

# CMR16 telecoms section charts

# Industry metrics and summary

# Figure 4.1

## UK telecoms industry: key statistics



UK Telecoms Industry	2010	2011	2012	2013	2014	2015
Total operator-reported revenue (£bn)	40.6	39.5	39.4	38.2	37.3	37.5
Operator-reported retail revenue (£bn) (excl. CDS)	27.8	27.9	28.3	28.1	28.2	28.7
Operator-reported wholesale revenue (£bn)	10.1	8.9	8.3	7.5	6.5	6.2
Average monthly household telecoms spend (£, 2015 prices)	86.06	84.13	83.16	80.43	79.65	82.17
Fixed access and call revenue (£bn)	9.3	9.0	8.7	8.7	8.4	8.4
Fixed internet revenue (£bn)	3.3	3.5	3.7	4.0	4.6	5.1
Fixed lines (millions)	33.4	33.3	33.4	33.4	33.5	33.2
Fixed broadband connections (millions)	19.6	20.7	21.8	22.8	23.7	24.7
Superfast broadband connections (≥30Mbit/s, millions)	0.2	1.0	3.1	5.3	7.1	9.2
Fixed voice call minutes (billions)	123	111	102	93	82	74
Average actual residential fixed broadband download speeds (Mbit/s)	6.2	7.6	12.0	17.8	22.8	28.9
UK Superfast broadband premises coverage (%)	-	-	-	-	75	83
Mobile retail revenues (£bn)	15.1	15.4	15.9	15.5	15.2	15.2
Mobile voice call minutes (billions)	131	131	132	134	137	142.8
SMS & MMS messages sent (billions)	129	150	151	129	110	101.3
Mobile data volumes (PB)	-	-	-	283	533	873
Active mobile subscribers (millions)	81.5	82.2	83.2	82.7	83.7	84.8
4G subscribers (millions)	-	-	-	2.7	23.6	39.5
4G UK outdoor premises coverage, by at least one operator (%)	-	-	-	-	-	90.5
M2M subscribers (millions)	3.2	4.1	5.0	5.7	6.3	6.7

Source: Ofcom / operators

Notes: CDS refers to corporate data services; connection figures are at year-end; all revenue data excludes VAT and is in nominal terms except for average monthly household spend; fixed voice minutes shown here are likely to be understated as they do not fully capture the use of VoIP services.

## Figure 4.2

Examples of promotional tariffs from BT, Sky, Virgin Media and TalkTalk for July 2016

Service provider	Plan	Tariff per month (£)		Discount received by new customers (%)
		Standard	Including promotion	
BT	Unlimited ADSL broadband + Free Weekend Calls	38.99	31.99	18.0%
Sky	Sky BB Unlimited	27.40	22.40	18.2%
TalkTalk	SimplyBroadband	25.20	21.45	14.9%
Virgin Media	SuperFibre 50 and calls	36.99	31.74	14.2%

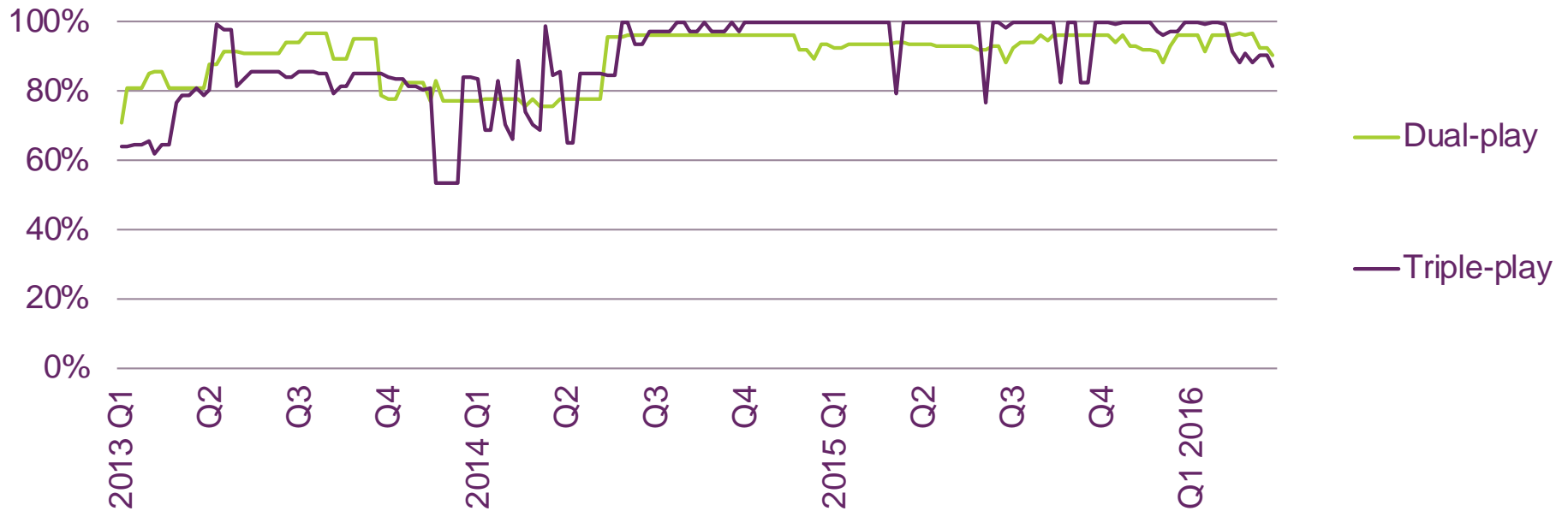
Source: Operator websites, PurePricing

Note: Tariff including promotional discounts are only for the duration of the promotion and not calculated across minimum contractual term

## Figure 4.3

### Plans with promotions as percentage of total plans for dual/triple-play services

Proportion of promoted plans (%)

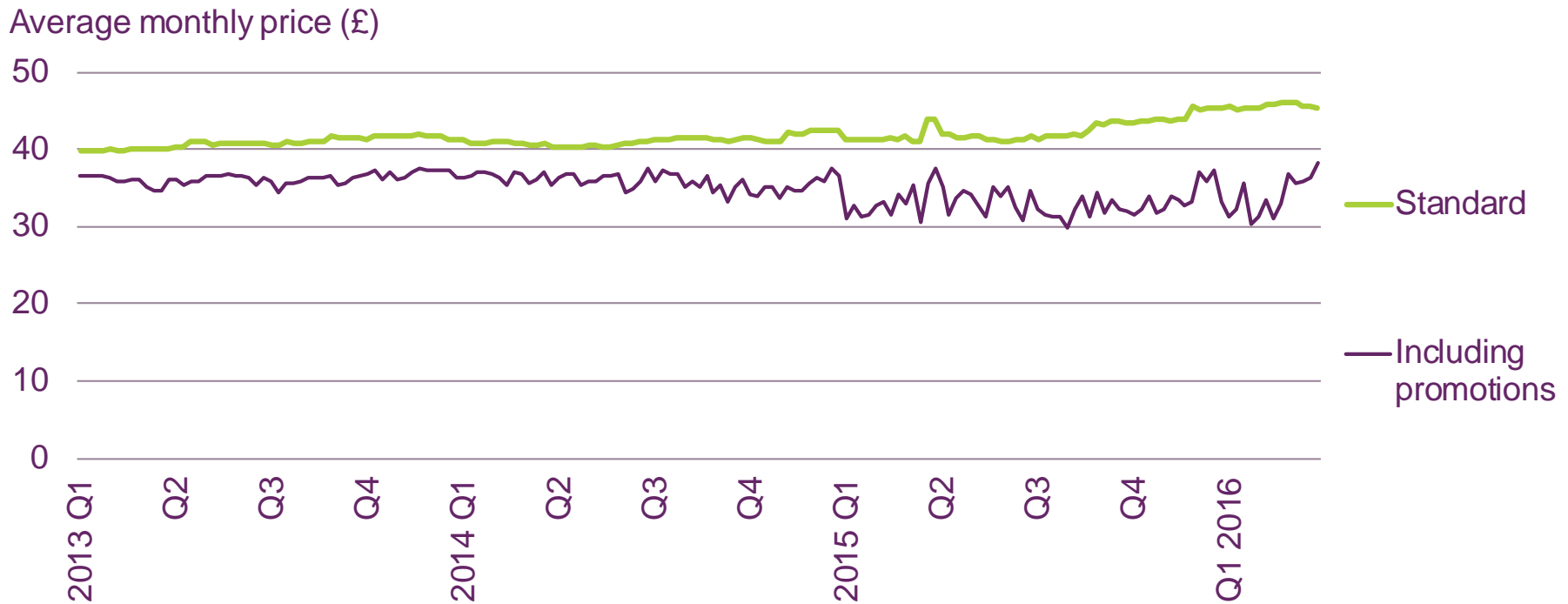


Source: Simplify Digital

Note: Includes tariffs for the four largest providers – BT, Sky, Virgin Media and TalkTalk.

# Figure 4.4

## Average monthly standard and discounted tariffs for dual-play bundles

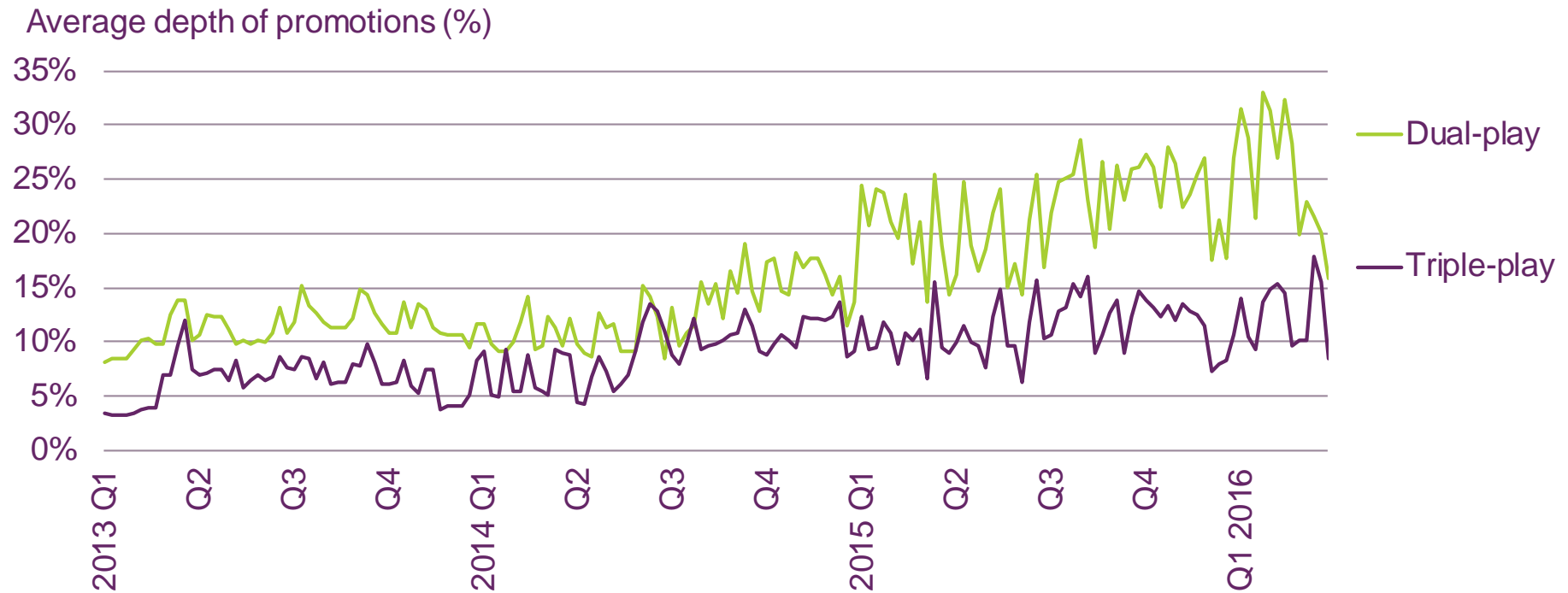


Source: Simplify Digital

Note: The average monthly cost is calculated across each service's minimum contractual term. Includes tariffs for the four largest providers – BT, Sky, Virgin Media and TalkTalk.

# Figure 4.5

## Promotions as a proportion of total monthly price for dual-play and triple-play bundles



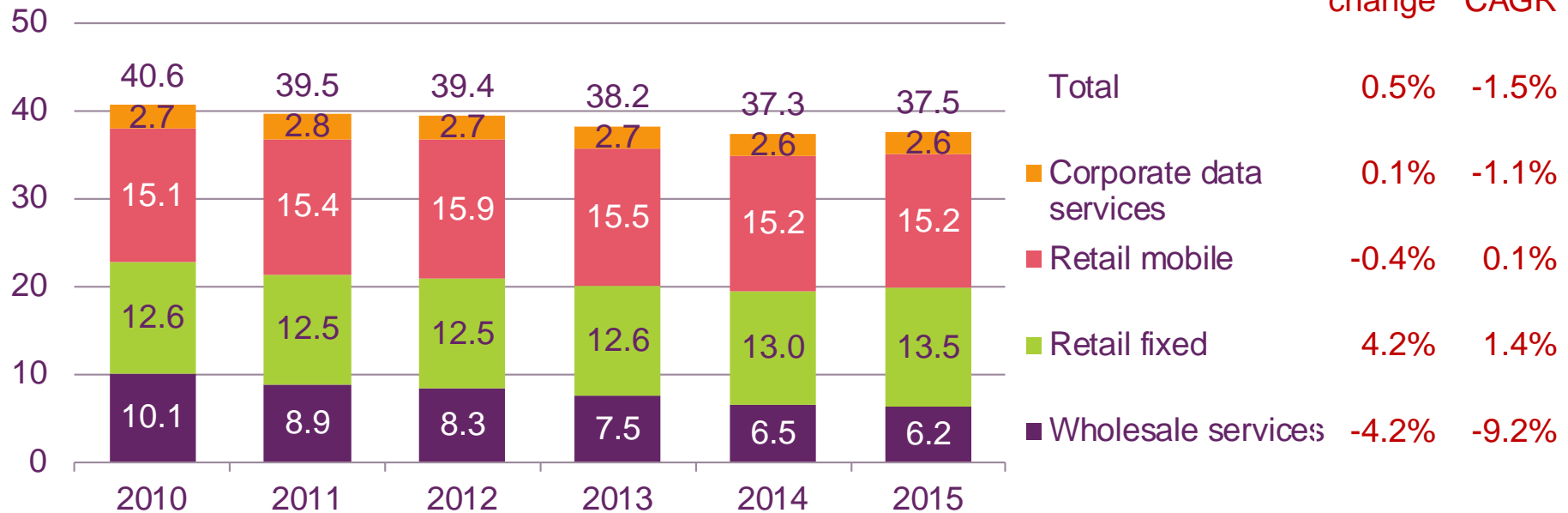
Source: Simplify Digital

Note: The average monthly price is calculated across each service’s minimum contractual term. Includes tariffs for the four largest providers – BT, Sky, Virgin Media and TalkTalk.

# Figure 4.6

## Summary of UK telecoms revenues

Revenue (£bn)



Source: Ofcom / operators, with the exception of corporate data services, sourced from IDC.

Notes: 'Corporate data services' comprises web hosting, Ethernet, IP VPN, digital leased line, corporate VoIP and frame relay/ATM services; wholesale mobile comprises wholesale mobile voice, messaging and data services, mobile voice and SMS termination revenue and wholesale inbound roaming revenue (i.e. revenue from overseas operators when their subscribers use UK networks).



