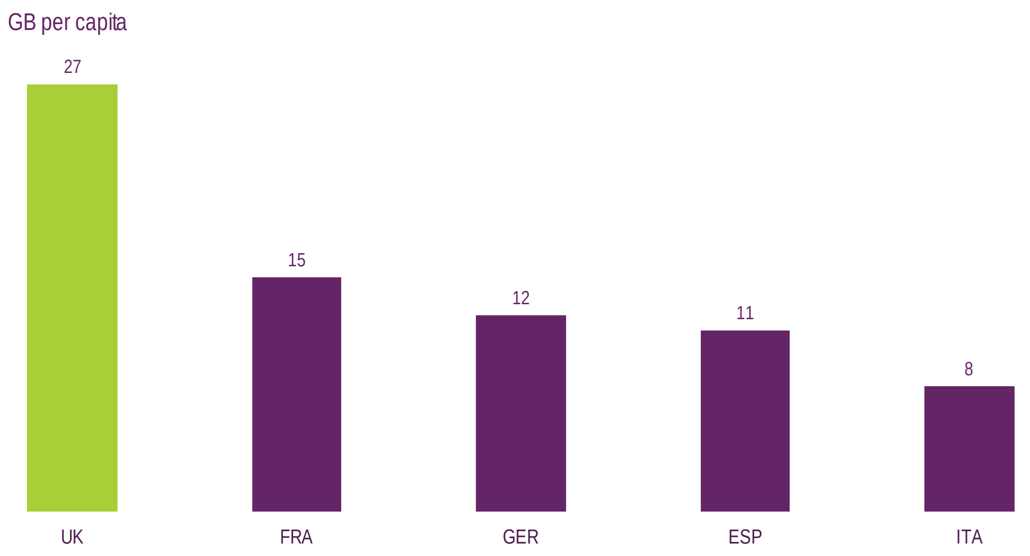
Source: IHS
Note: The countries are ranked by 4G connections as a proportion of total mobile connections

Figure 1.12 **Mobile broadband connections per 100 people: year-end 2015**



Source: IHS
Note: Mobile broadband includes all data connections made on cellular networks, including those made via mobile handsets and using dedicated mobile data dongles and SIMs. All figures have been rounded to the nearest whole number. The countries are ranked by 4G connections per 100 people.

Figure 1.13 **Fixed data volume per capita per month: 2015**



Source: IHS
Note: All figures have been rounded to the nearest whole number.

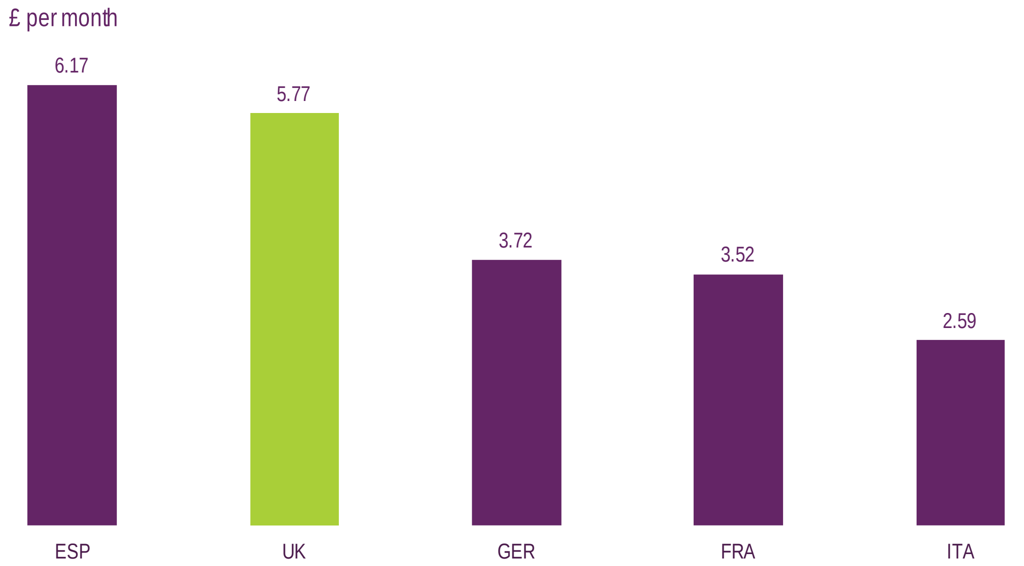
Figure 1.14 Mobile data volume per person per month: 2015

