

# ICMR 2011 all telecoms charts

December 2011

# ICMR 2011 telecoms key market developments charts

November 2011

# Key Market Developments

## Overview

# Figure 6.1 Key telecoms indicators, 2010

	UK	FRA	GER	ITA	USA	CAN	JPN	AUS
Telecoms service revenues (£bn)	27.2	31.8	35.5	23.7	188.2	20.9	79.0	16.0
Telecoms revenues per capita (£)	434	486	435	389	608	615	624	739
Fixed lines per 100 population	53.0	32.9	52.5	28.9	48.2	54.3	36.5	50.4
Monthly outbound fixed minutes per capita	172	145	201	125	148	174	58	209
Mobile connections per 100 population	129.8	99.4	133.5	148.5	97.8	76.2	92.4	129.5
Share of mobile post-pay connections	46%	71%	45%	15%	77%	80%	99%	58%
3G connections per 100 population	50.3	34.4	26.0	56.6	46.8	23.1	85.8	72.4
Monthly outbound mobile minutes per capita	170	132	103	172	603	318	98	287
Fixed broadband connections per 100 population	31.3	32.6	32.9	21.1	26.6	31.9	26.9	25.7
DSL as a proportion of fixed broadband connections	79%	93%	86%	96%	36%	40%	25%	80%
FTTx as a proportion of fixed broadband connections	0.2%	1.6%	0.3%	2.6%	7.1%	0.0%	54.2%	0.0%
Mobile broadband connections per 100 population	7.7	4.2	5.3	10.0	27.6	2.7	7.7	19.5
VoIP subscriptions per 100 population	6.0	28.9	10.0	11.8	9.3	24.6	19.7	14.3

	ESP	NED	SWE	IRL	POL	BRA	RUS	IND	CHN
Telecoms service revenues (£bn)	20.0	8.5	4.3	2.2	5.9	34.2	18.6	12.1	65.9
Telecoms revenues per capita (£)	429	497	476	482	153	169	134	10	49
Fixed lines per 100 population	42.7	30.4	50.9	40.0	22.8	20.8	32.2	3.0	22.1
Monthly outbound fixed minutes per capita	117	107	156	131	29	87	99	0	11
Mobile connections per 100 population	122.1	121.0	141.9	114.3	121.4	100.3	155.7	63.7	64.4
Share of mobile post-pay connections	65%	55%	64%	36%	49%	18%	5%	4%	33%
3G connections per 100 population	67.3	26.3	80.8	39.3	40.7	9.3	5.6	0.6	3.5
Monthly outbound mobile minutes per capita	128	198	204	193	125	102	190	140	270
Fixed broadband connections per 100 population	22.7	38.9	33.2	21.9	14.7	6.6	14.1	0.9	9.5
DSL as a proportion of fixed broadband connections	79%	54%	54%	72%	46%	67%	39%	89%	75%
FTTx as a proportion of fixed broadband connections	0.3%	3.1%	18%	0.9%	0.4%	0.0%	21%	0.0%	0.7%
Mobile broadband connections per 100 population	7.2	4.2	32.2	12.3	9.0	-	-	-	-
VoIP subscriptions per 100 population	2.4	22.3	13.1	3.1	1.8	-	-	-	-

Source: Not

inbound calls; 3G includes W-CDMA and CDMA2000 1xEV-DO but not CDMA2000; BRIC country revenues exclude fixed broadband

## Key Market Developments

**Mobile growth driven by substitution of fixed services**

# Figure 6.2

## Mobile as a proportion of total connections and call volumes



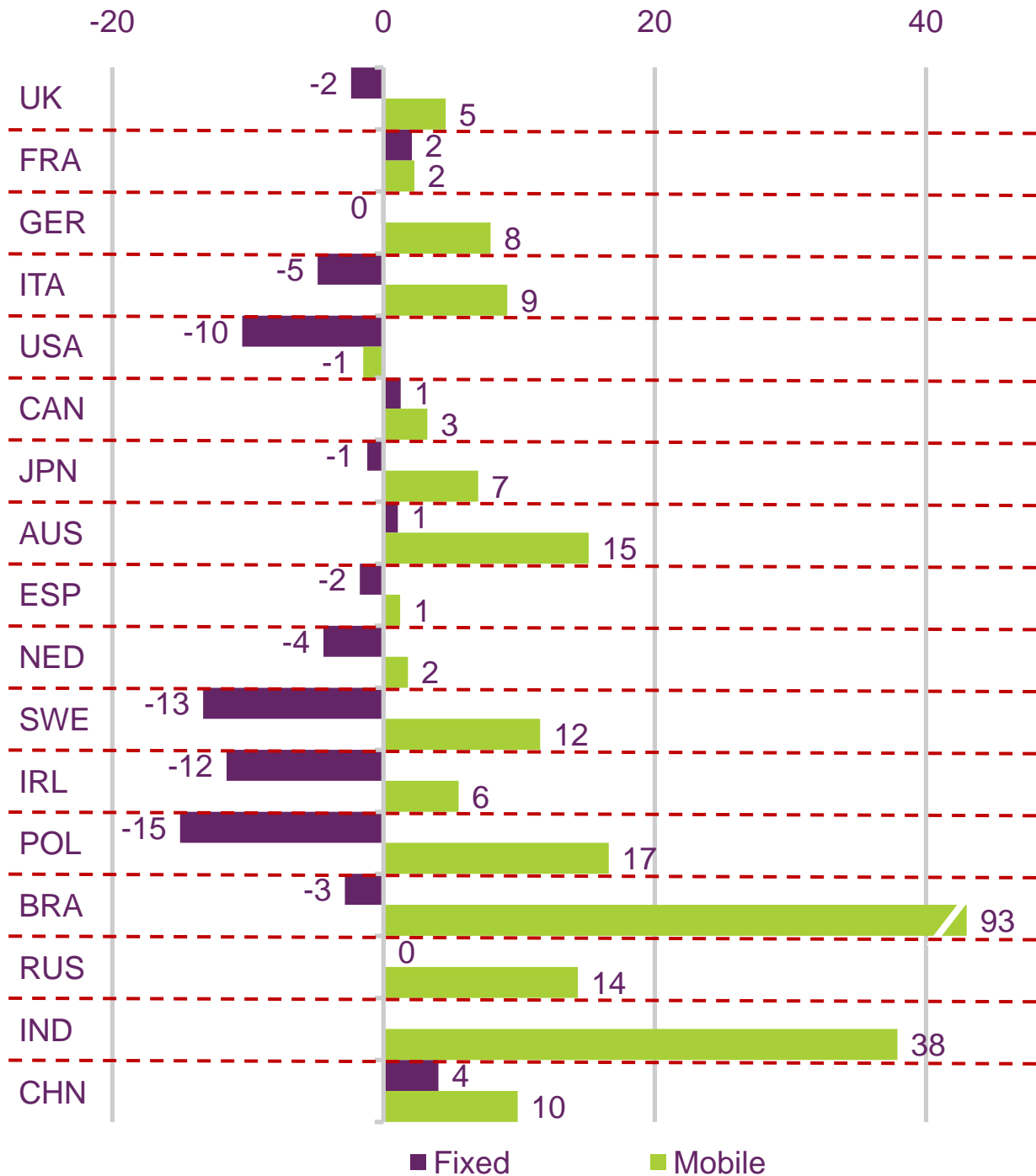
Source: IDATE / industry data / Ofcom

Note: Includes data for USA, CAN and BRA, where mobile call volumes include an element of incoming calls