# Figure 4.7

## Outgoing fixed and mobile voice call volumes

Billions of minutes

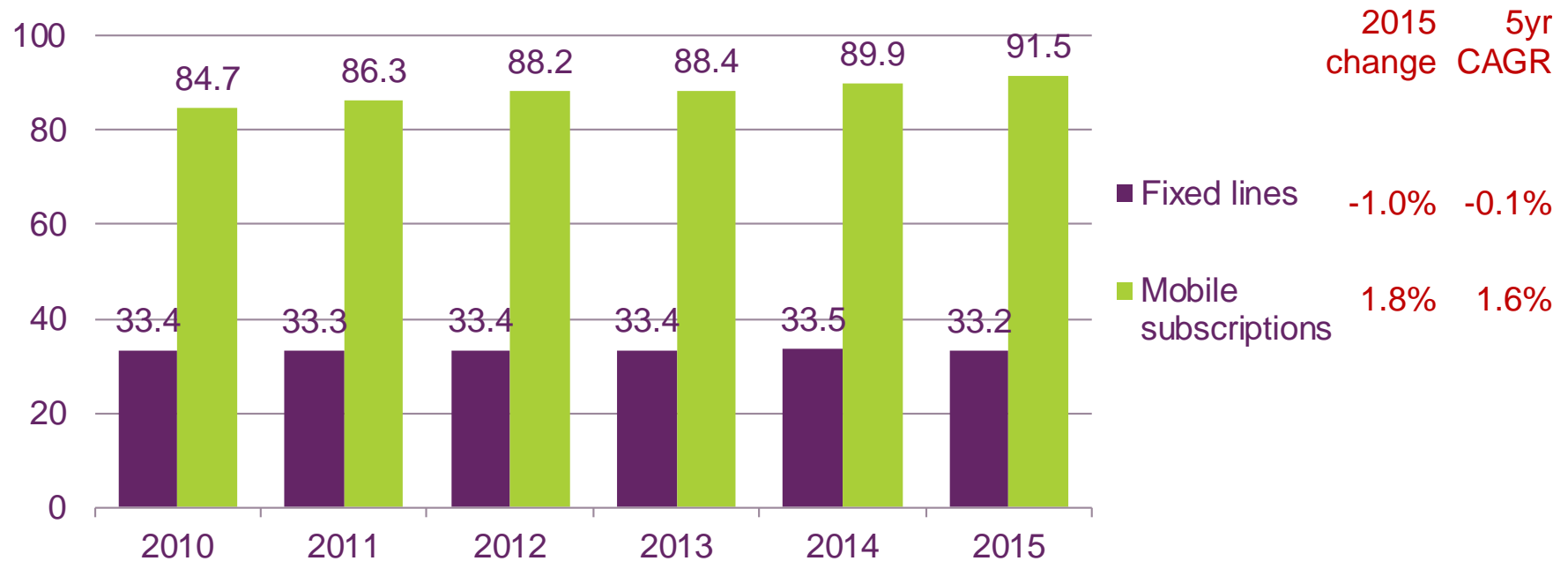


Source: Ofcom / operators

## Figure 4.8

### Fixed lines and mobile subscriptions

Millions



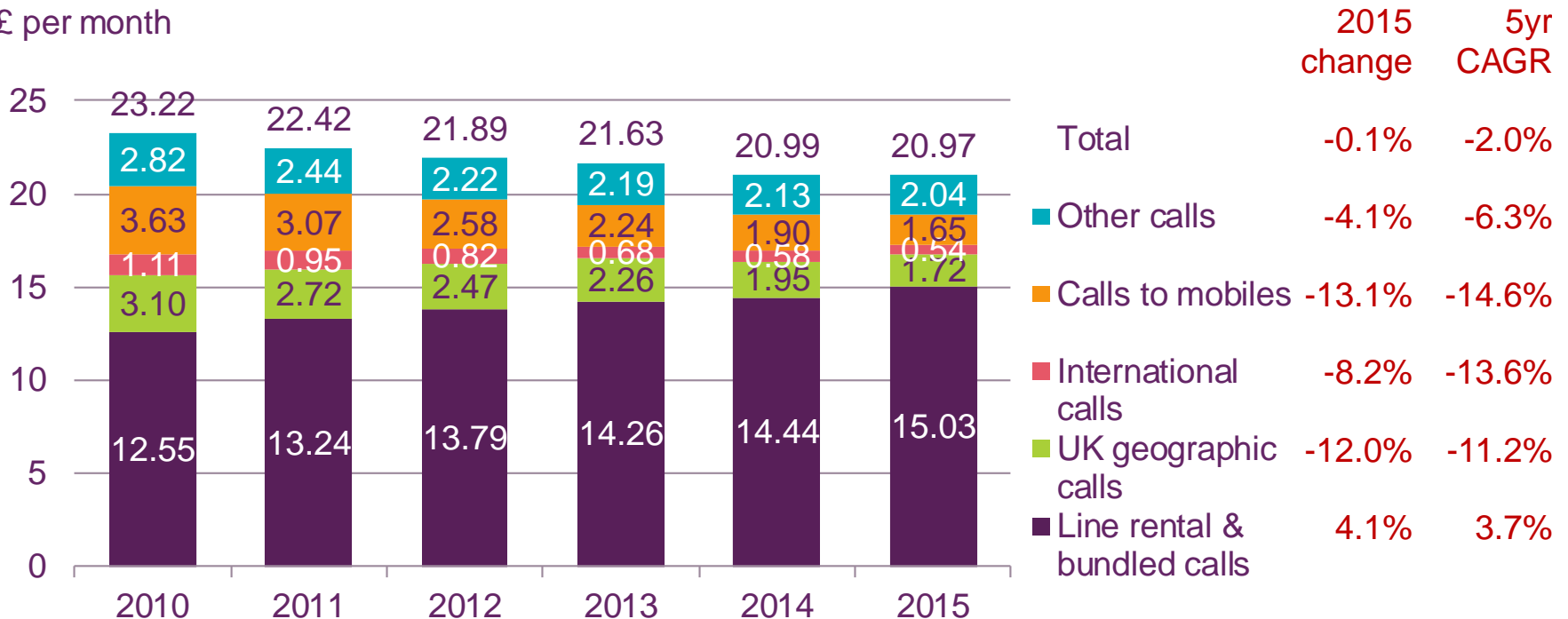
Source: Ofcom / operators

Note: Mobile subscriptions include M2M

# Figure 4.9

## Average monthly retail voice revenue per fixed line

£ per month



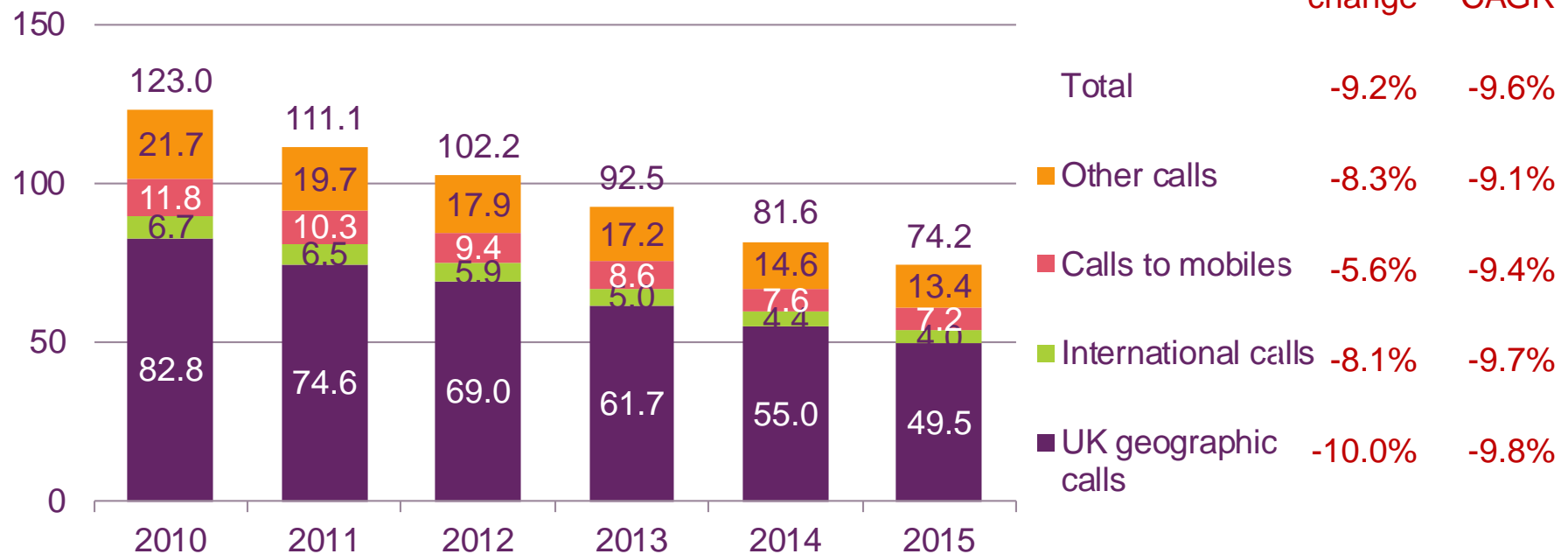
Source: Ofcom / operators

Note: Figures exclude VAT

# Figure 4.10

## Fixed voice call volumes, by type of call

Billions of minutes



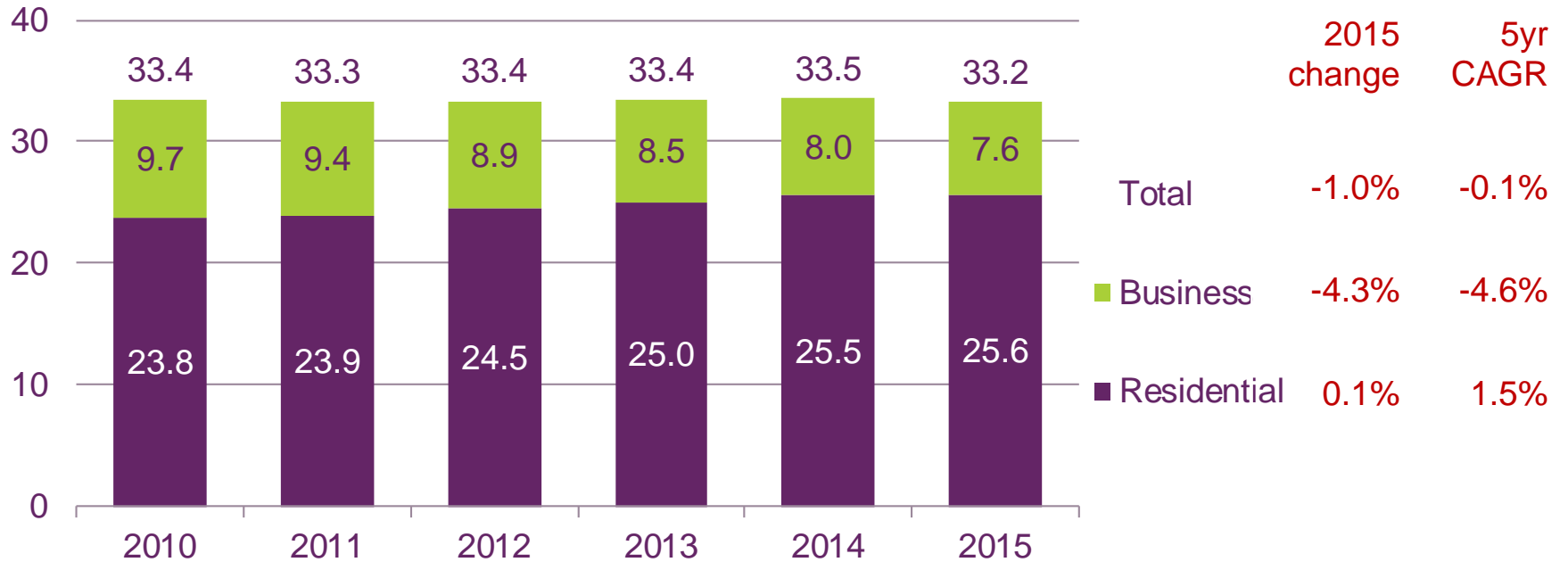
Source: Ofcom / operators

Note: VoIP call volumes are not fully captured in this chart and so totals may be understated