Source: IHS

Figure 1.15 Average monthly fixed broadband revenue per connection: 2015

Source: IHS

Figure 1.16 **Average non-messaging mobile data revenue per mobile connection: 2015**

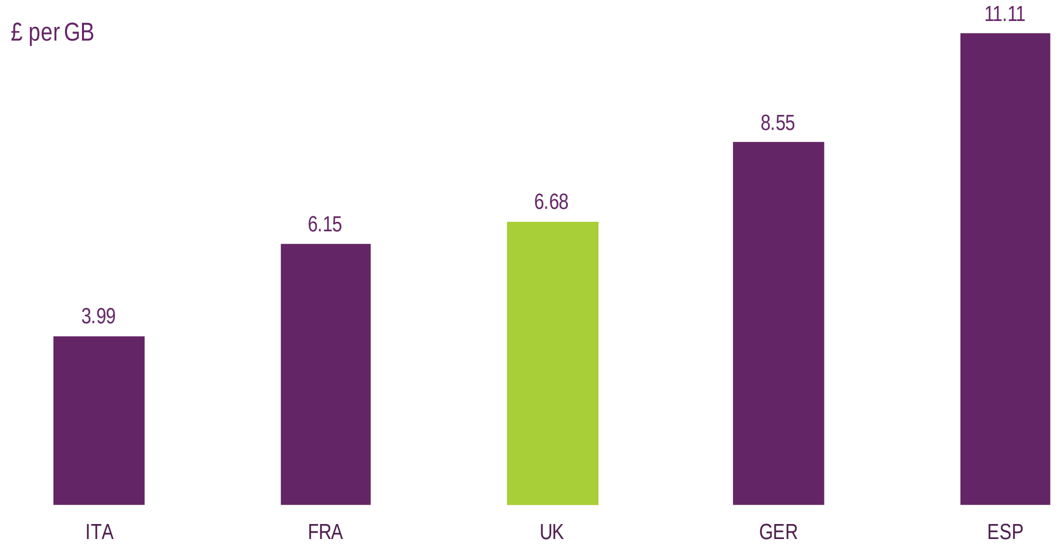


Source: IHS

Price per unit for fixed broadband data consumption: 2015

Source: IHS

Figure 1.17 **Price per unit for mobile broadband data consumed: 2015**



Source: IHS

1.4 Choice

The UK was ranked first as its incumbent provider operated the lowest share of lines compared to other incumbent providers in other EU5 markets and was ranked third in share of leading MNO, behind Spain and Italy.

Figure 1.18 **Percentage of fixed broadband lines operated by incumbent: year-end 2015**

Source: HIS

Figure 1.19 **Percentage retail[3] market share of leading MNO: year-end 2015**

Source: IHS

Figure 1.20 **Mobile market HHI,[4] MNOs (including wholesale and hosted MVNO): year-end 2015**

Source: IHS

[3] In some comparator countries, the mobile connections used to calculate MNO market shares include wholesale and hosted MVNO connections

[4] We have used HHI in order to compare concentration in mobile markets. This index is estimated by taking the absolute value of the market share of each firm in the industry (e.g. 25 if the market share is 25%) and then squaring this number. The sum of these values for all firms is the HHI, and can theoretically range from close to zero for a market with a large number of firms of equal size, to 10,000 for a monopoly. As the calculation is based on market shares for a specific period, even small changes of a few percentage points in market share can impact HHIs, thereby affecting the overall rankings.