# Figure 6.3

## Change in fixed and mobile voice call volumes, 2010

Per cent

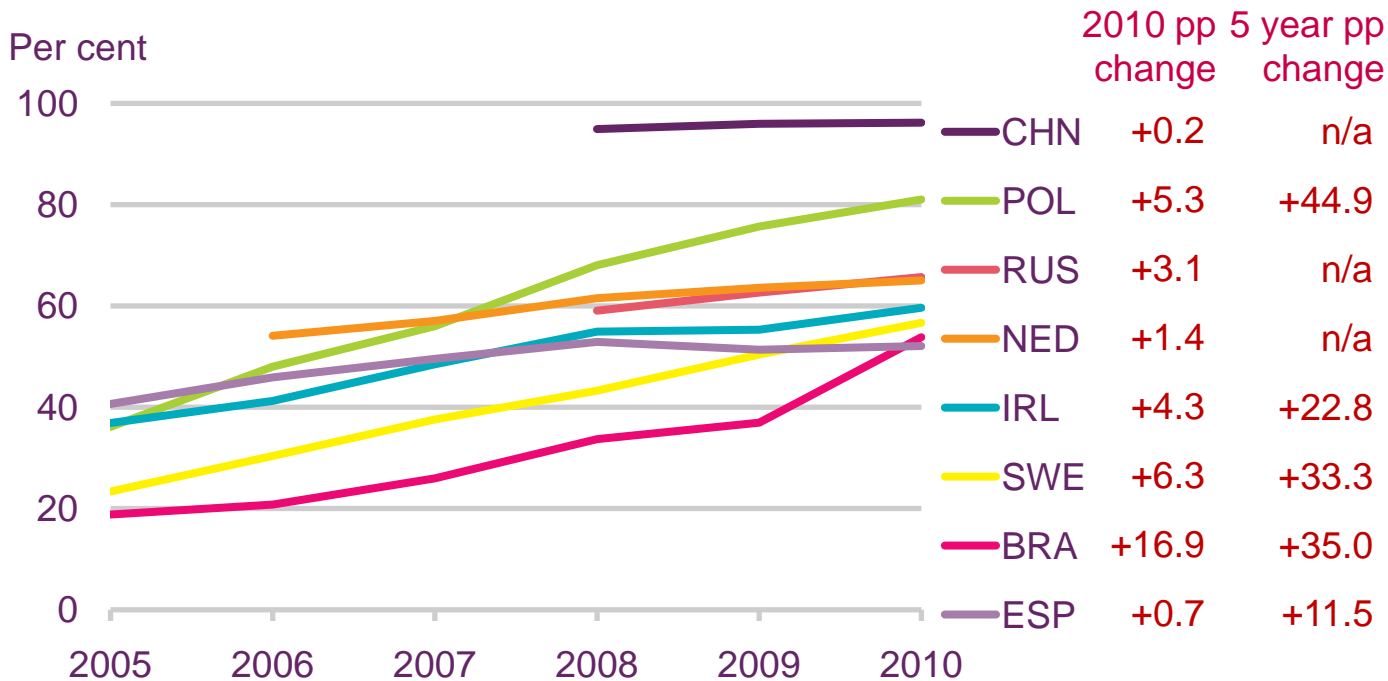
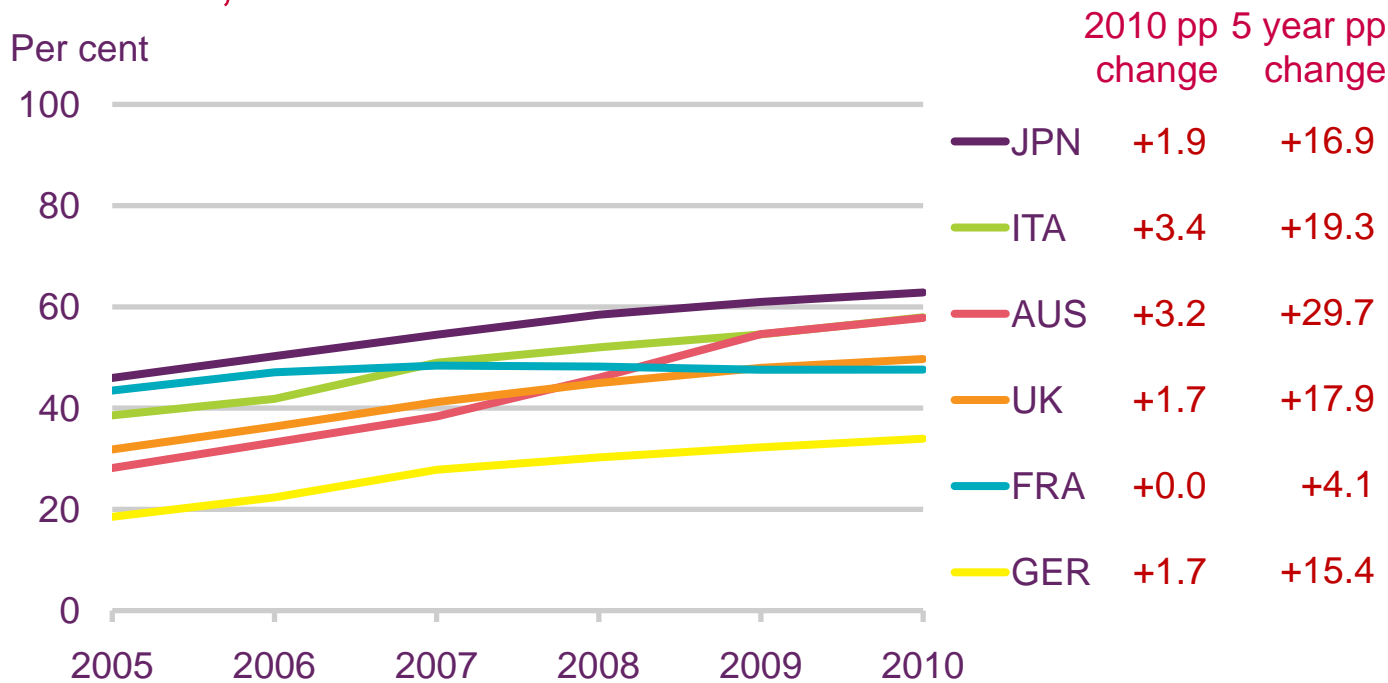


Source: IDATE / industry data / Ofcom

Note: USA, CAN and CHN includes incoming calls to mobiles; BRA, RUS and IND include fixed-to-mobile and off-net incoming calls

# Figure 6.4

## Proportion of voice calls originating on mobile networks, 2005 to 2010

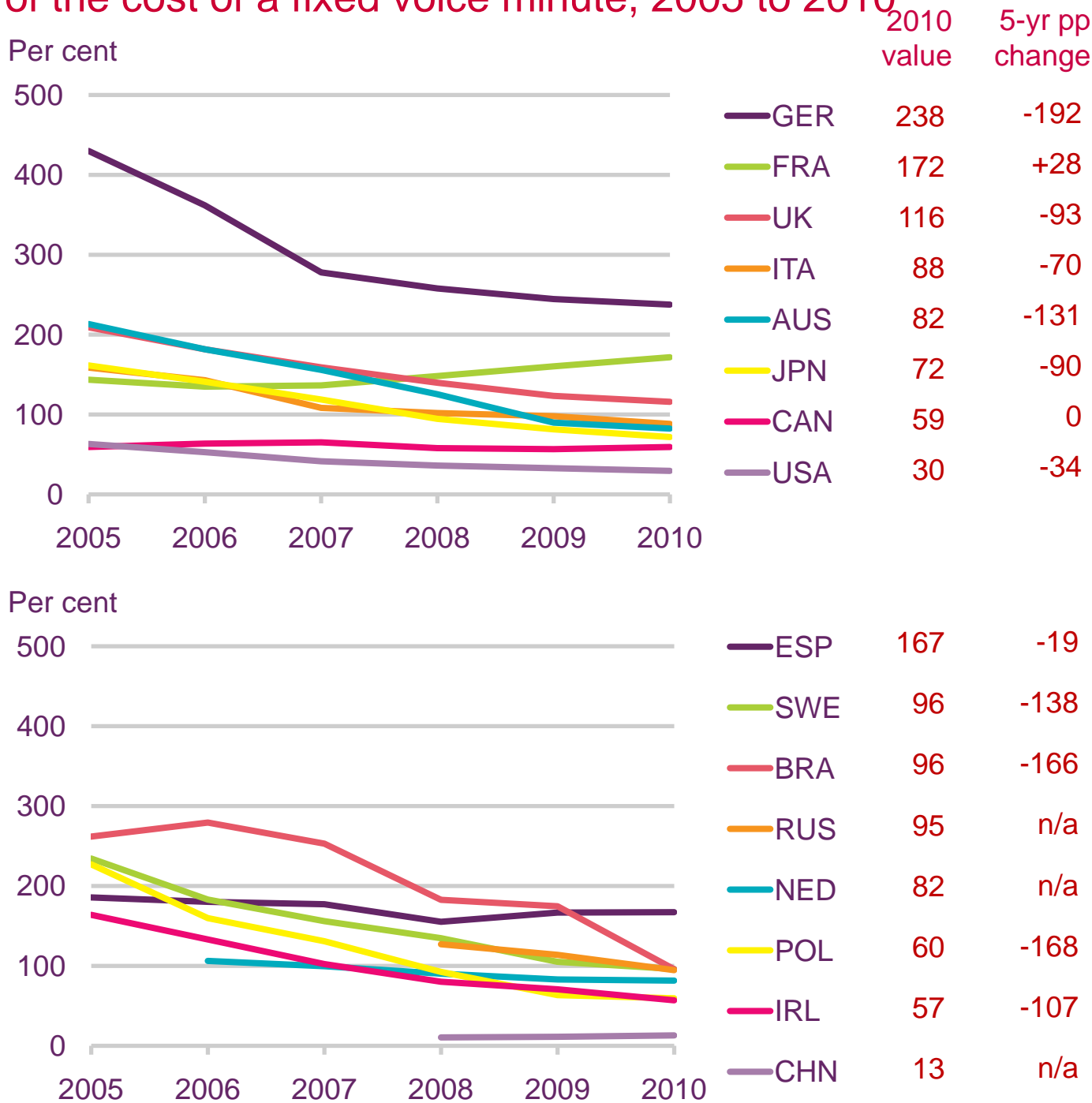


Source: IDATE / industry data / Ofcom

Note: CHN includes incoming calls to mobiles; BRA, RUS and IND include fixed-to-mobile and off-net incoming calls