# Figure 4.11

## Number of fixed lines

Millions

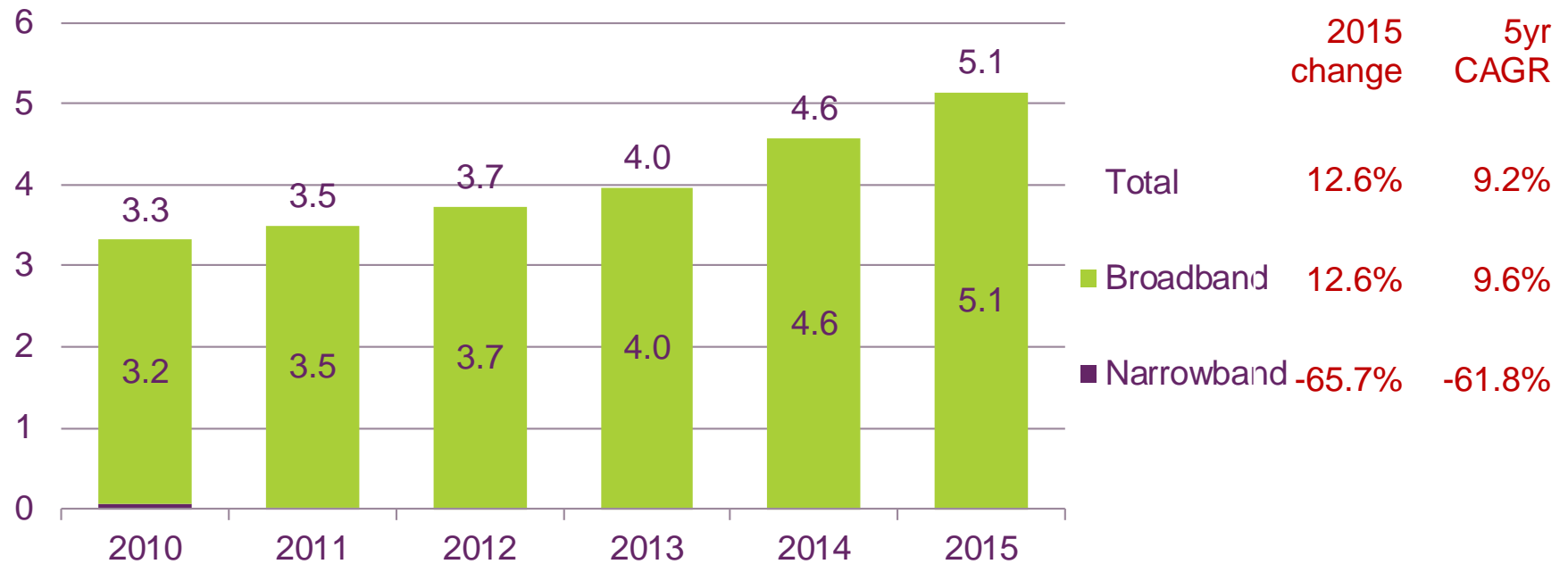


Source: Ofcom / operators

## Figure 4.12

### Retail residential and SME fixed internet revenues

£billions

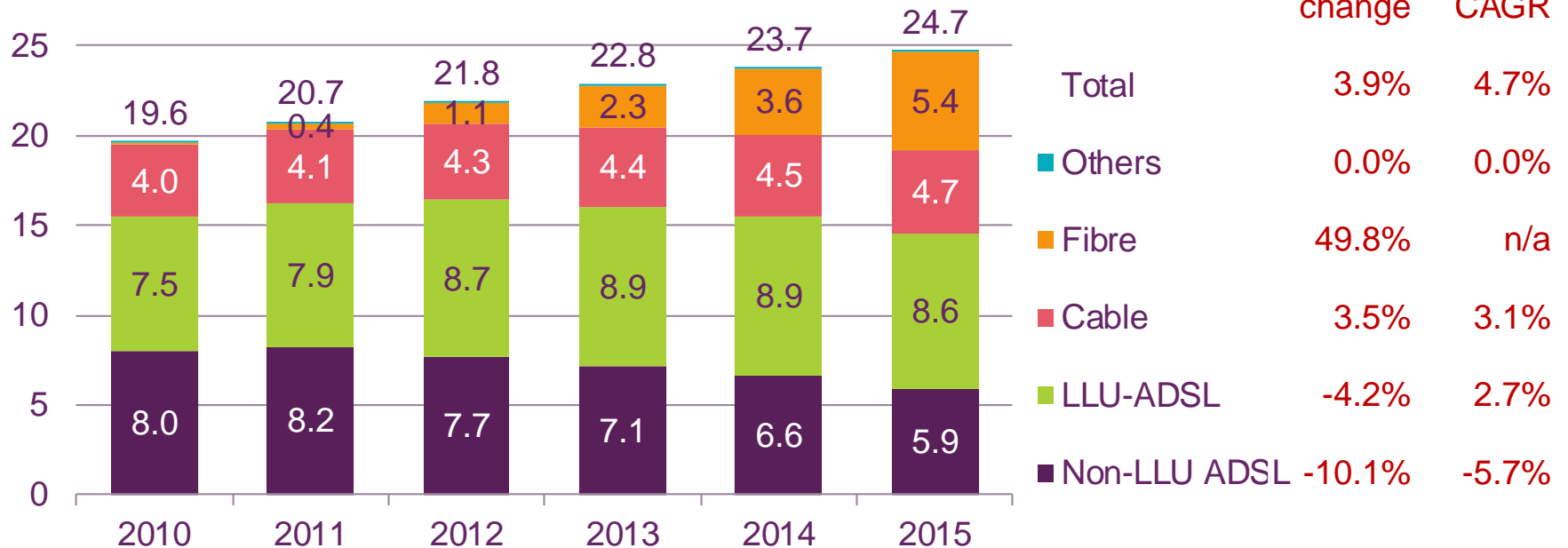


Source: Ofcom / operator data

# Figure 4.13

## Retail fixed broadband lines

Millions

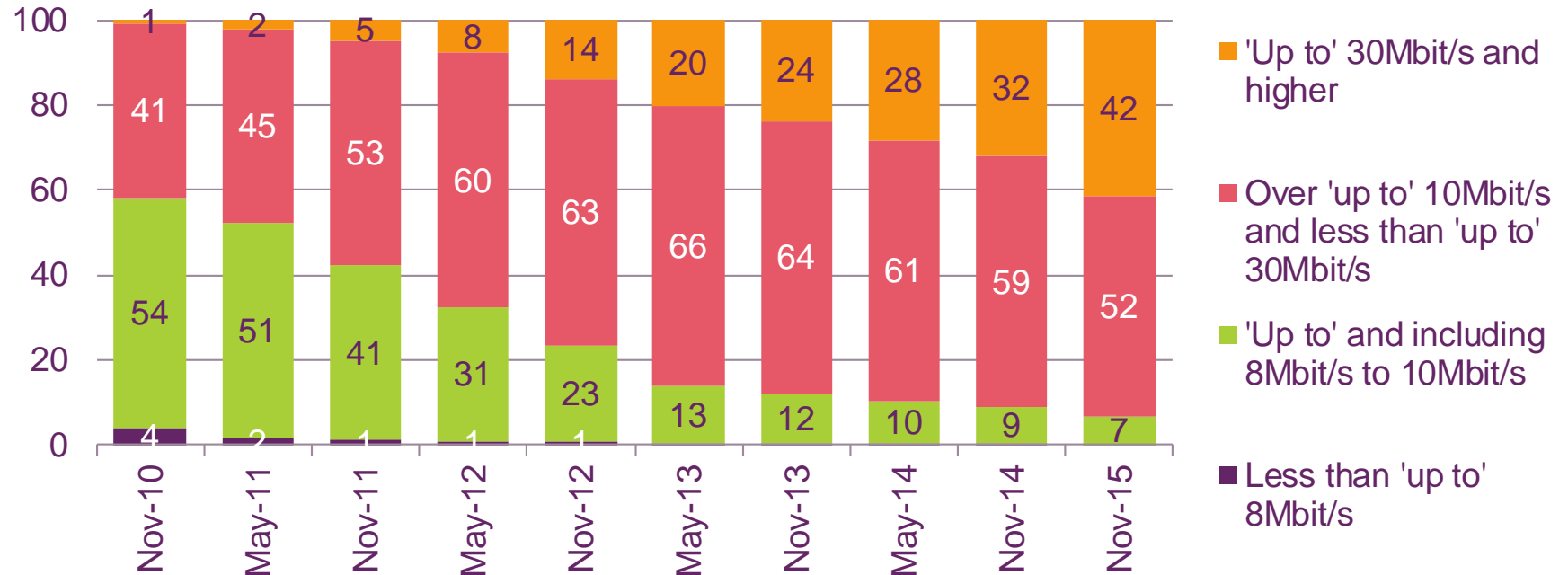


Source: Ofcom / operator data

# Figure 4.14

## UK residential broadband lines, by headline speed

Per cent



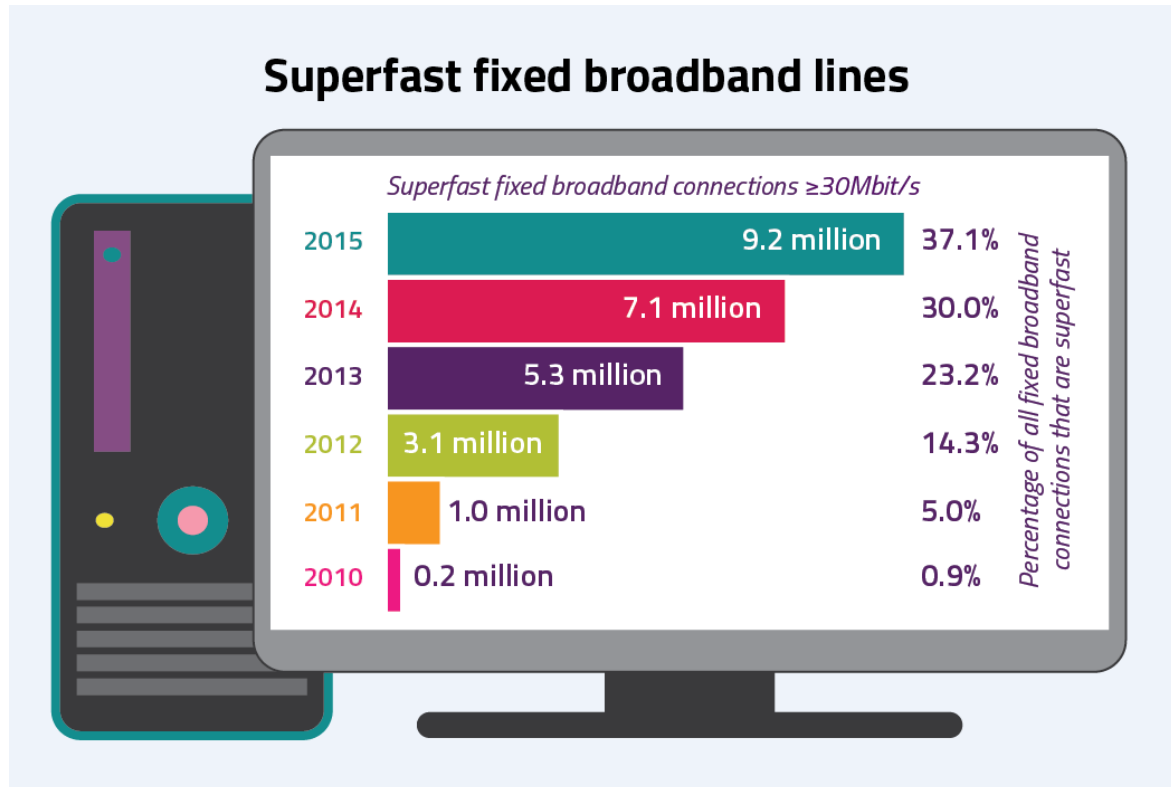
Source: Ofcom, based on data provided by the UK's largest ISPs by retail market share (representing over 90% of the total market).

Note: The above 'up to' 10Mbit/s and less than 'up to' 30Mbit/s category includes ADSL2+ lines which are not marketed using a connection speed.



# Figure 4.15

## Superfast fixed broadband lines



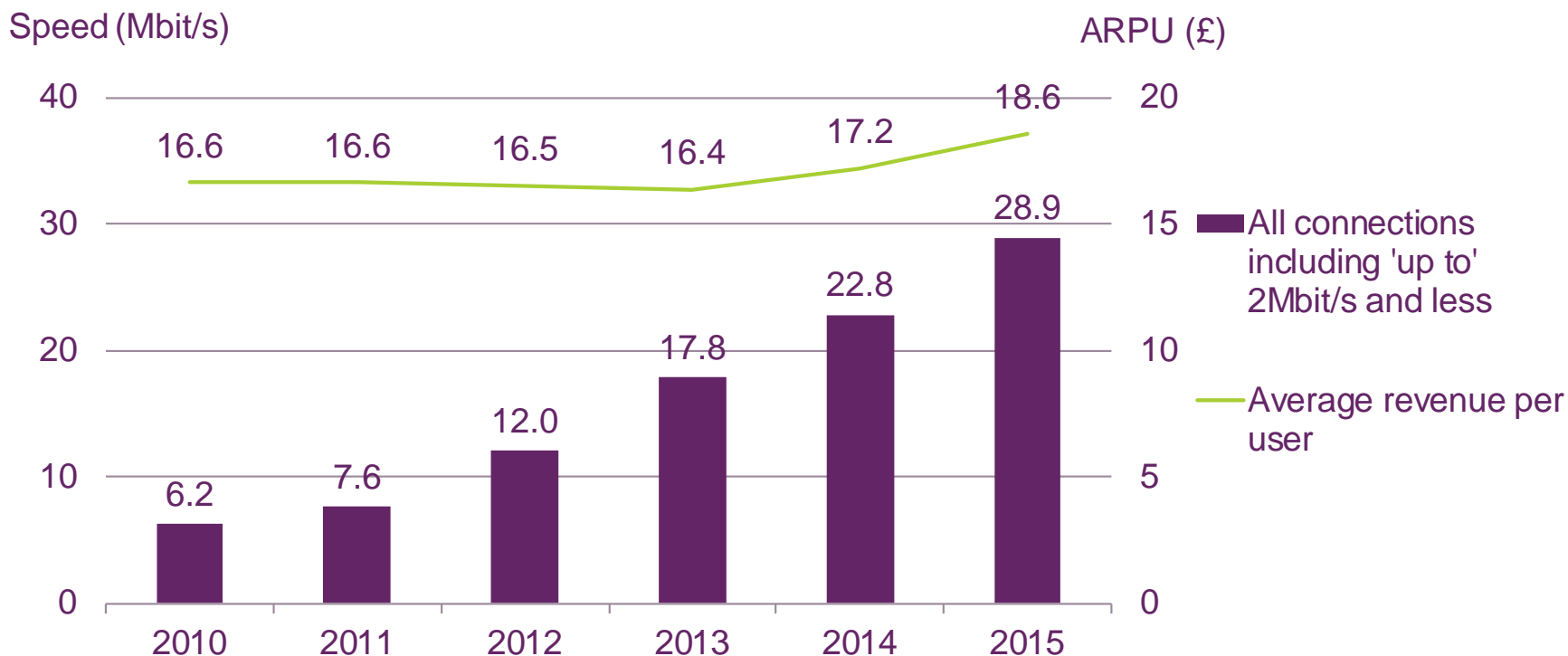
Source: Ofcom / operators

Notes: Includes estimates where Ofcom does not receive data from operators; includes Ofcom adjustment to exclude FTTC connections delivering less than 30Mbit/s.

# Figure 4.16



## Average actual residential fixed broadband download speeds and real average revenue per connection



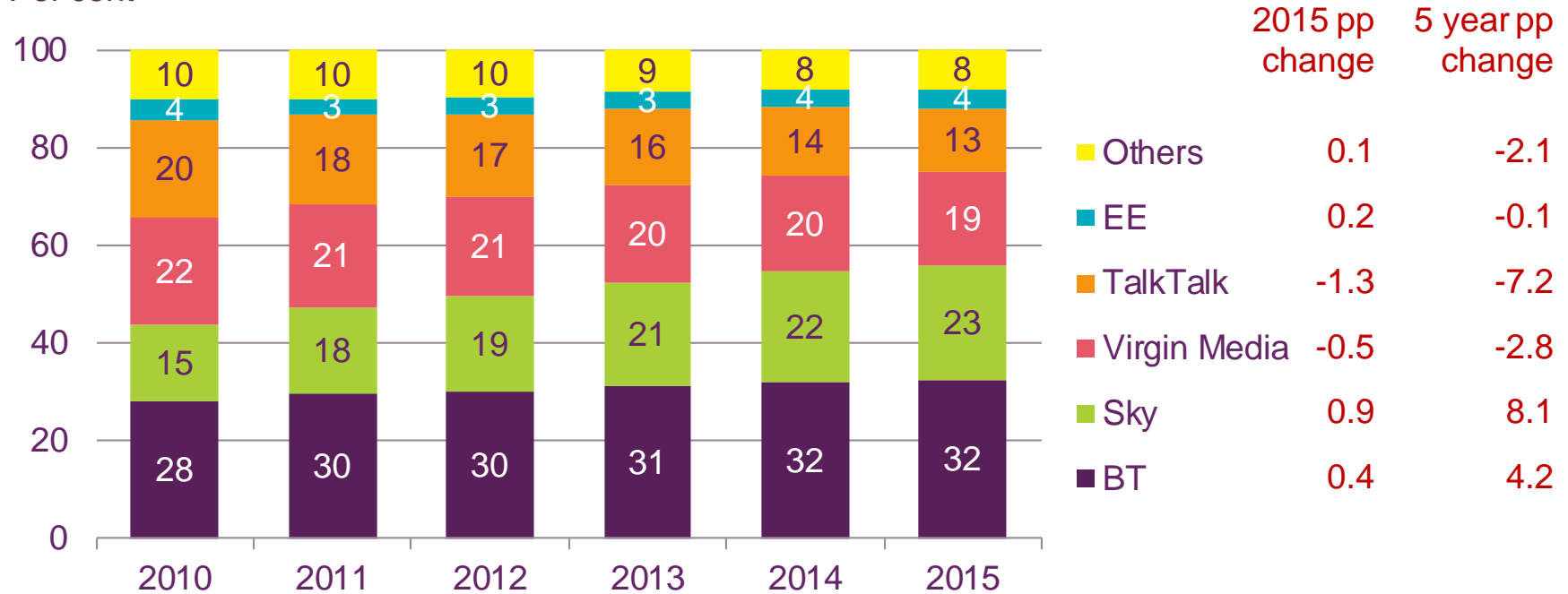
Source: Ofcom, using data provided by SamKnows

Note: November 2010 data are for Nov/Dec 2010; average speed data are for November of each year; average revenue per user includes VAT and is adjusted for CPI

# Figure 4.17

## Retail fixed broadband market shares

Per cent

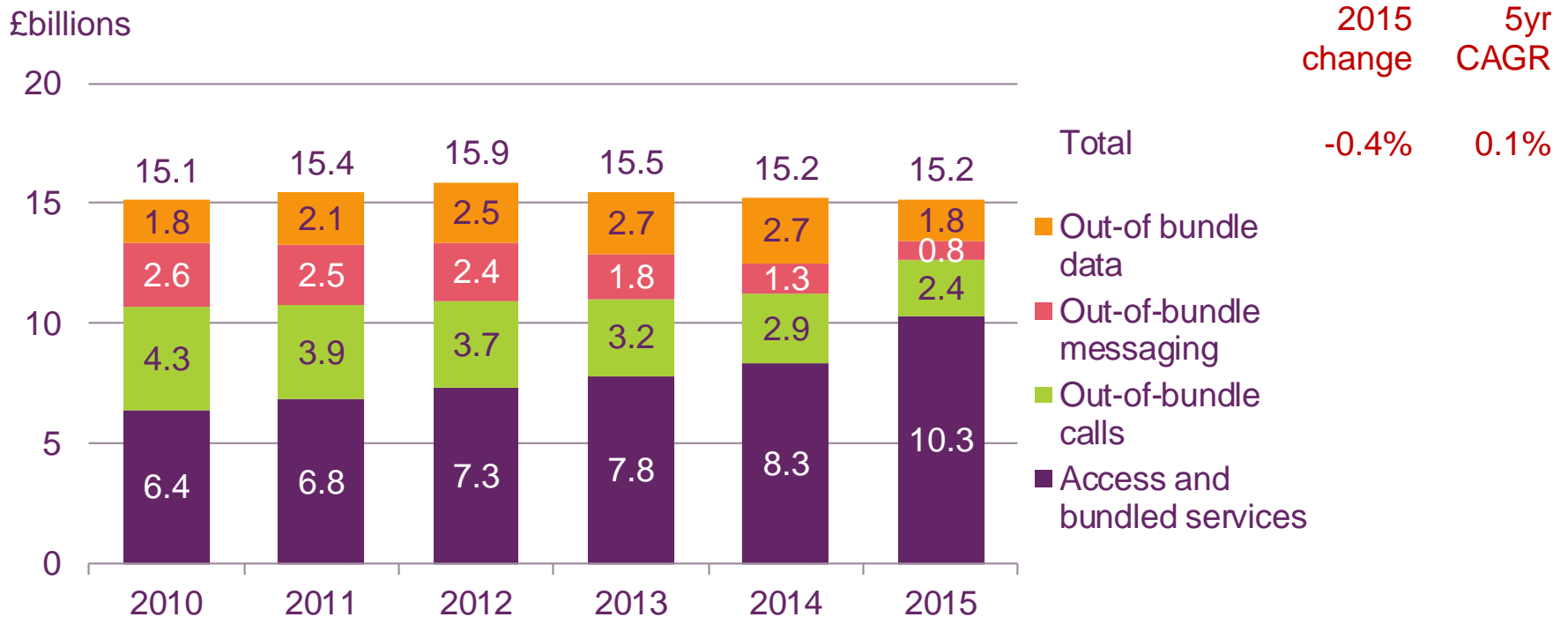


Source: Ofcom / operator data

Note: BT and EE are shown separately, as the merger between these two organisations not completed until 2016