# Figure 6.5

Average cost of a mobile voice minute as a proportion of the cost of a fixed voice minute, 2005 to 2010



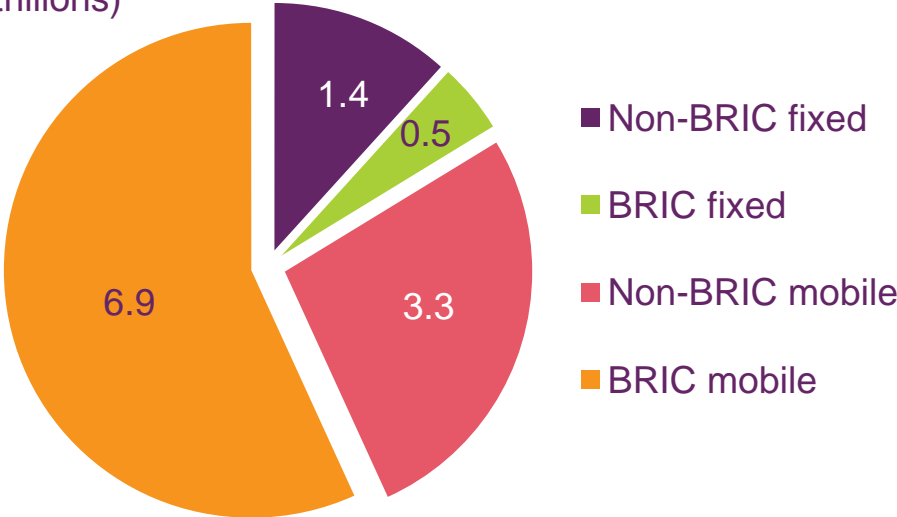
Source: IDATE / industry data / Ofcom

Note: USA, CAN and CHN includes incoming calls to mobiles; BRA, RUS and IND include fixed-to-mobile and off-net incoming calls

# Figure 6.6

## Voice call volumes by network and country type

Outgoing call minutes  
(trillions)

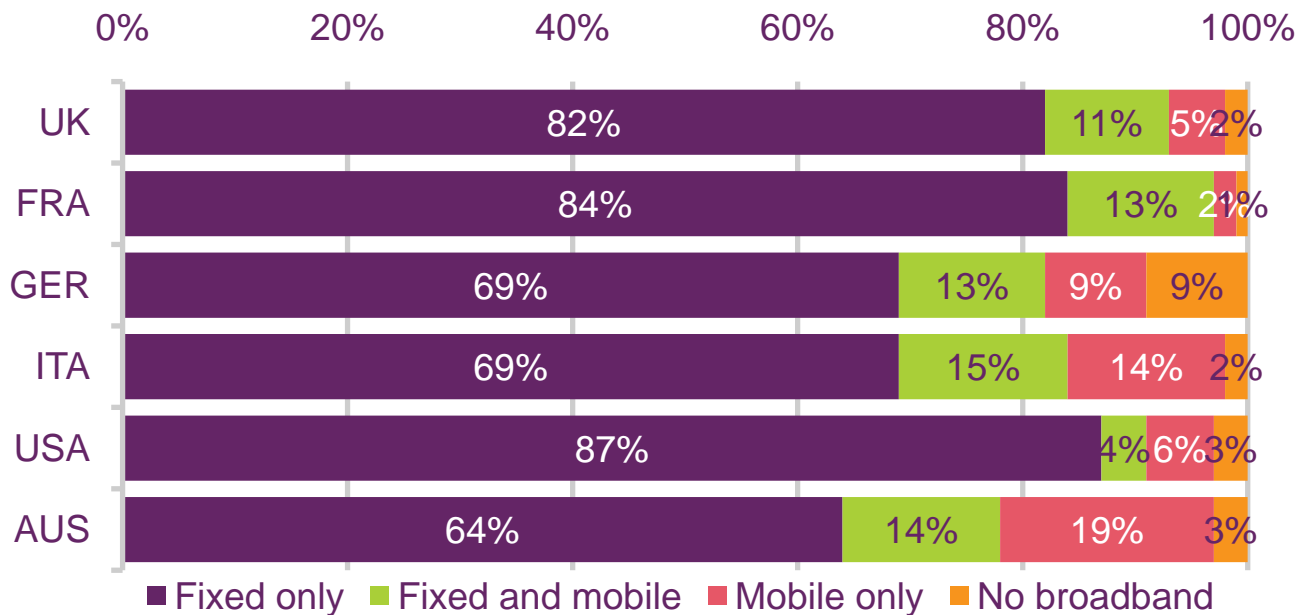


Source: IDATE / industry data / Ofcom

# Figure 6.7

## Household penetration of fixed and mobile broadband, 2011

Proportion of respondents (per cent)



Source: Ofcom consumer research, October 2011

Base sizes: UK=1015, France=1014, Germany=1014, Italy=1045, USA=1002, Japan=1015, Australia=1012.

# Key Market Developments

## Growth in next-generation broadband services

# Figure 6.8

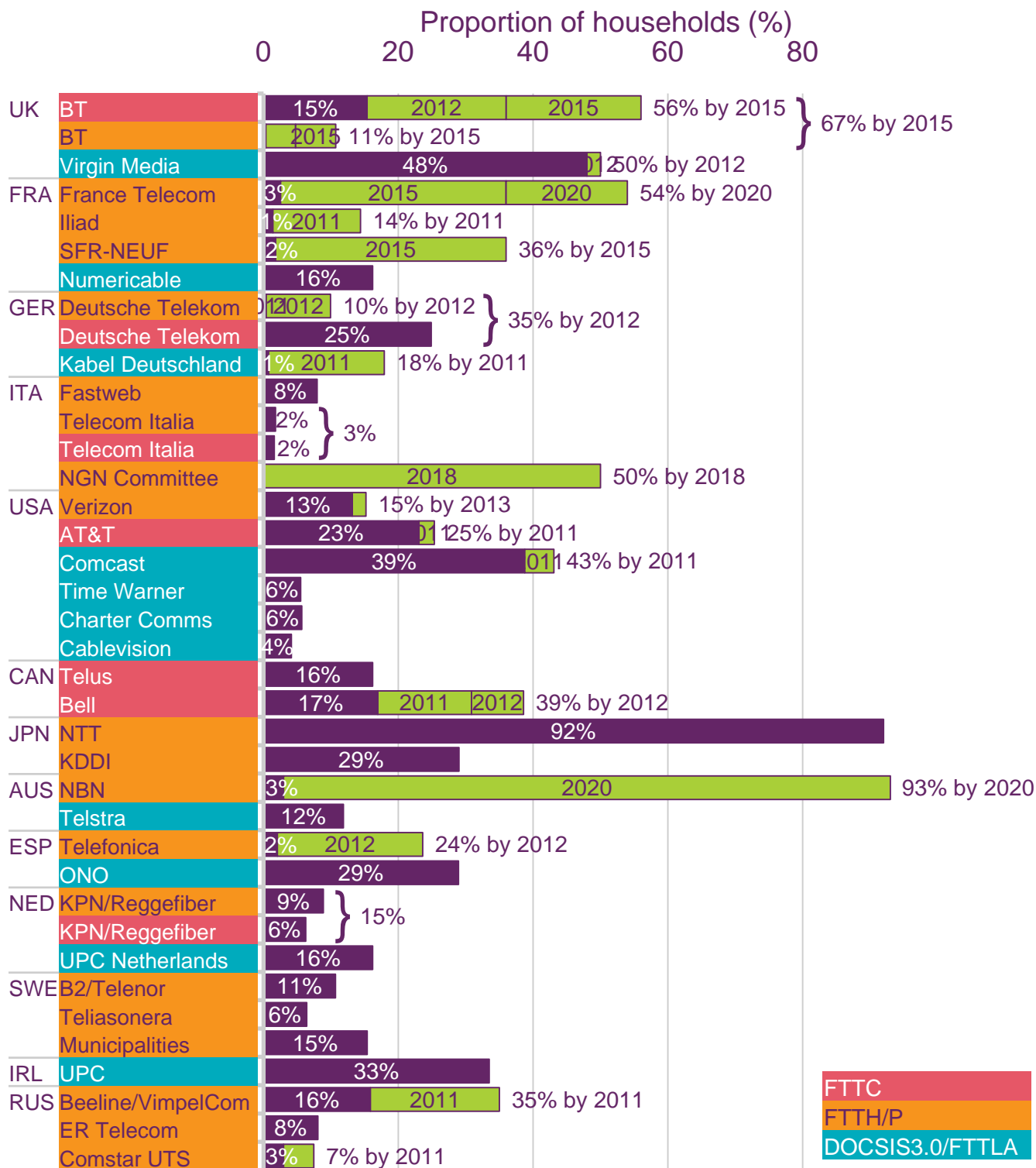
## Broadband targets in selected countries

Country	Target
UK	By 2015, to bring “superfast broadband” to all parts of the UK and to create the “best broadband network” in Europe. To provide everyone with at least 2Mbit/s and superfast broadband to be available to 90% of people.
FRA	By 2012, 100% of the population to have access to broadband. By 2025 100% of home to have access to very high speed broadband.
GER	By 2014, 75% of households will have download speeds of 50Mbit/s.
ITA	By 2012, all households to have access to the Internet at between 2 and 20Mbit/s.
USA	By 2020, at least 100 million homes should have affordable access to actual download speeds of at least 100Mbit/s and actual upload speeds of at least 50Mbit/s. Every household should have access to actual download speeds of 4Mbit/s and actual upload speeds of 1Mbit/s.
JPN	By 2015, fibre optic ‘highways’ will be completed enabling every household to access a superfast broadband service
AUS	By 2021, the National Broadband Network will cover 100% of premises - 93% of homes, schools and businesses at up to 100 Mbit/s over fibre, with the remainder at up to 12Mbit/s over next generation wireless and satellite.
ESP	By 2011, minimum speed of 1Mbit/s broadband access available to 100% of population. By 2015, 100Mbit/s broadband available to 50% of population.
IRE	October 2010: in areas where there was no broadband a mobile service (using HSPA), was required to be in place with a minimum download speed of 1.2Mbit/s and a minimum upload speed of 200kbit/s. Delivery of high speed broadband throughout Ireland is a key commitment under the Government’s NewERA programme and in June 2011 the government set up a Next Generational Broadband Taskforce
European Commission	Digital Agenda sets targets of basic broadband coverage for all EU citizens by 2013 and 30Mbit/s by 2020, with at least half European households subscribing 100Mbit/s.

Source: Adapted from Table 21: ‘Broadband targets’ in OECD Working Party on Communication Infrastructures and Services Policy ‘National Broadband Plans’, 15 June 2011, pp13-14 , <http://www.oecd.org/dataoecd/22/41/48459805.pdf>

# Figure 6.9

## NGA coverage and planned deployments, end 2010



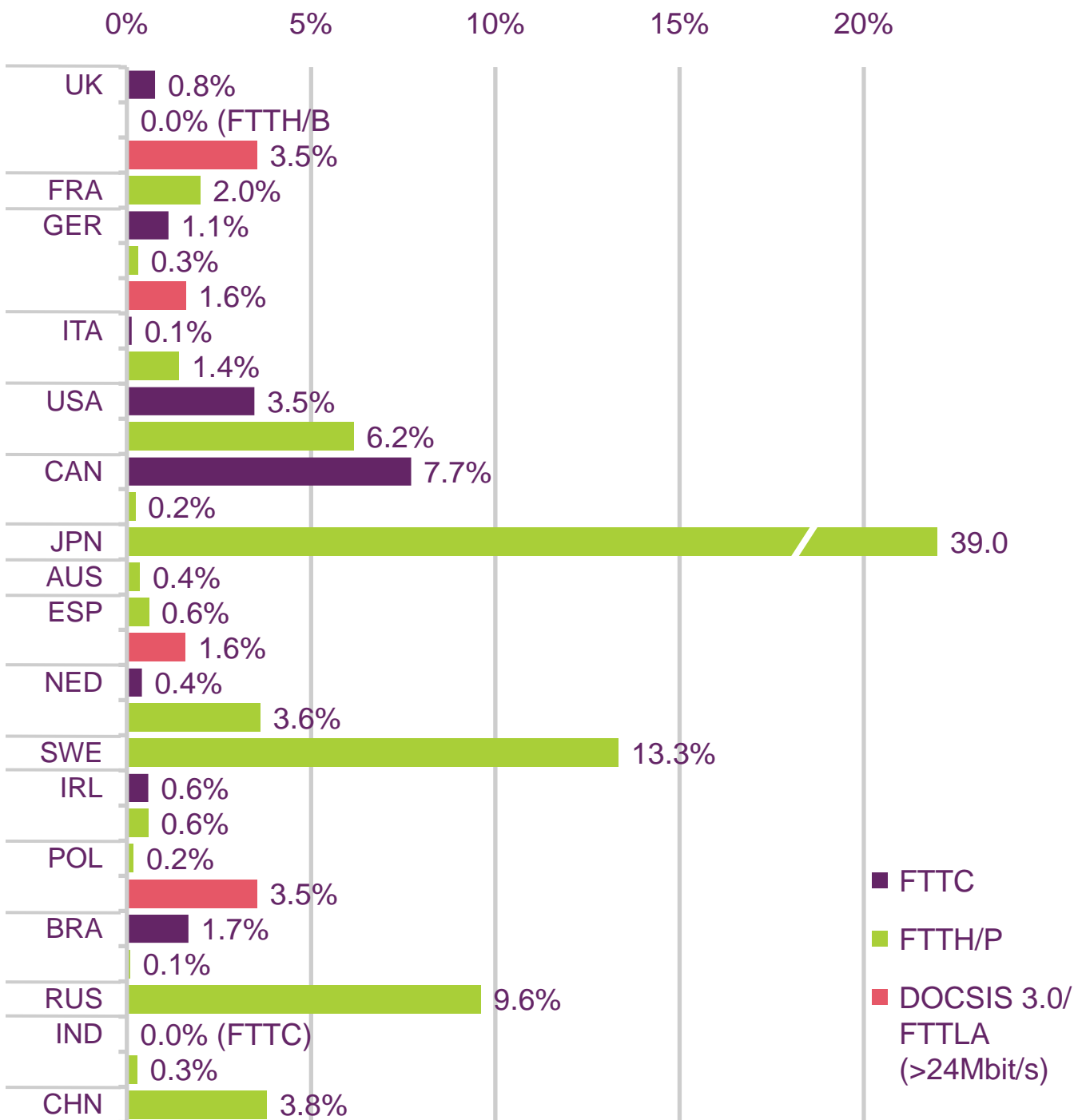
Source: Ofcom, based on operator announcements and third-party data including Cullen International and IDATE

Notes: Includes announcements from the largest operators only, estimates have been used where there is lack of clarity on timelines; deployments are typically gradual and incremental – the year given marks the end of a planned deployment phase

# Figure 6.10

## Household take-up of superfast broadband, June 2011

Proportion of households (%)



Source: Ofcom, based on operator announcements and third-party data including Cullen International and IDATE