# Figure 4.18

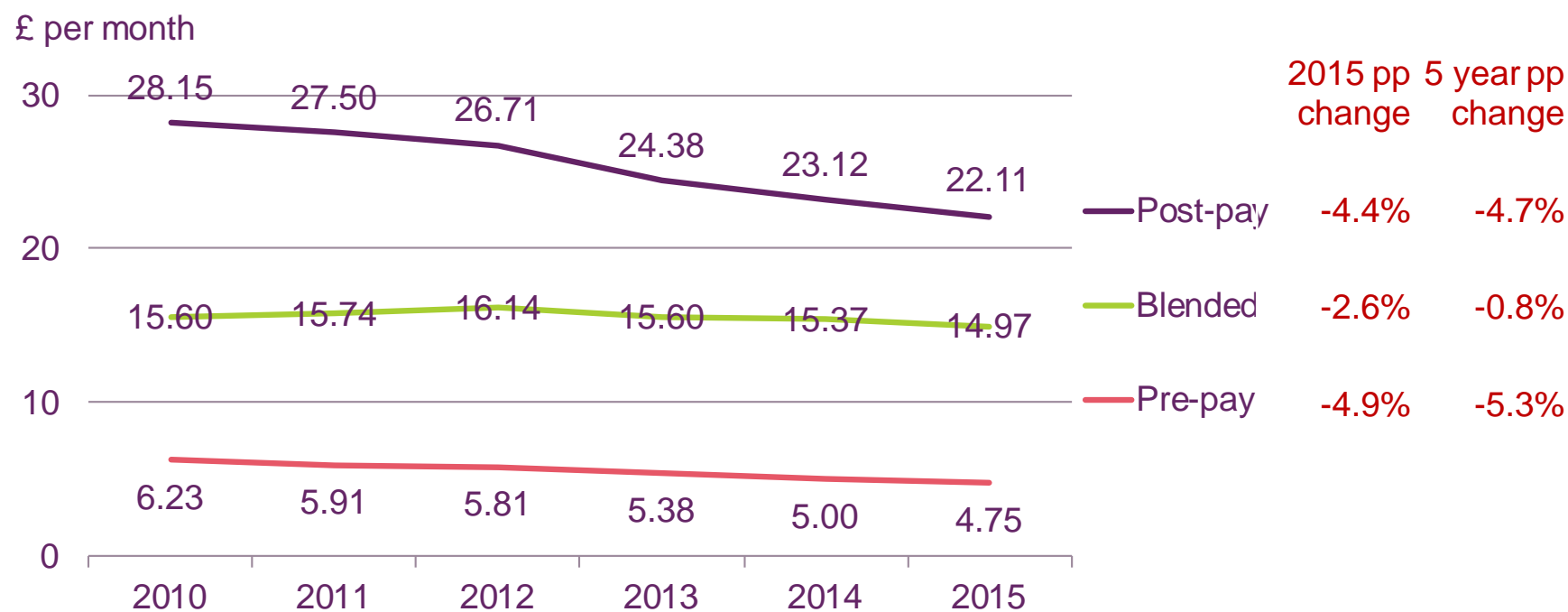
## Mobile retail revenue, by service



Source: Ofcom / operators

# Figure 4.19

## Average monthly retail revenue per mobile subscription

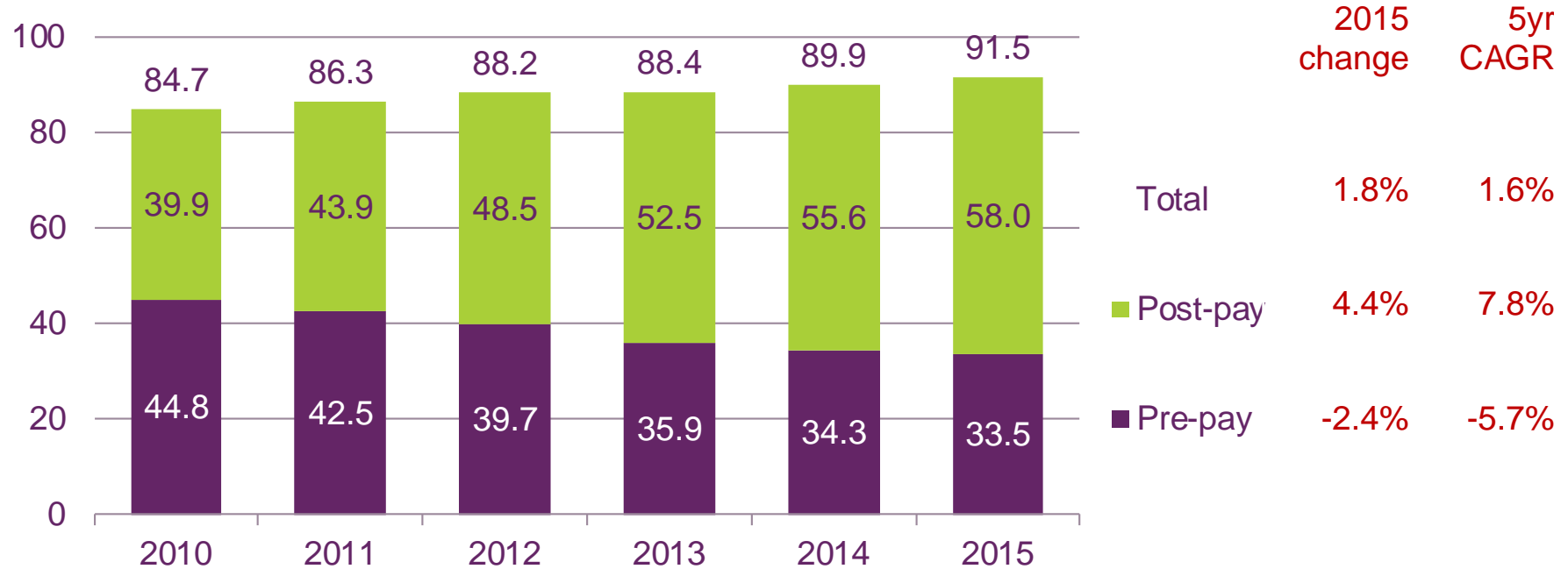


Source: Ofcom/ operators  
All figures are nominal.

# Figure 4.20

## Mobile subscriptions, by pre-pay and post-pay

Millions

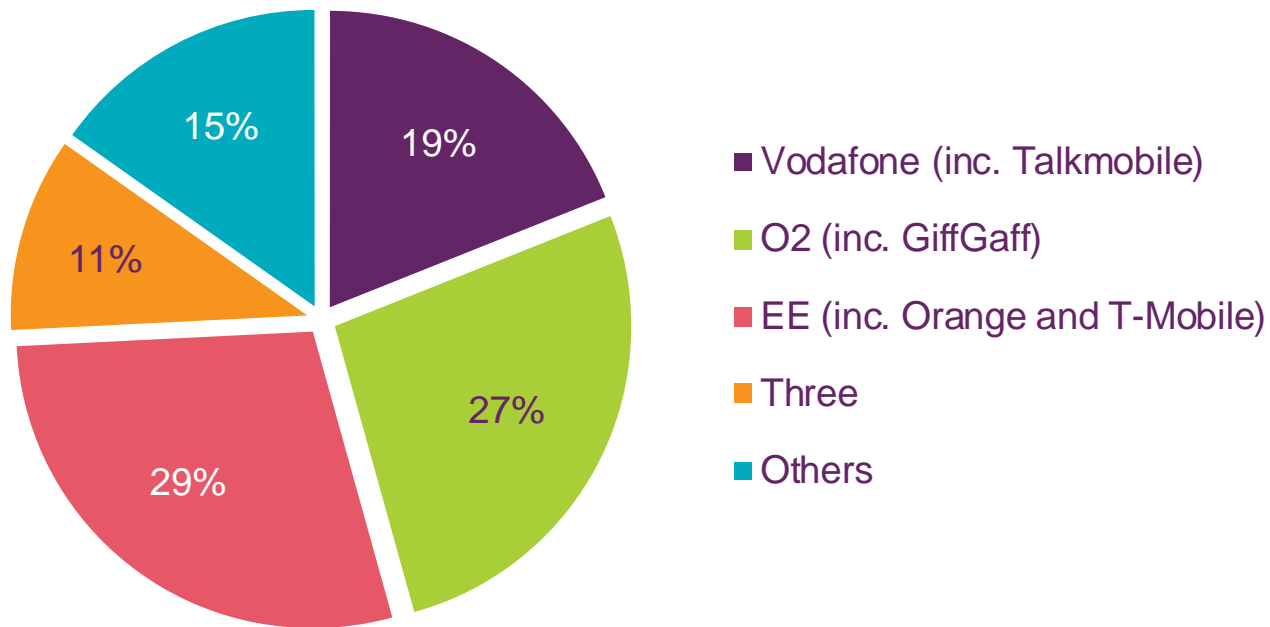


Source: Ofcom / operators

Note: Includes M2M

## Figure 4.21

Retail mobile subscription shares, by provider: Q4 2015

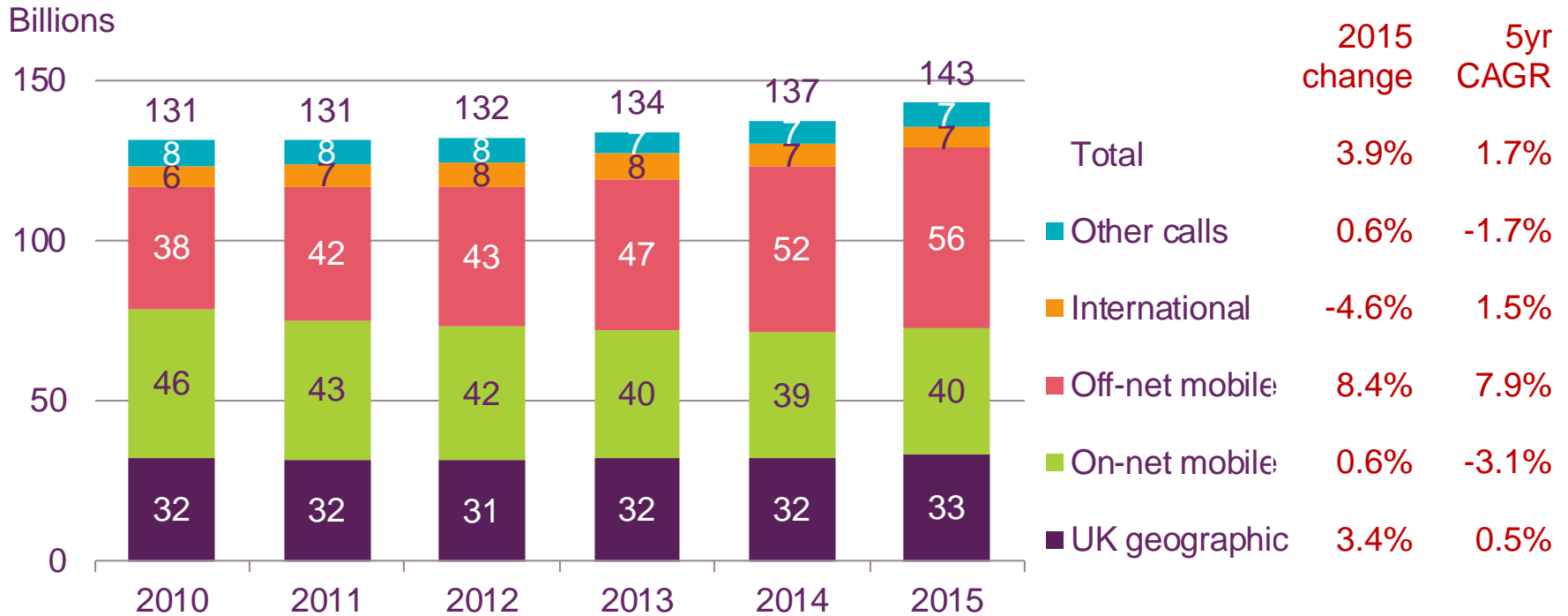


Source: Ofcom / operators

Note: Excludes M2M subscriptions

# Figure 4.22

## Outgoing mobile call minutes, by type of call



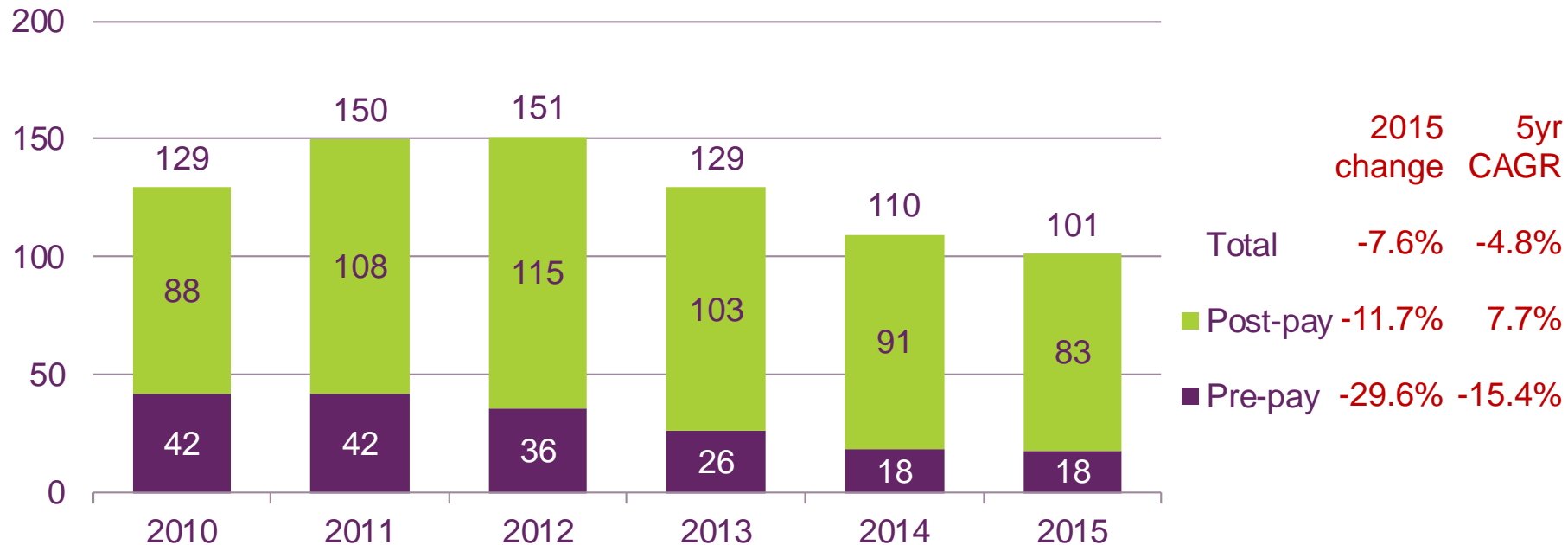
Source: Ofcom / operators



# Figure 4.23

## Outgoing SMS and MMS messages: 2010-2015

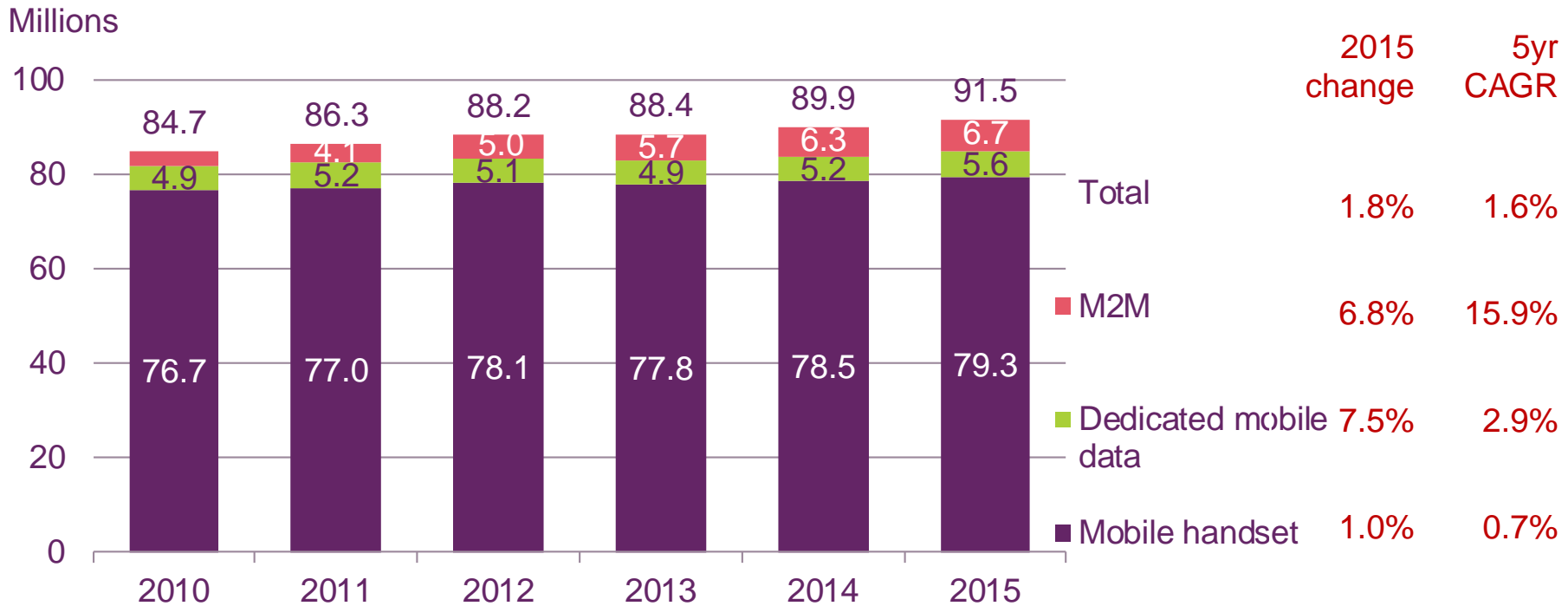
Billions



Source: Ofcom / operators

# Figure 4.24

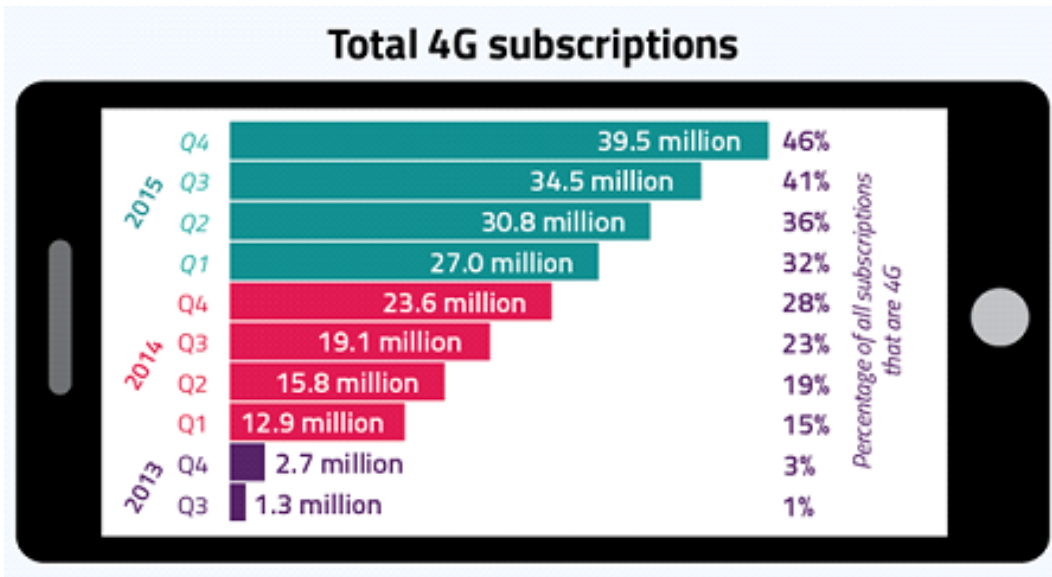
## Mobile subscriptions, by connection type: 2010-2015



Source: Ofcom / operators

## Figure 4.25

### Total 4G subscription numbers

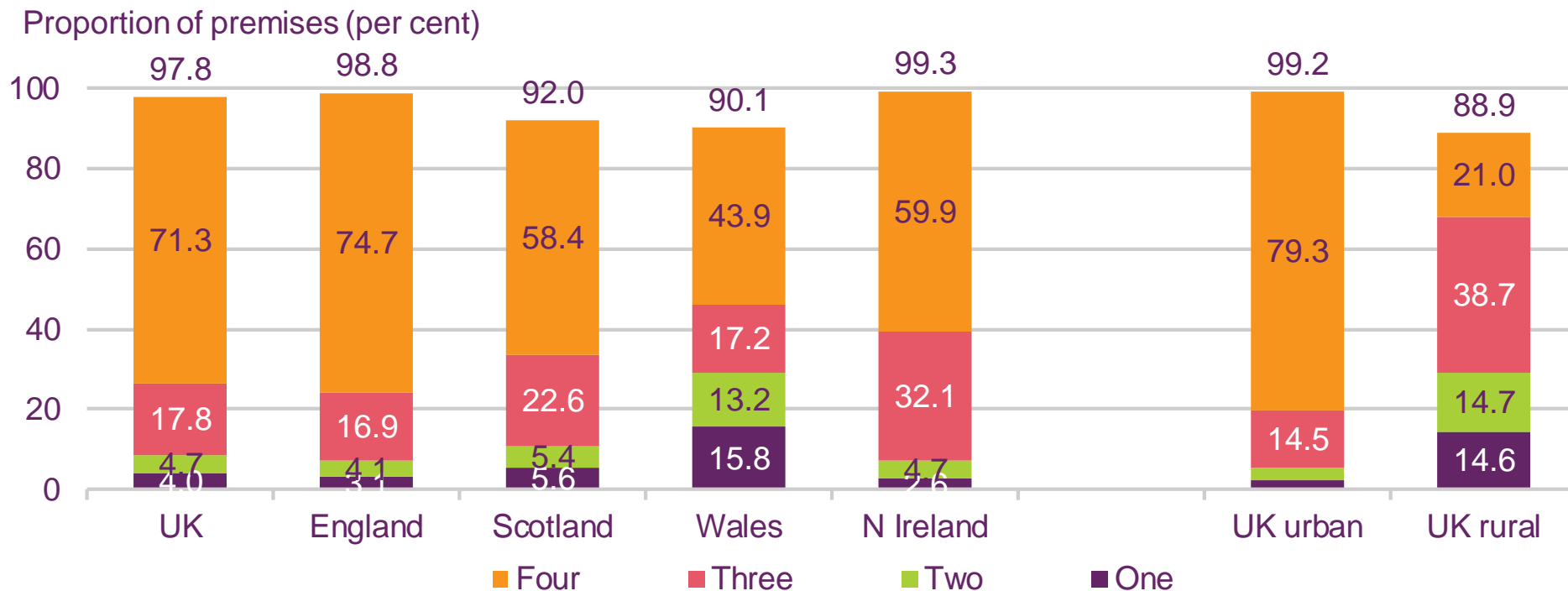


Source: Operator data

Note: Includes all consumers whose tariff allows them to access 4G mobile services, even those without a 4G-enabled device or in areas where their provider has no 4G coverage.

# Figure 4.26

## Outdoor 4G premises mobile coverage, by number of operators

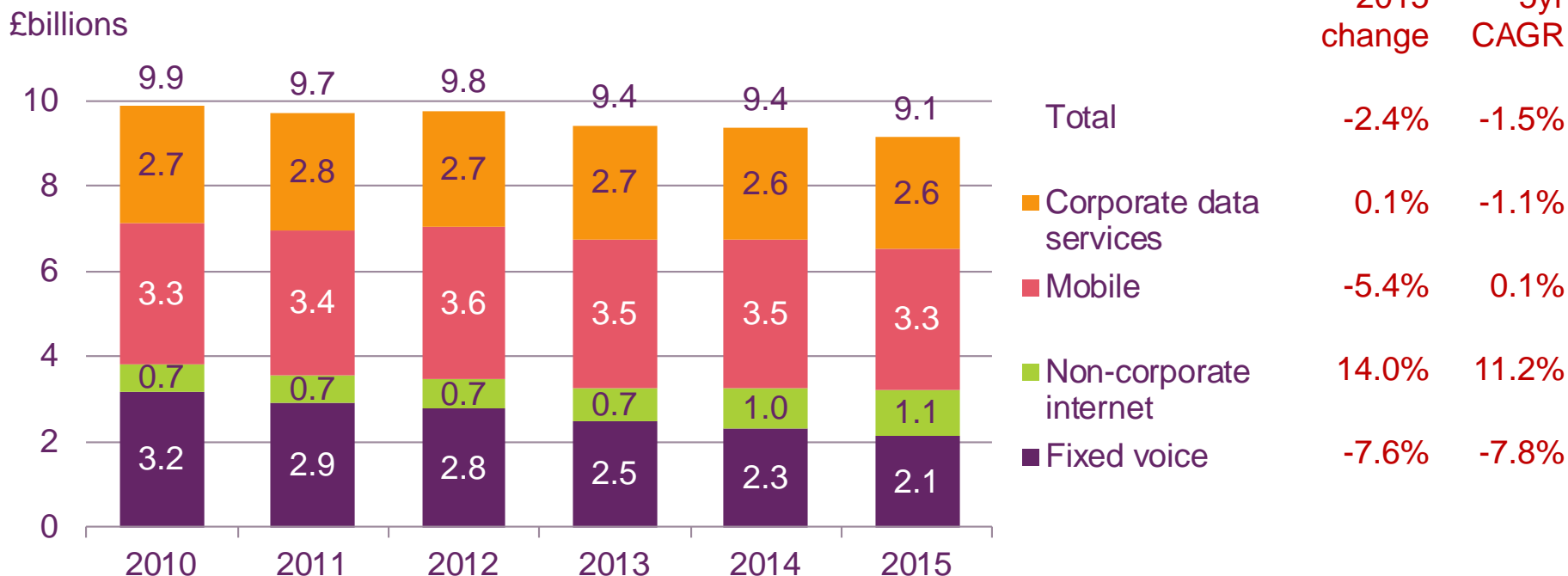


Source: Ofcom / operators, May 2016 data

Note: Coverage is based on 100m<sup>2</sup> pixels covering the UK

# Figure 4.27

## Retail business telecoms revenues, by service



Source: Ofcom / operator data, with the exception of corporate data services, sourced from IDC

Note: Fixed voice figures exclude revenues from non-geographic voice calls; corporate data services comprises web hosting, Ethernet, IP VPN, digital leased line and frame relay/ATM services.

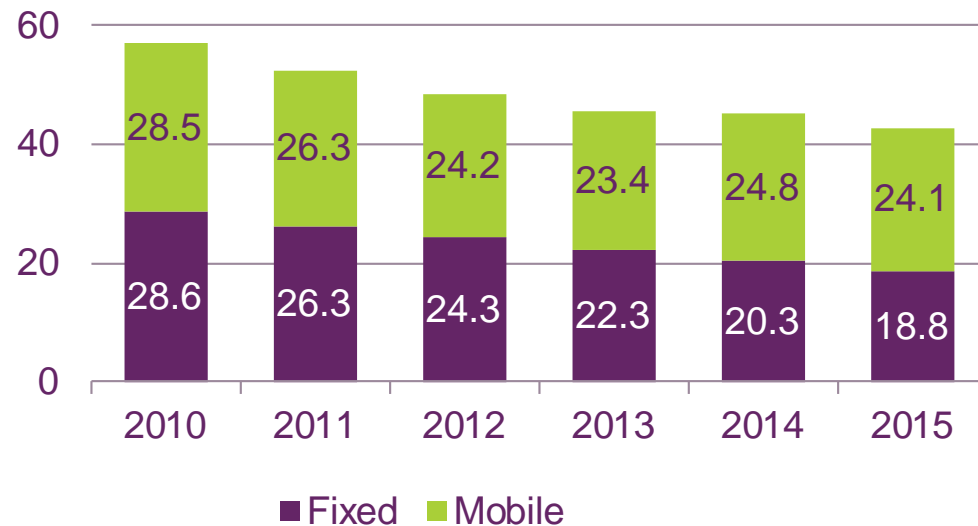
Business VoIP call volumes increased 19.1% year on year, while fixed and mobile call volumes fell in 2015

# Figure 4.28

## Business voice call minutes

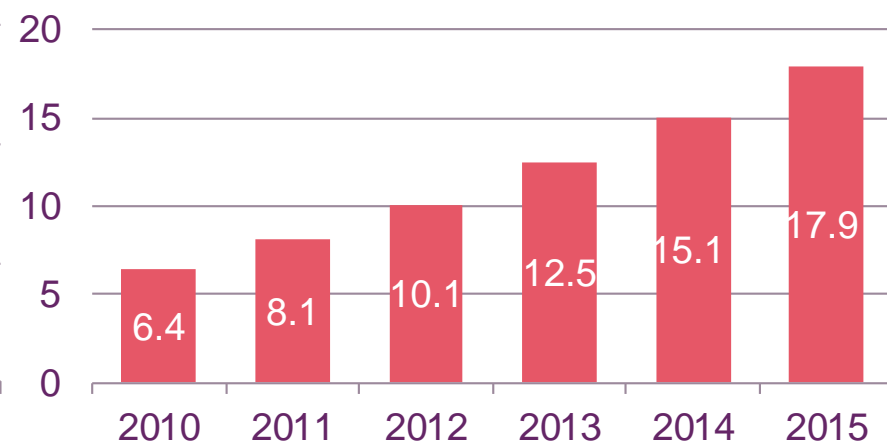
### Business fixed and mobile voice call minutes

Billions of minutes



### Business VoIP voice call minutes

Billions of minutes



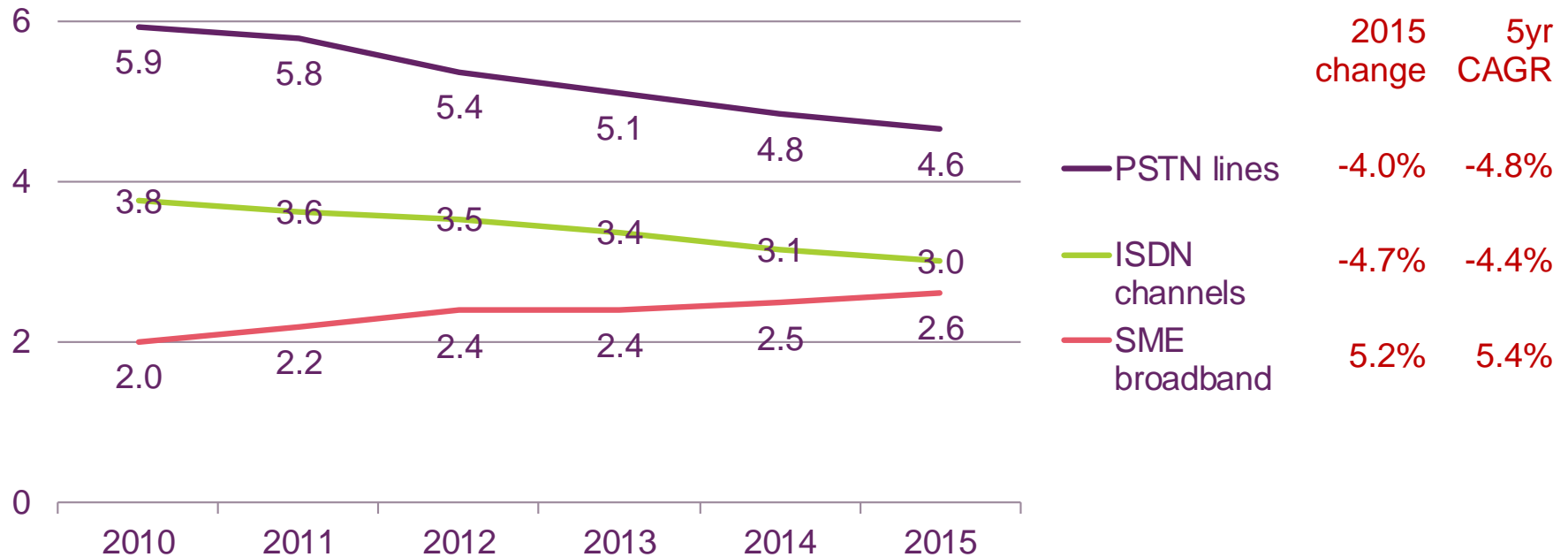
Source: Ofcom / operator data / IDC for VoIP data only

Note: VoIP volumes are not fully captured in the business fixed and mobile voice call minutes chart. It is not possible to sum the totals of both charts to calculate total business call volumes as some VoIP minutes may be included in the business fixed and mobile voice call minutes data.

# Figure 4.29

## Business fixed voice and SME fixed broadband lines

Millions of connections



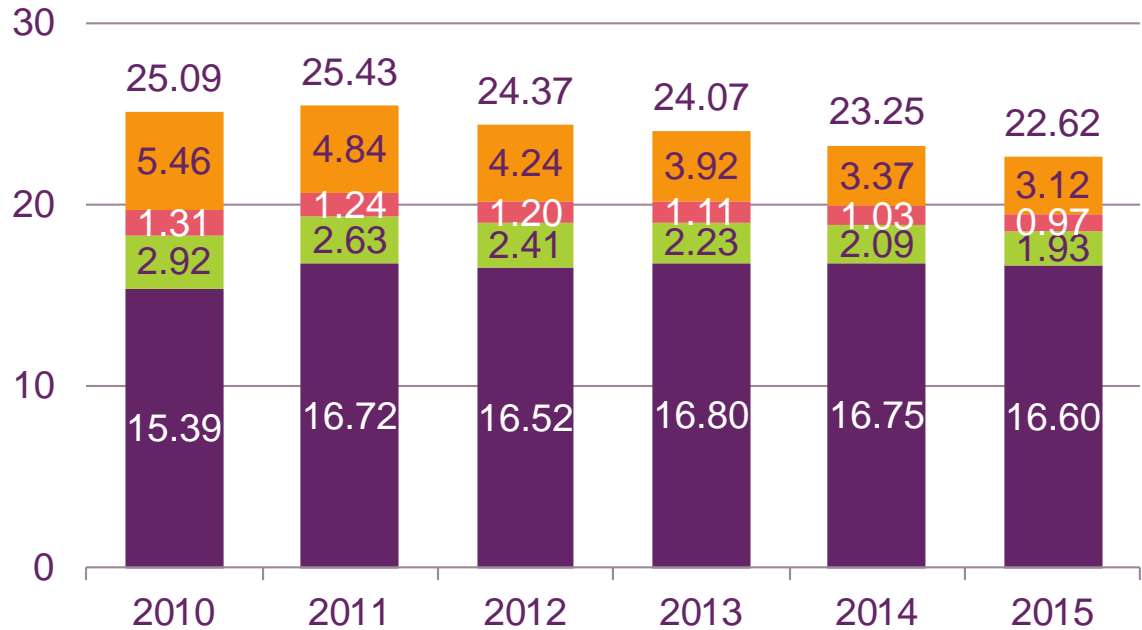
Source: Ofcom / operator data

Note: Mobile voice revenues include revenues from bundled messaging and data services.