# Key Market Developments

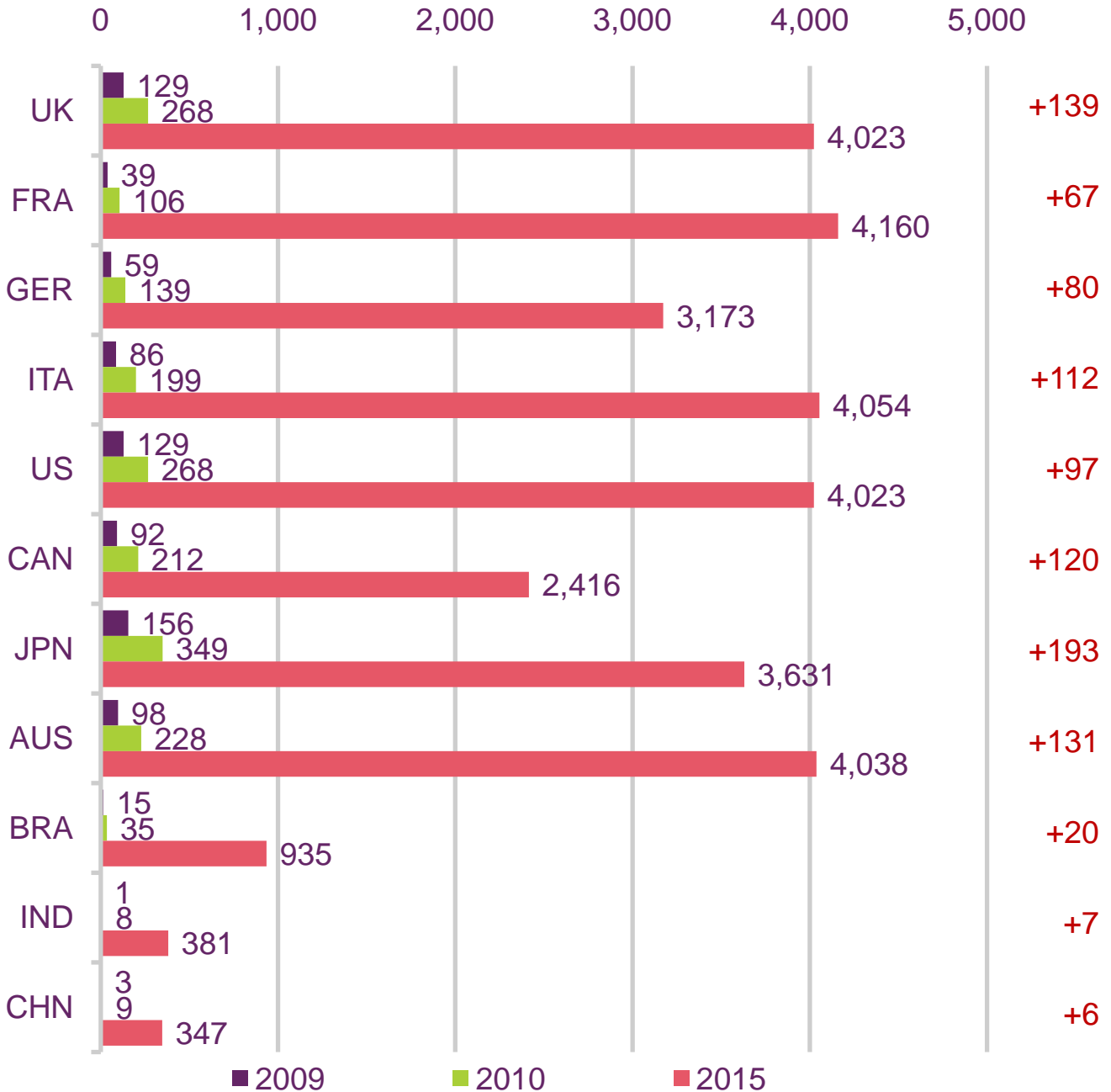
## Network upgrades as mobile data use soars

# Figure 6.11

## Mobile data traffic per mobile connection, 2009, 2010 and 2015

MB per mobile connection per month

Change  
2009-2010

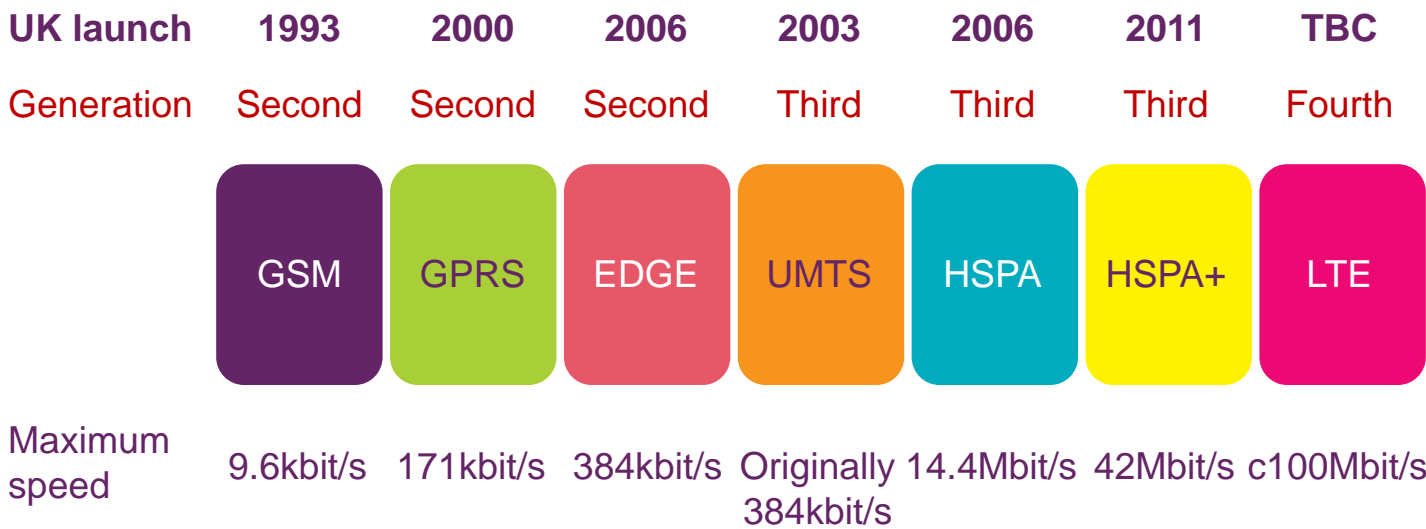


Source: Cisco Visual Networking Index

Note: 2009 figures calculated from Cisco's published 2010 figures and prior annual growth rate

# Figure 6.12

## Theoretical download speeds of mobile data technologies



Source: Ofcom

# Figure 6.13

## Awards of UHF spectrum for likely LTE use

	Relevant spectrum awards	LTE launch	Comments
<b>UK</b>	No	No	Currently consulting on combined spectrum award. Proposed award is likely to be in the second half of 2012 with likely deployment of services starting 2013-2014.
<b>FRA</b>	No	No	Award for both bands expected early 2012
<b>GER</b>	Yes – 800MHz and 2.6GHz	Yes	Awarded May 2010. Commercial services launched late 2010.
<b>ITA</b>	Yes - 800MHz and 2.6GHz	No	Spectrum availability expected at the turn of 2012/2013
<b>USA</b>	Yes – 700MHz, 1700MHz and 2.1GHz	Yes	LTE services launched in all three bands in 2010
<b>CAN</b>		No	Launch expected 2012, with the auction of the 700MHz band late 2012.
<b>JPN</b>	Yes – 1500MHz	Yes	Launched December 2010.
<b>AUS</b>	No	No	700MHz and 2.6GHz auctions expected end 2012.
<b>ESP</b>	Yes – 800MHz and 2.6GHz	Expected late 2011	800MHz awarded July 2011.
<b>NED</b>	No	No	Awards in both bands expected early 2012.
<b>SWE</b>	Yes - 800MHz and 2.6GHz	Yes	World's first LTE deployment in 2009 after 2.6GHz award in 2008. Five operators now using this band. 800MHz awarded March 2011. Deployment of LTE Advanced expected in 2013.
<b>IRL</b>	No	No	Consultation launched on 800MHz band. Services expected after digital switchover in 2012. No plans for awarding 2.6GHz band.
<b>POL</b>	Yes – 2.6GHz	Yes	Part of the 2.6GHz band was awarded in 2009, which is already being used for LTE. No timetable for 800MHz.
<b>BRA</b>	No	No	2.6GHz spectrum award expected 2012.
<b>RUS</b>	Yes - 2.6GHz	No	2.6GHz band is being used for Wimax services.
<b>IND</b>	Yes – 800MHz and 2.3GHz	No	800MHz launch (2010) for UMTS only. 2.3GHz spectrum, awarded 2010, may be used for LTE, with services as early as the first half of 2012.
<b>CHN</b>		Yes	LTE services launched in 2010. Widescale deployment expected.