# Figure 4.30

## Average monthly retail revenue per business fixed line

£ per month



	2015 change	5yr CAGR
Total	-2.7%	-2.1%
Calls to mobiles	-7.5%	-10.6%
International calls	-5.9%	-5.9%
UK geographic calls	-8.0%	-8.0%
Line rental & bundled calls	-0.9%	1.5%

Source: Ofcom / operators

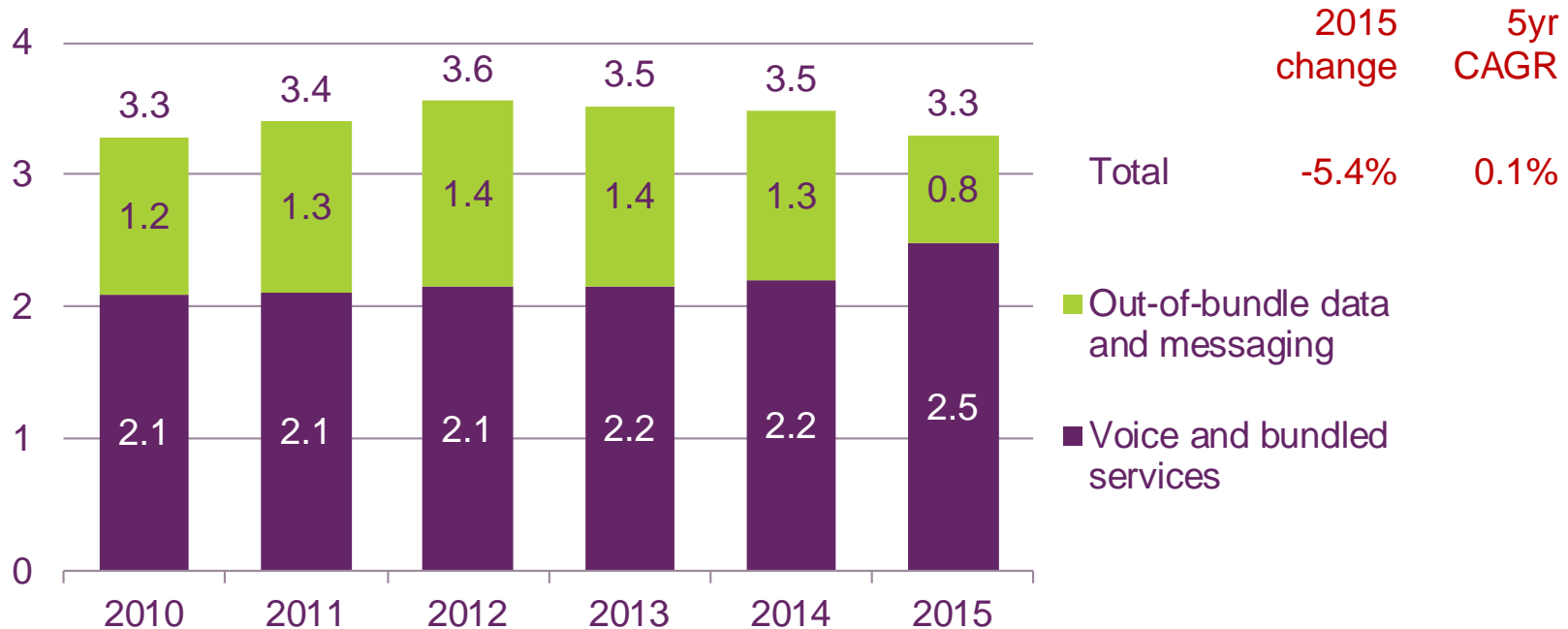
Note: Excludes revenues from non-geographic voice calls.



# Figure 4.31

## Breakdown of business mobile revenues

£billions

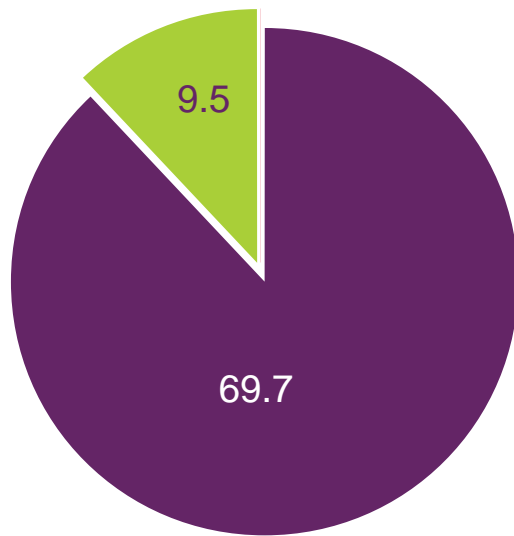


Source: Ofcom / operators

# Figure 4.32

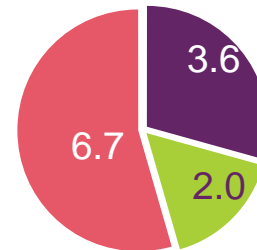
## Business mobile voice and dedicated mobile data connections

Subscriptions (millions)



Subscriptions including voice

- Residential
- Business
- M2M



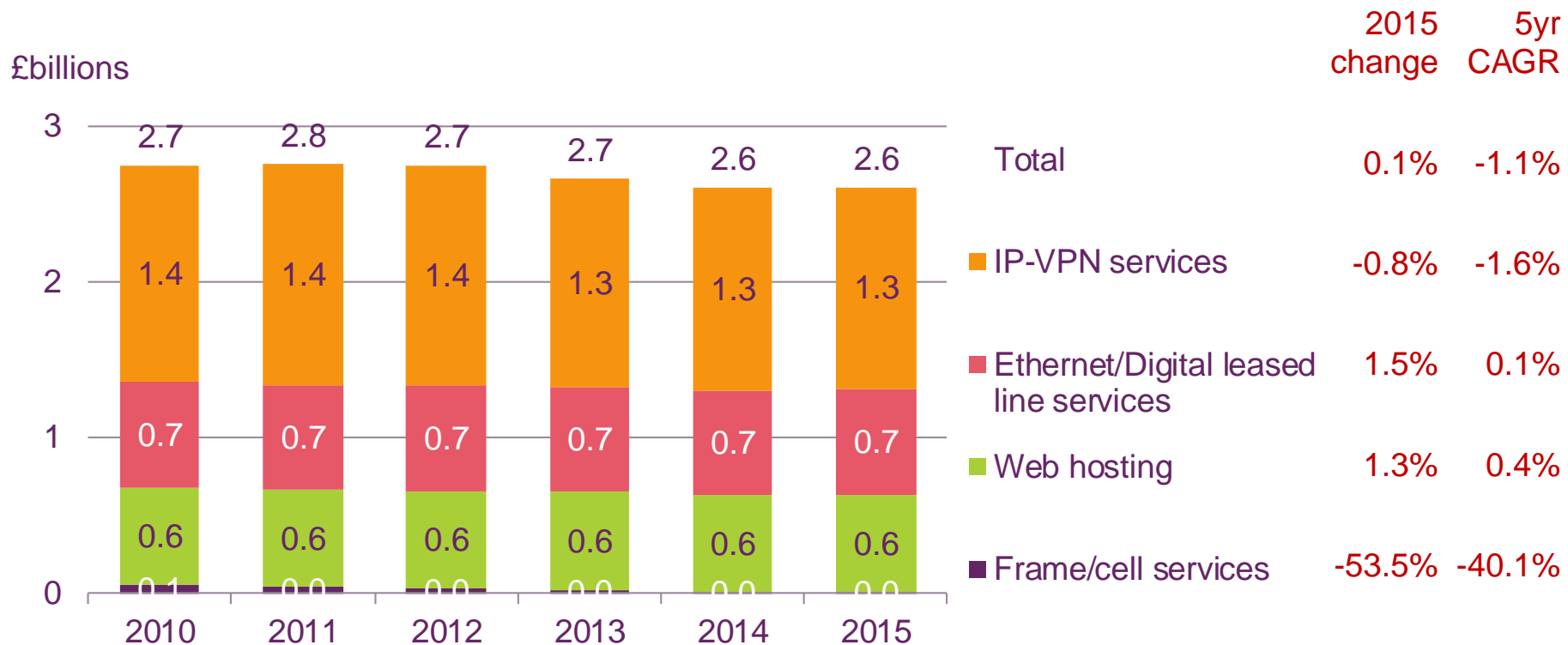
Dedicated data subscriptions

Source: Ofcom / operators

Note: Mobile broadband excludes smartphone data use.

# Figure 4.33

## Breakdown of corporate data services' revenues

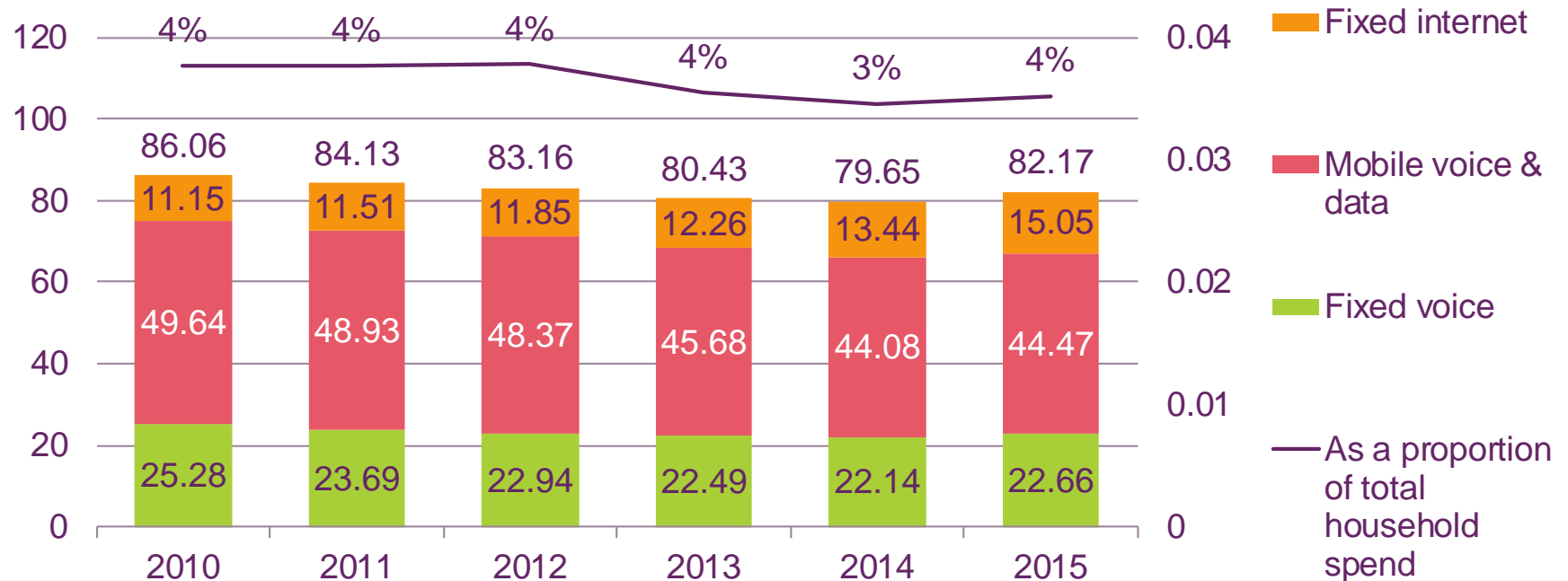


Source: IDC

# Figure 4.34

## Average household spend on telecoms services

£ per month (2015 prices)



Source: Ofcom / operators / ONS

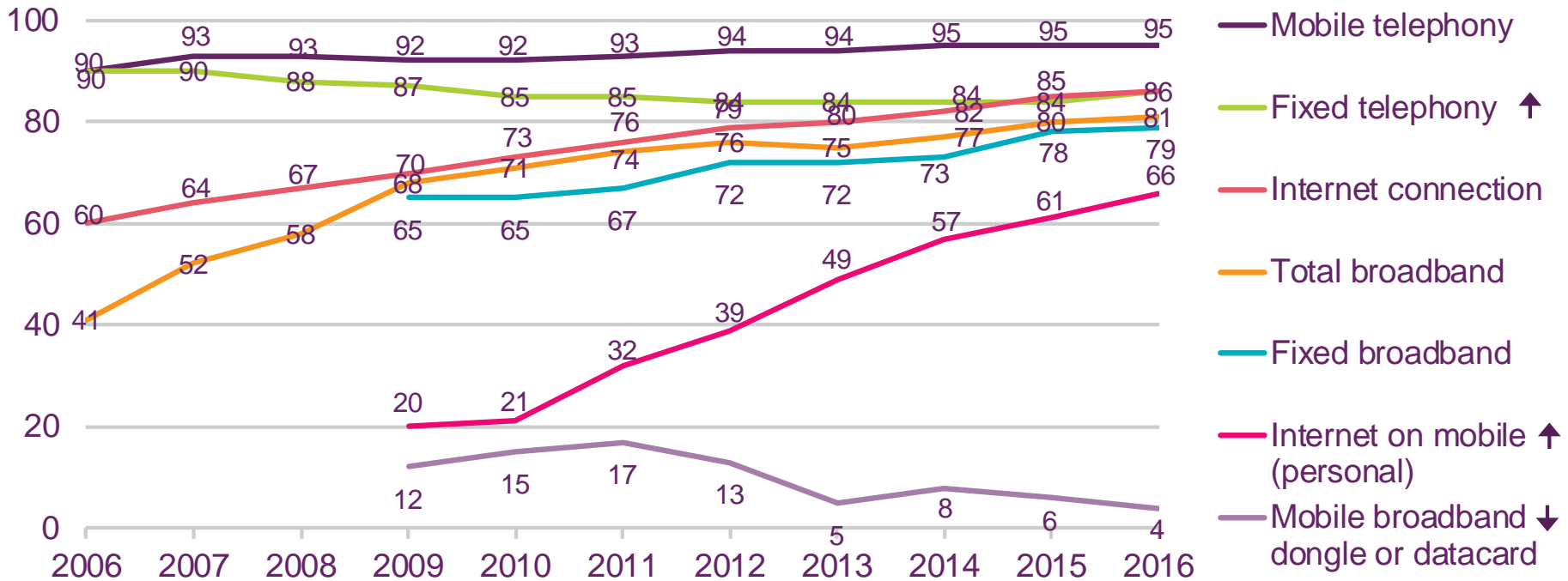
Notes: Includes estimates where Ofcom does not receive data from operators; adjusted to CPI; includes VAT.

# Figure 4.35



## Household take-up of communications services

Proportion of households/ adults (%)



Source: Ofcom Technology Tracker. Data from Q1 of each year 2007-2014, then H1 2015-2016.

Base: All adults aged 16+ (2016 n=3737).

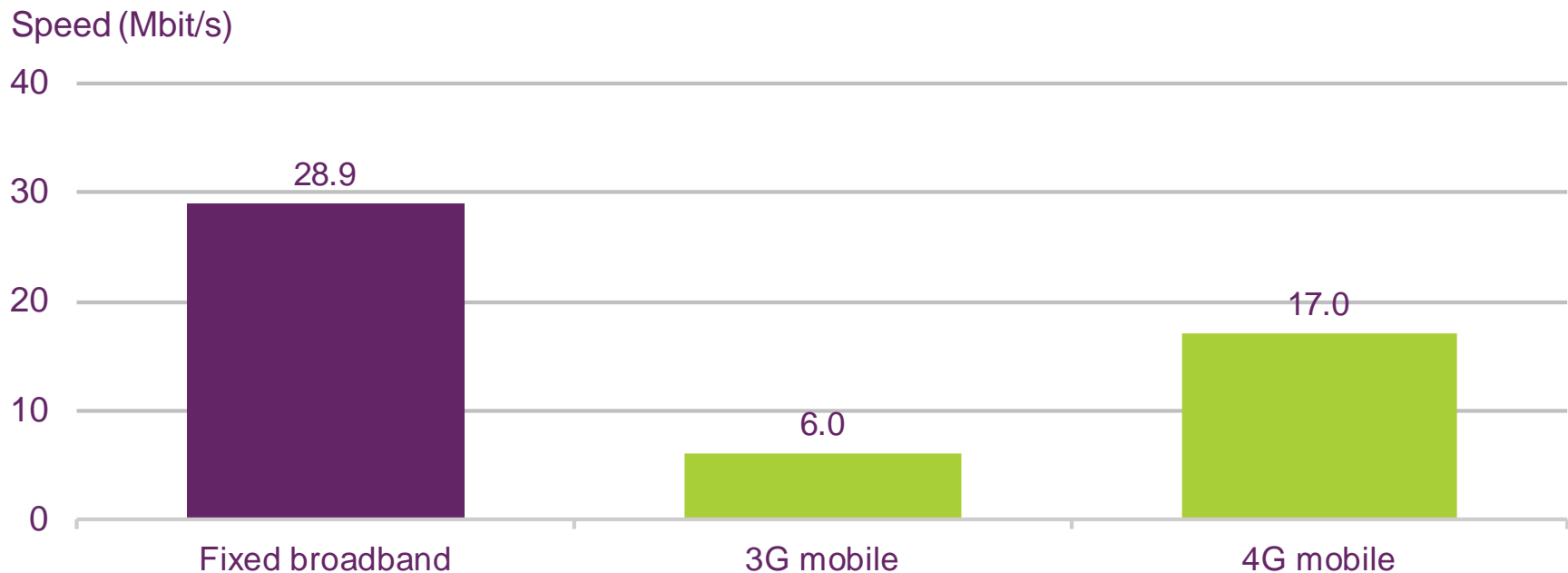
Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016.

QC1: Is there a landline phone in your home that can be used to make and receive calls? QE1: Does your household have a PC or laptop computer? / QE2: Do you or does anyone in your household have access to the internet at home (via any device, e.g. PC, laptop, mobile phone etc.)? / QE9: Which of these methods does your household use to connect to the internet at home?

Note: Use of internet on mobile is personal take-up measure, whereas the other data relate to household take-up.

## Figure 4.36

### Average actual fixed and mobile data speeds: 2015

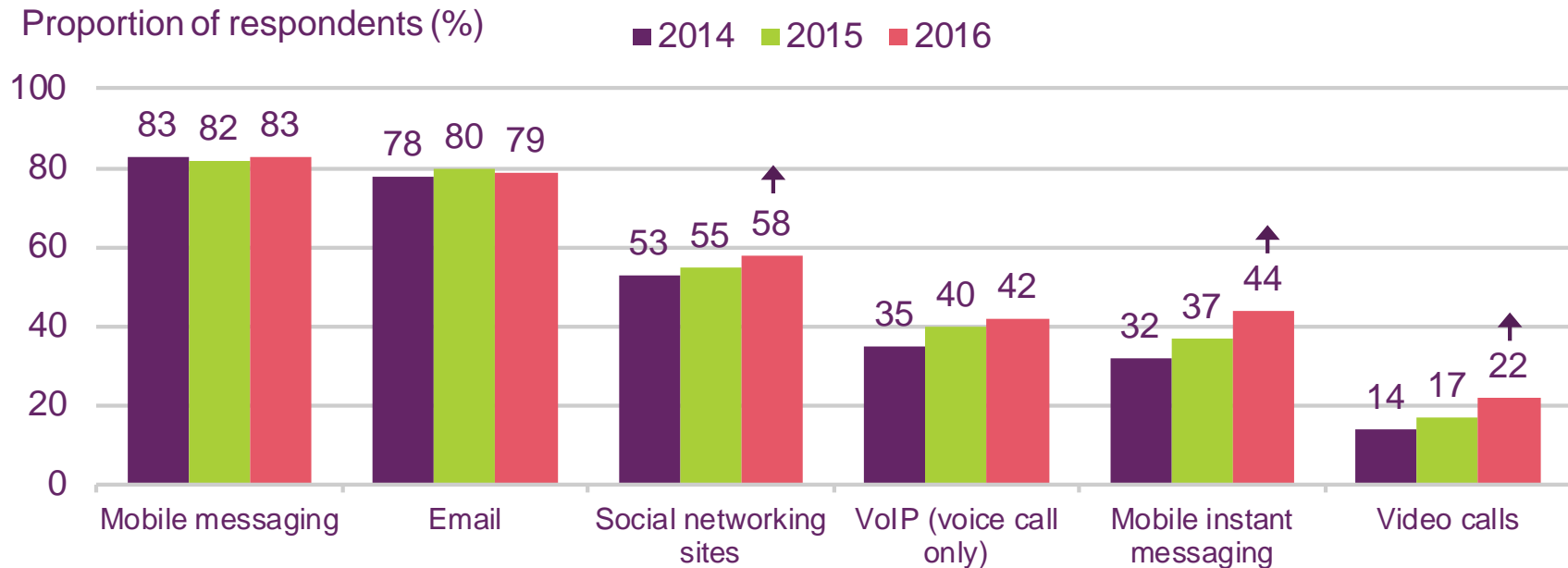


Source Ofcom: UK fixed-line broadband performance, November 2015

(<http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/broadband-speeds/UK-home-broadband-performance-Nov-15/>) and Smartphone Cities, fieldwork in November and December 2015 (<http://stakeholders.ofcom.org.uk/binaries/research/broadband-research/smartphone-cities/chartpack.pdf>)

# Figure 4.37

## Use of methods of communication other than traditional voice telephony



Source: Ofcom Technology Tracker. Data from Q1 2014, then H1 2015-2016

Base: All adults 16+ (2016=3737)

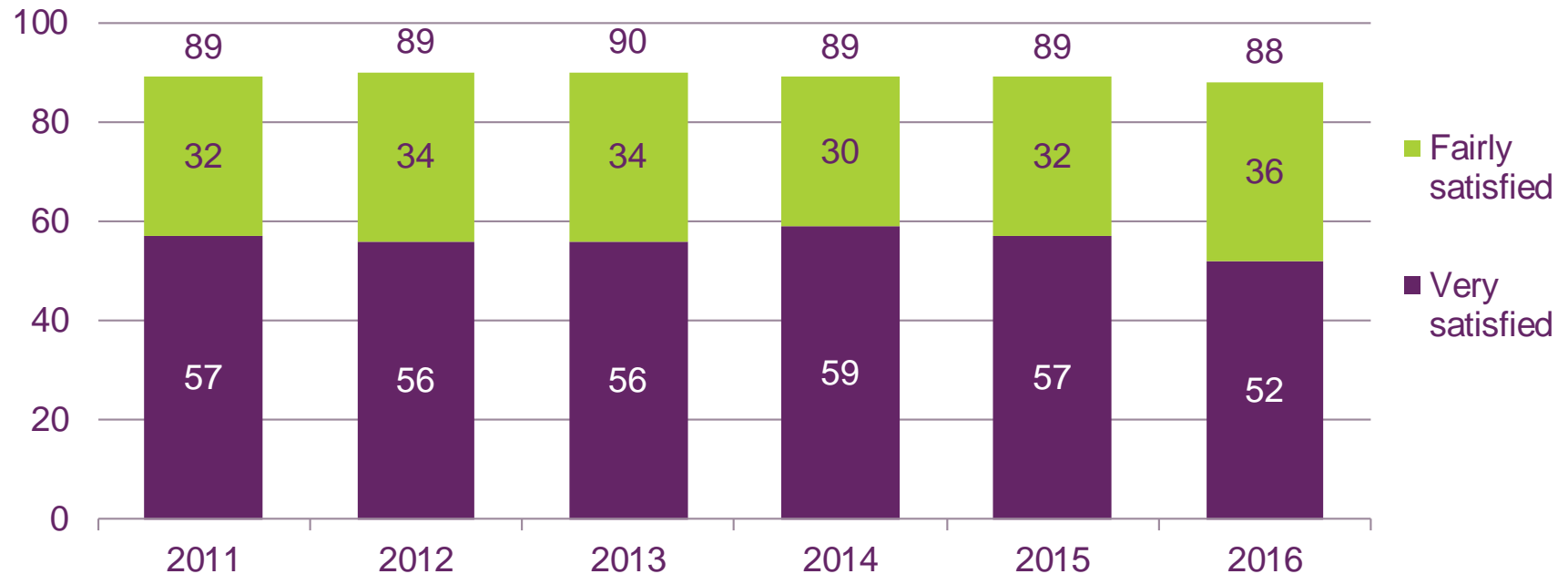
Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016.

QD28A: Which, if any, of the following activities, other than making and receiving voice calls, do you use your mobile for? / QE5A: Which, if any, of these do you use the internet for? / QE30: Have you or anyone in your household ever used one of these services to make voice calls using the internet at home? (answers used relate to current use)

# Figure 4.38

## Overall satisfaction with residential fixed voice services

Proportion of adults with service (%)



Source: Ofcom Technology Tracker. Data from Q1 2011-2014, then H1 2015-2016

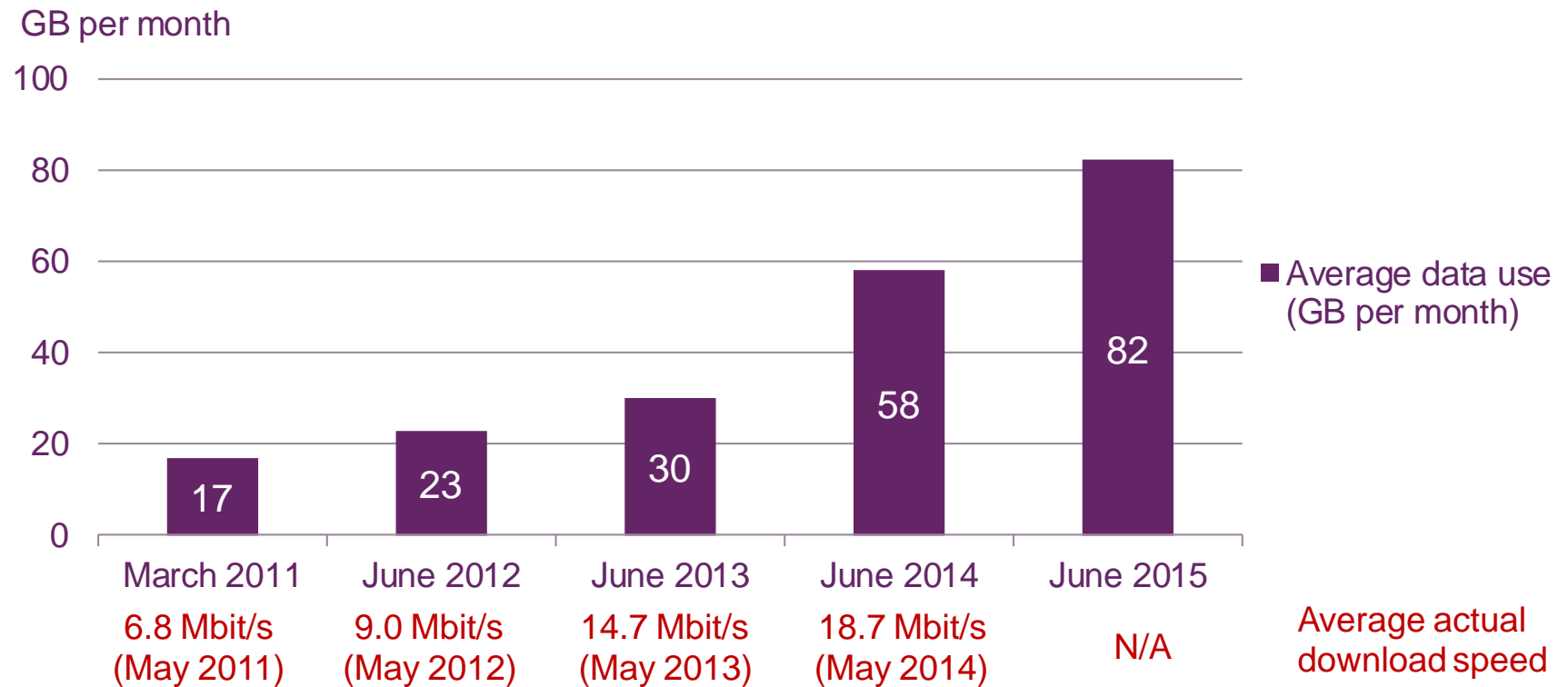
Note: Shows the proportion of users with each service, includes only those who expressed an opinion.

Thinking about your home phone service only, please use this card to say how satisfied you are with the overall service provided by (main supplier)?



# Figure 4.39

## Average fixed broadband data use



Source: Ofcom Infrastructure Reports 2011-2015, Connected Nations Report 2015

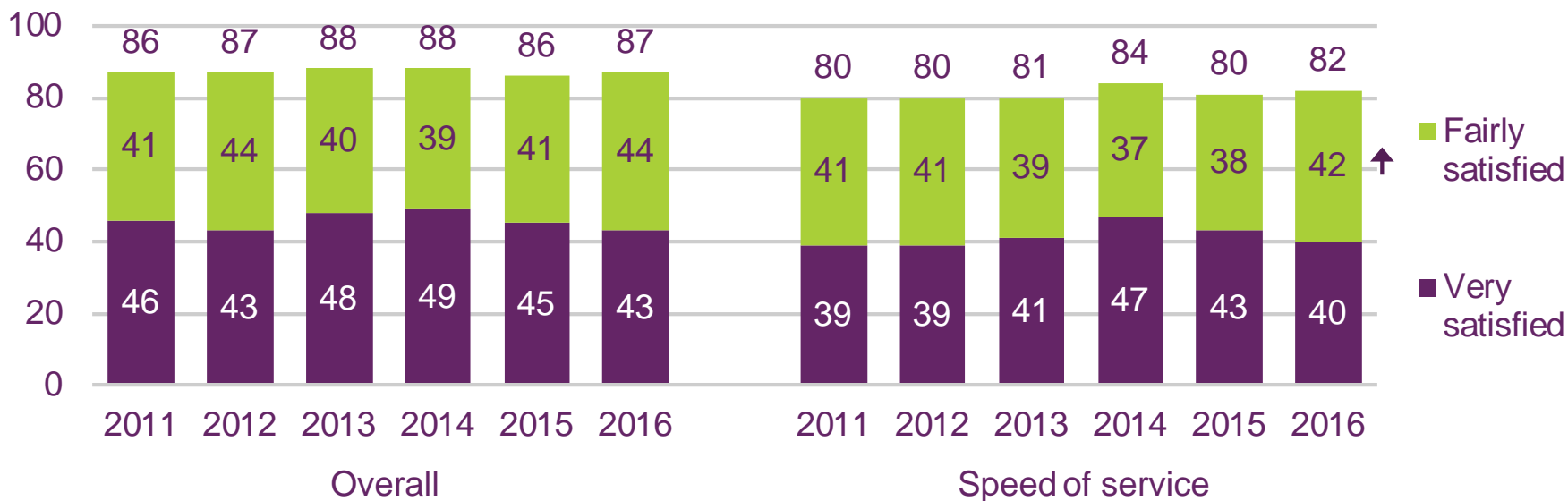
Note: No speed data were available for May 2015.

# Figure 4.40



## Satisfaction with aspects of fixed broadband service

Proportion of all adults with service (%)



Source: Ofcom Technology Tracker. Data from Q1 2009-2014, then H1 2015-2016

Base: All adults aged 16+ with a fixed broadband connection (2016=2774)

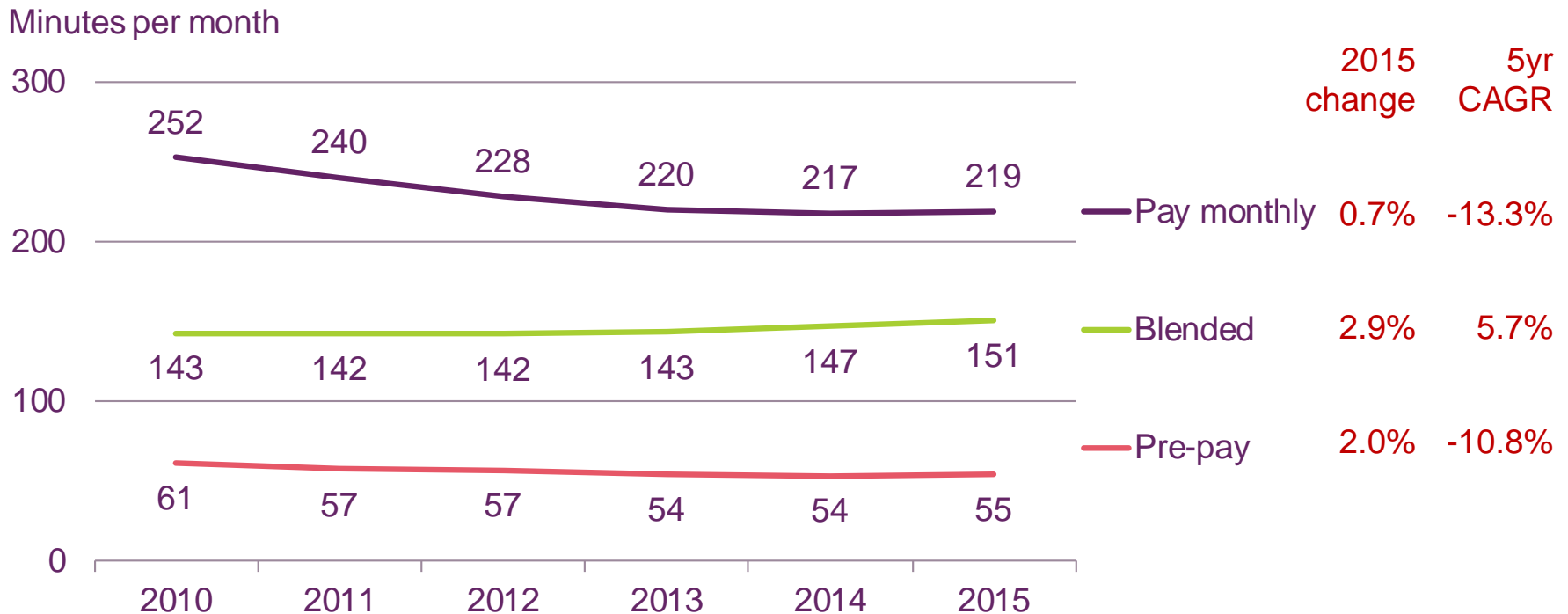
Note: Includes only those who expressed an opinion.

Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016.

QE8A/B: Thinking about your fixed broadband internet service, please use this card to say how satisfied you are with your main supplier for... The overall service/ The speed of your service while online (not just the connection) provided by [main provider]?