Source: Ofcom

# Figure 6.14

Maximum theoretical download speeds available via mobile networks, by country: October 2011



Source: Ofcom, Global mobile Suppliers Association (GSA), Technology Update, 28 October 2011

# ICMR 2011 telecoms industry charts

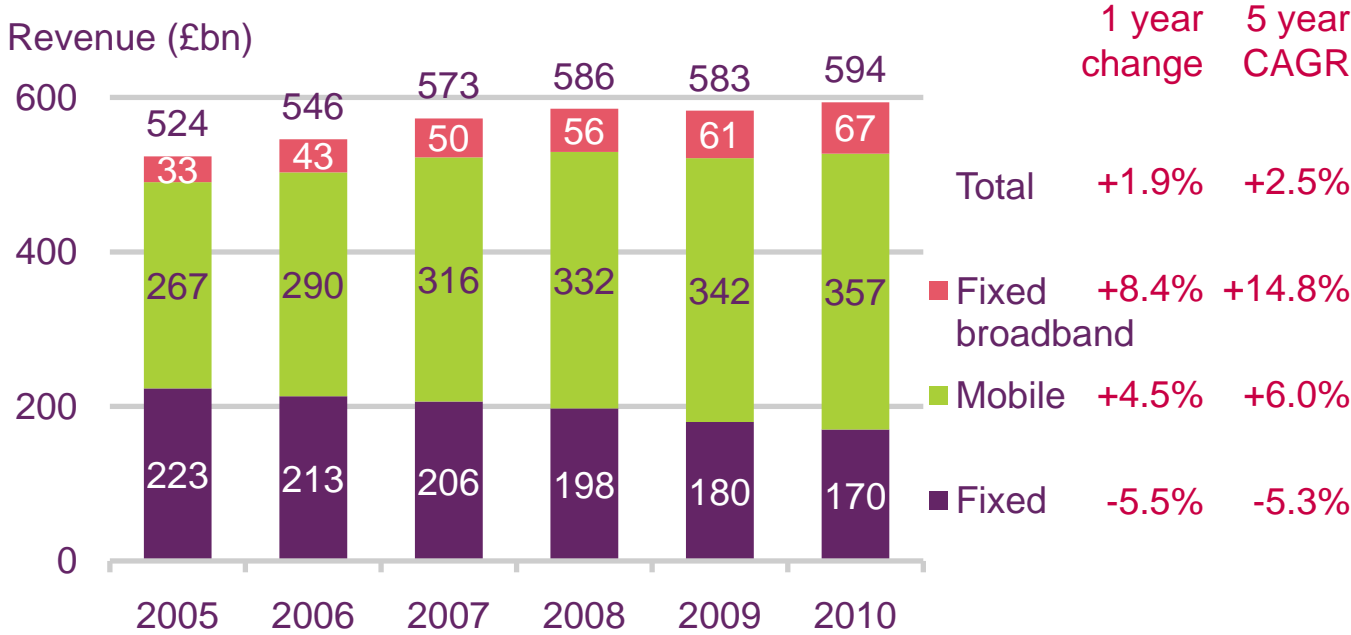
November 2011

# The telecoms industry

## Overview

# Figure 6.15

## Total comparator country retail telecoms revenue, by sector, 2005 to 2010

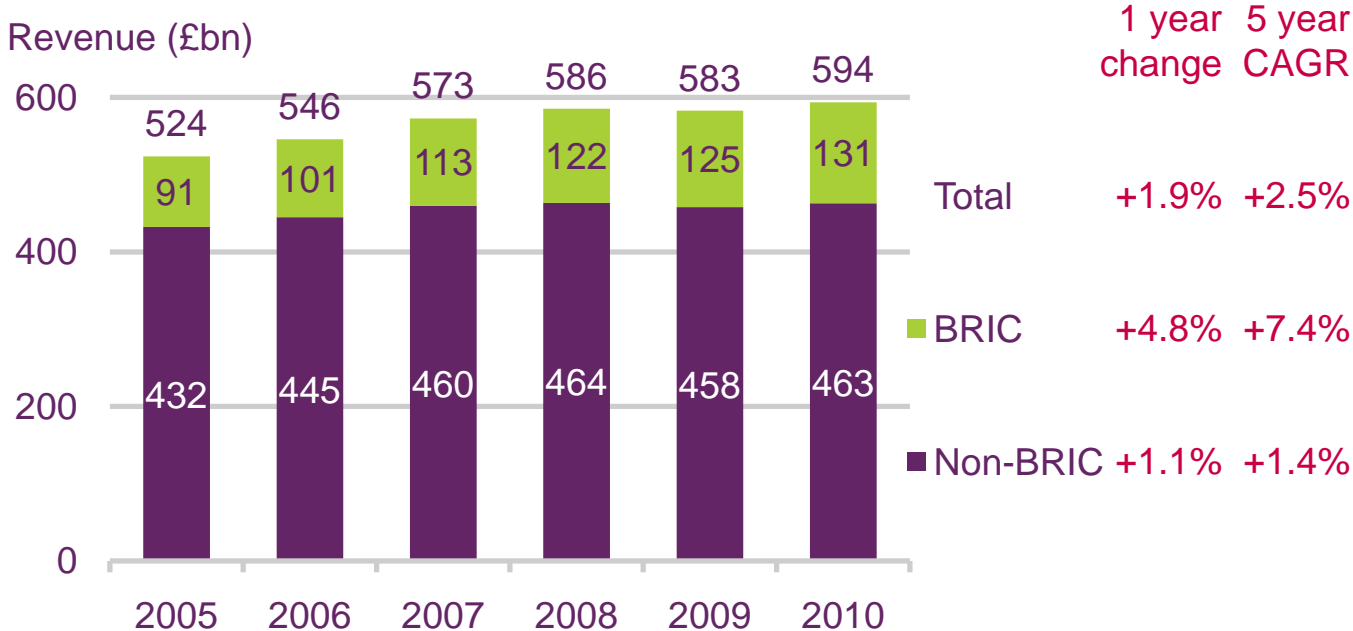


Source: IDATE / industry data / Ofcom

Note: Excludes revenue from narrowband internet and corporate data services and broadband revenues for BRA, RUS, IND and CHN; covers only the 17 countries in the analysis; figures have been restated to reflect more accurate data