## Figure 4.41

### Average monthly outbound mobile call minutes, by subscription type



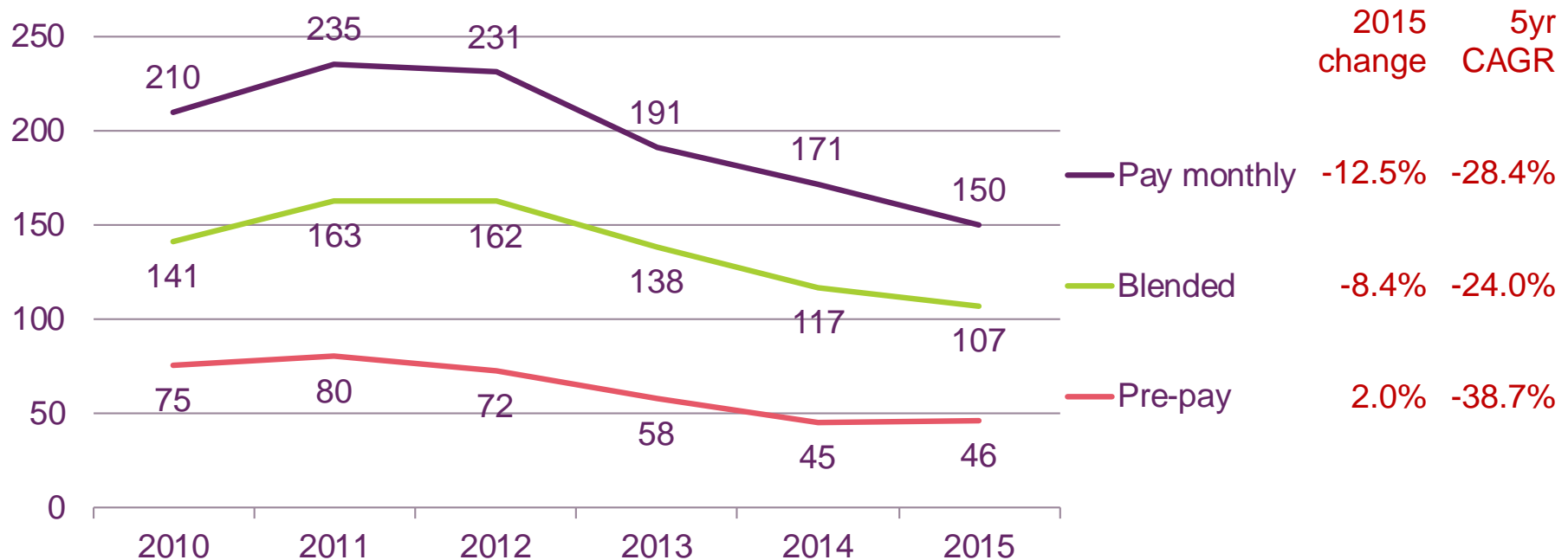
Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators.

## Figure 4.42

### Average monthly outbound mobile messages per subscriber, by subscription type

Messages per month

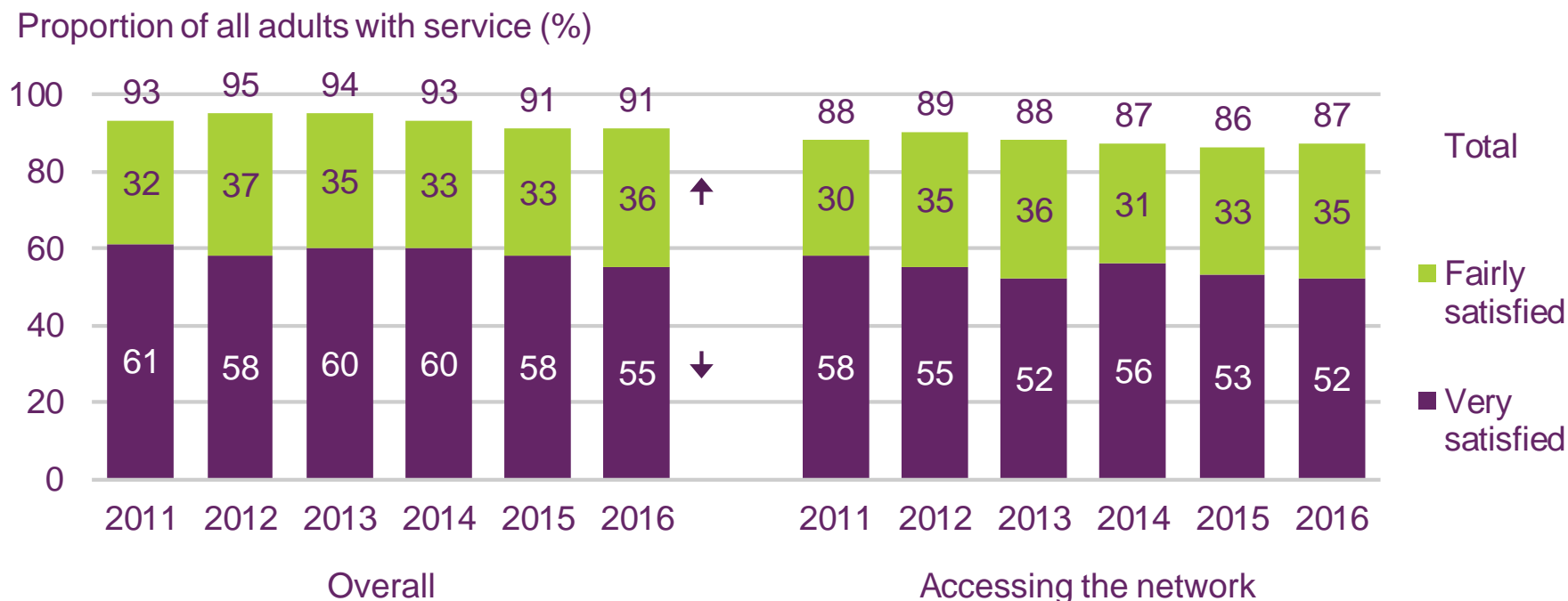


Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators.

# Figure 4.43

## Satisfaction with aspects of mobile service



Source: Ofcom Technology Tracker. Data from Q1 2009-2014, then H1 2015-2016

Base: All adults aged 16+ w with a mobile phone (2016=3425)

Note: Includes only those who expressed an opinion.

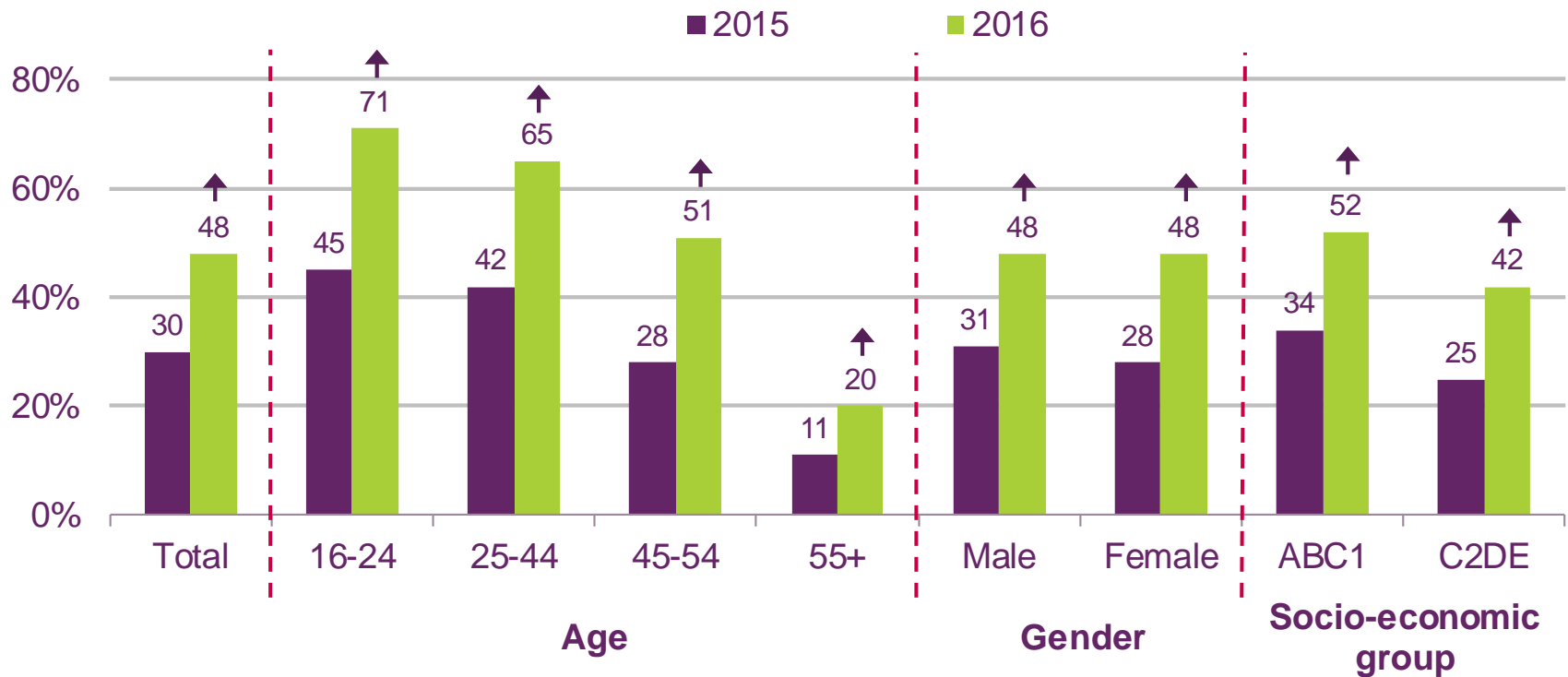
Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016.

QD21A/J: Thinking about your mobile phone service, please use this card to say how satisfied you are with your main supplier for... The overall service/ Reception/ accessing network provided by [main provider]?

# Figure 4.44

## 4G take-up overall, by age, gender and socio-economic group

% of respondents



Source: Ofcom Technology Tracker. Data from H1 2015-2016

Base: UK adults 16+ 2016 (3737), 16-24 (519), 25-44 (1206), 44-54 (570), 55+ (1442), male (1790), female (1947), ABC1 (1919), C2DE (1813)

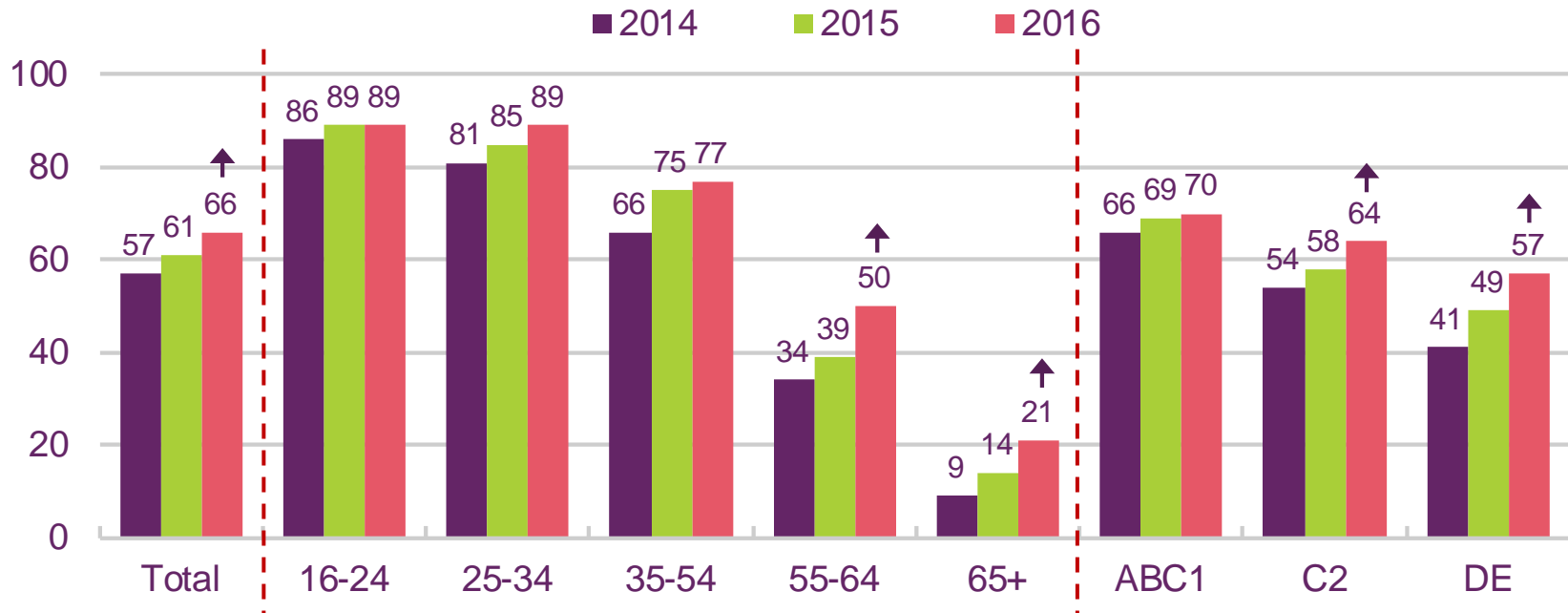
Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016, between each age group in 2015 and 2016, between each gender in 2015 and 2016 and between each socio-economic group in 2015 and 2016.

QD41: Do you have a 4G service?

# Figure 4.45

## Use of data services on mobile phones, by age and socio-economic group

Proportion of adults (%)



Source: Ofcom Technology Tracker. Data from Q1 2014, then H1 2015-2016

Base: All adults aged 16+ (2016 n=3737)

Note: Internet use includes accessing the internet, downloading and streaming content, connecting using Wi-Fi and using VoIP.

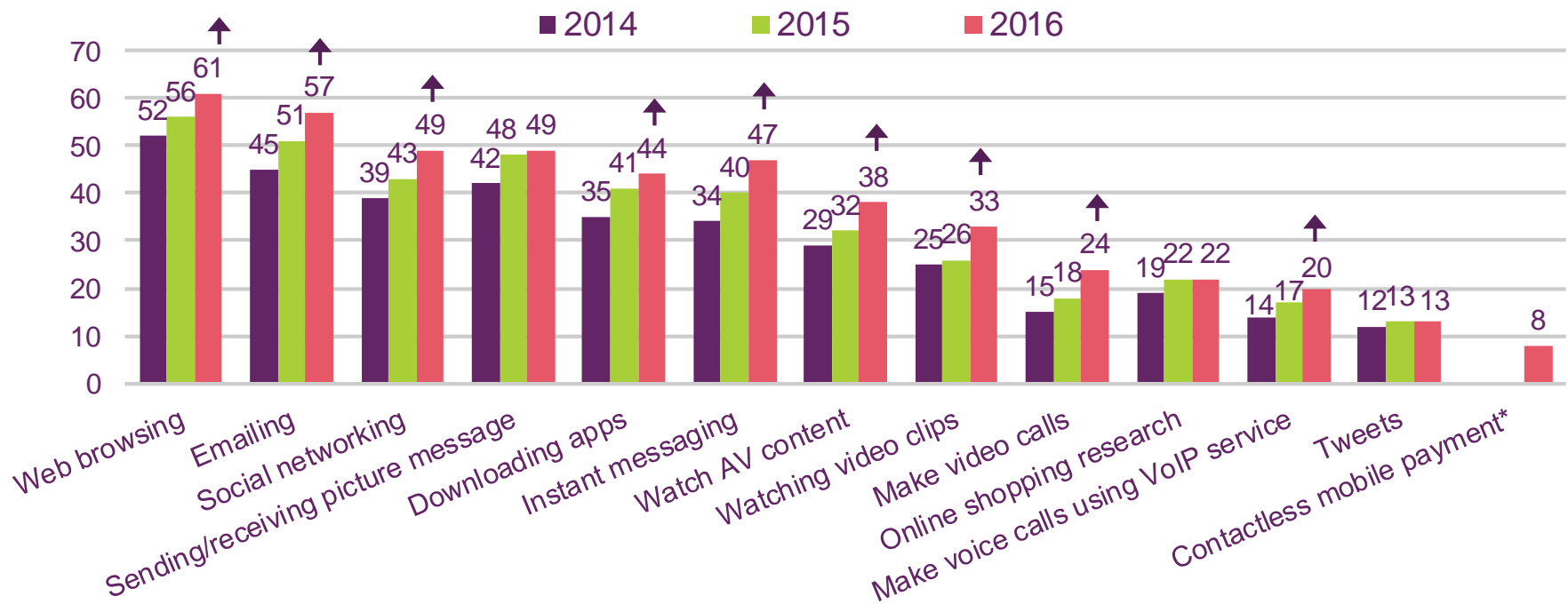
Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016, between each age group in 2015 and 2016 and between each socio-economic group in 2015 and 2016.

QD28A: Which if any, of the following activities, other than making and receiving voice calls, do you use your mobile for?

# Figure 4.46

## Use of mobile data services among mobile users

Proportion of mobile users using service (%)



Source: Ofcom Technology Tracker. Data from Quarter 1 2014, then Half 1 2015-2016

Base: All mobile users aged 16+ (2016 = 3425)

Significance testing: Arrows indicate any significant differences at the 95% confidence level between UK 2015 and UK 2016.

QD28A: Which if any of the following activities, other than making and receiving voice calls, do you use your mobile for?

\* New code for 2016