# Figure 6.16

## Total comparator country retail telecoms revenue, by country type, 2005 to 2010

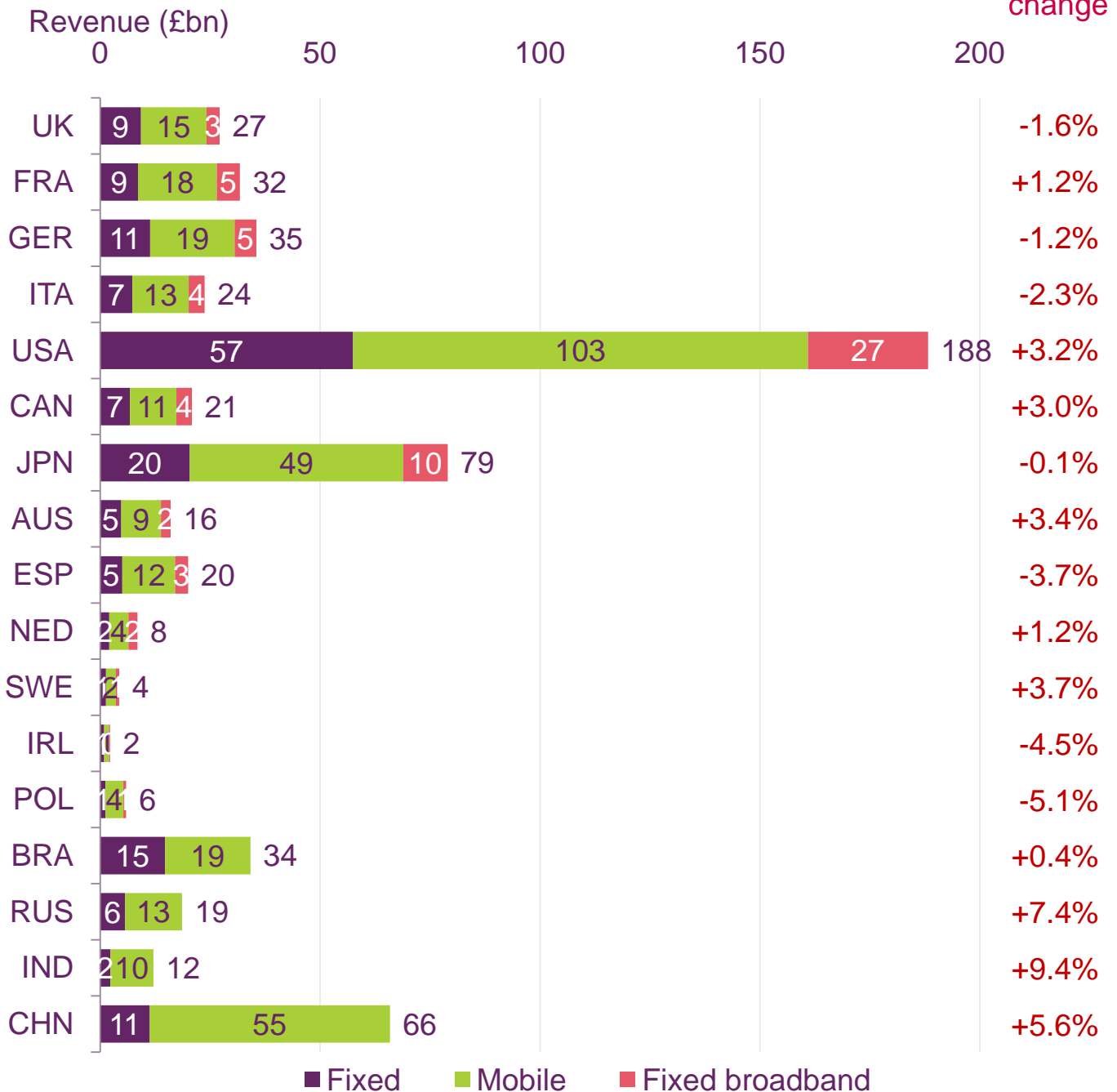


Source: IDATE / industry data / Ofcom

Note: Excludes revenue from narrowband internet and corporate data services and broadband revenues for BRA, RUS, IND and CHN; covers only the 17 countries in the analysis; figures have been restated to reflect more accurate data

# Figure 6.17

## Telecoms service retail revenue by nation and by sector, 2010

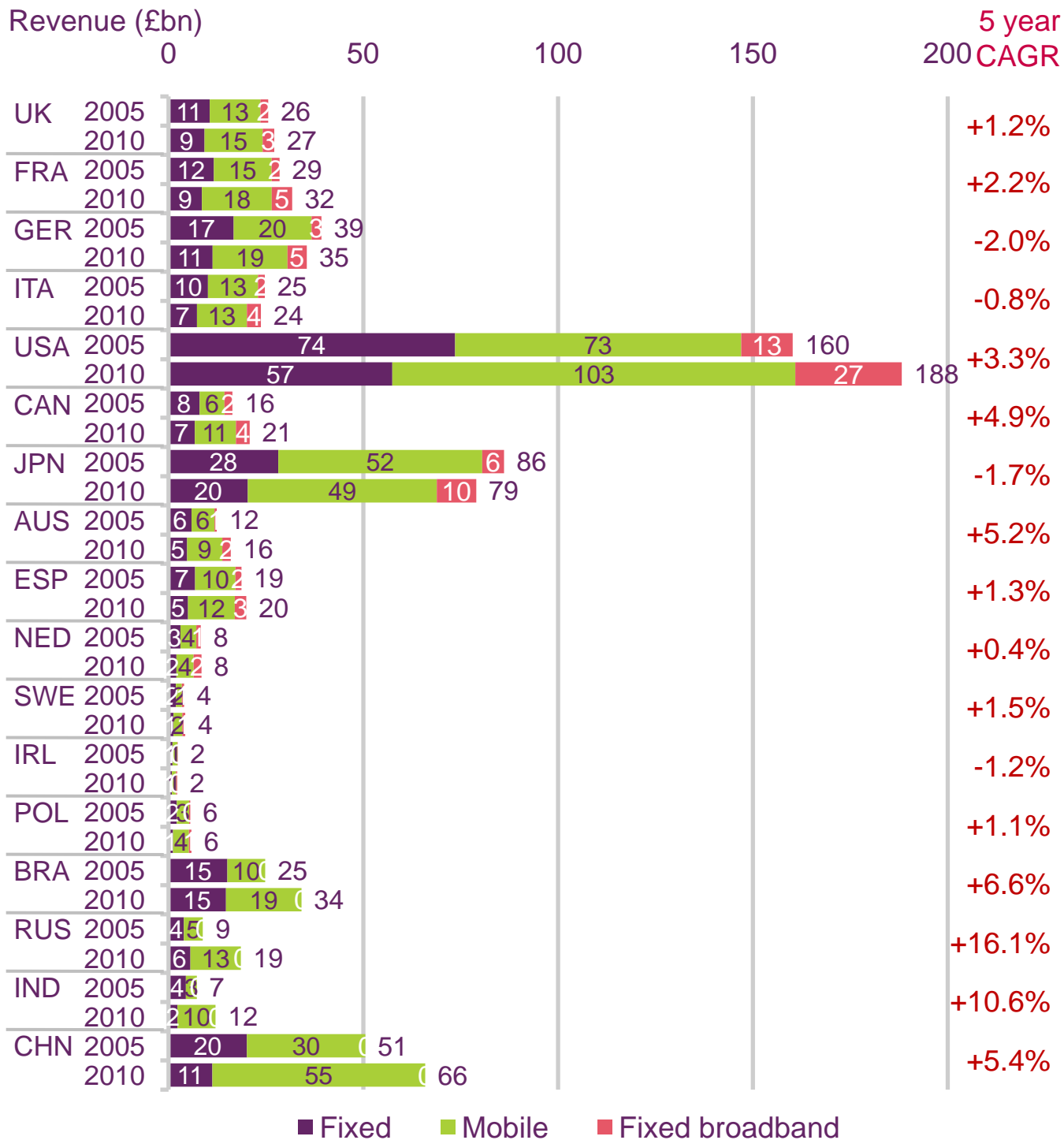


Source: IDATE / industry data / Ofcom

Note: Total service revenue excludes revenue from narrowband internet and corporate data services and broadband revenues for BRA, RUS, IND and CHN

# Figure 6.18

## Telecoms service retail revenues, by sector, 2005 and 2010

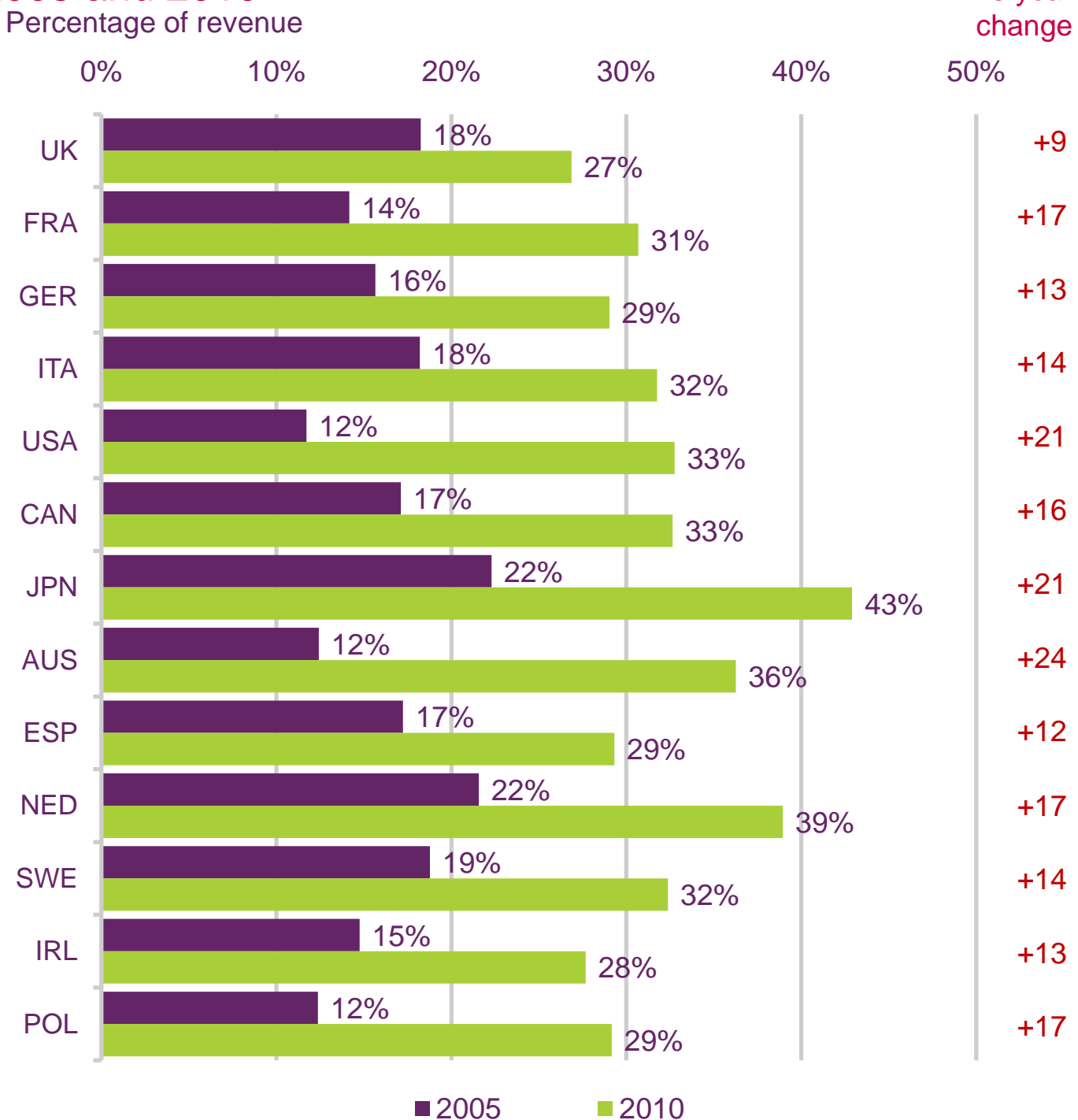


Source: IDATE / industry data / Ofcom

Note: Total service revenue excludes revenue from narrowband internet and corporate data services and broadband revenues for BRA, RUS, IND and CHN

# Figure 6.19

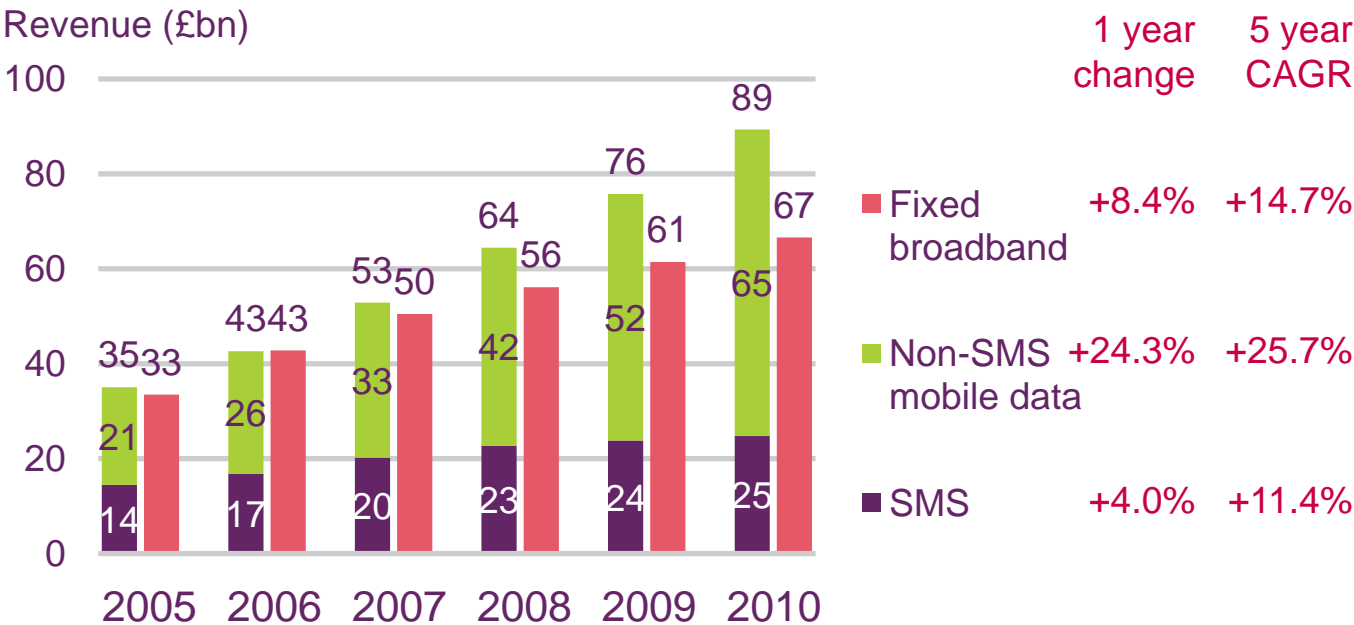
## Data revenue as a proportion of total telecoms revenues, 2005 and 2010



Source: IDATE / industry data / Ofcom  
 Note: Analysis excludes the BRIC countries

# Figure 6.20

## Fixed broadband and mobile data revenues, 2005 to 2010



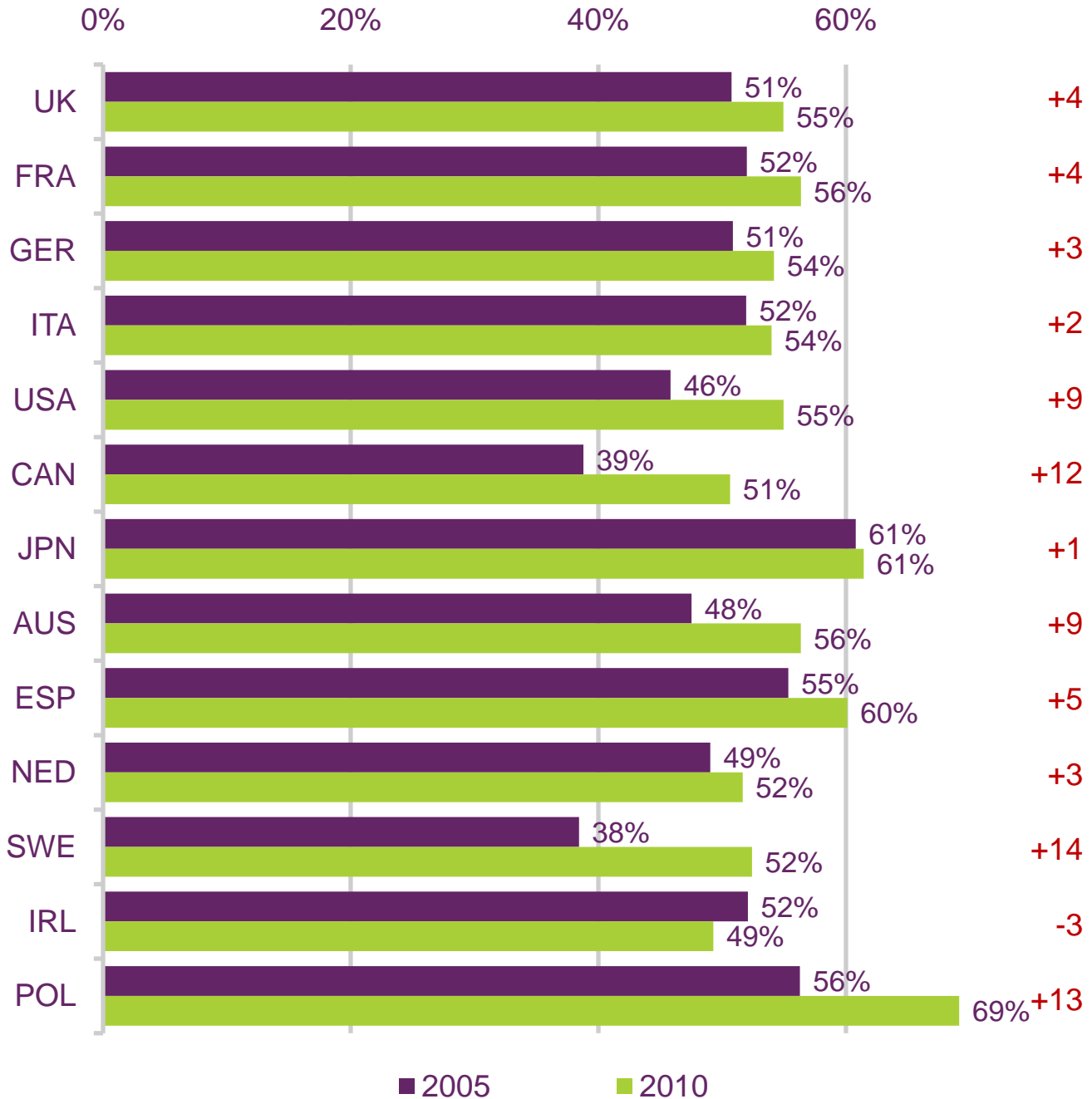
Source: IDATE / industry data / Ofcom  
 Note: Analysis excludes the BRIC countries

# Figure 6.21

## Mobile as a proportion of total telecoms revenues, 2005 and 2010

Proportion of total revenues (%)

5 year percentage point change



Source: IDATE / industry data / Ofcom

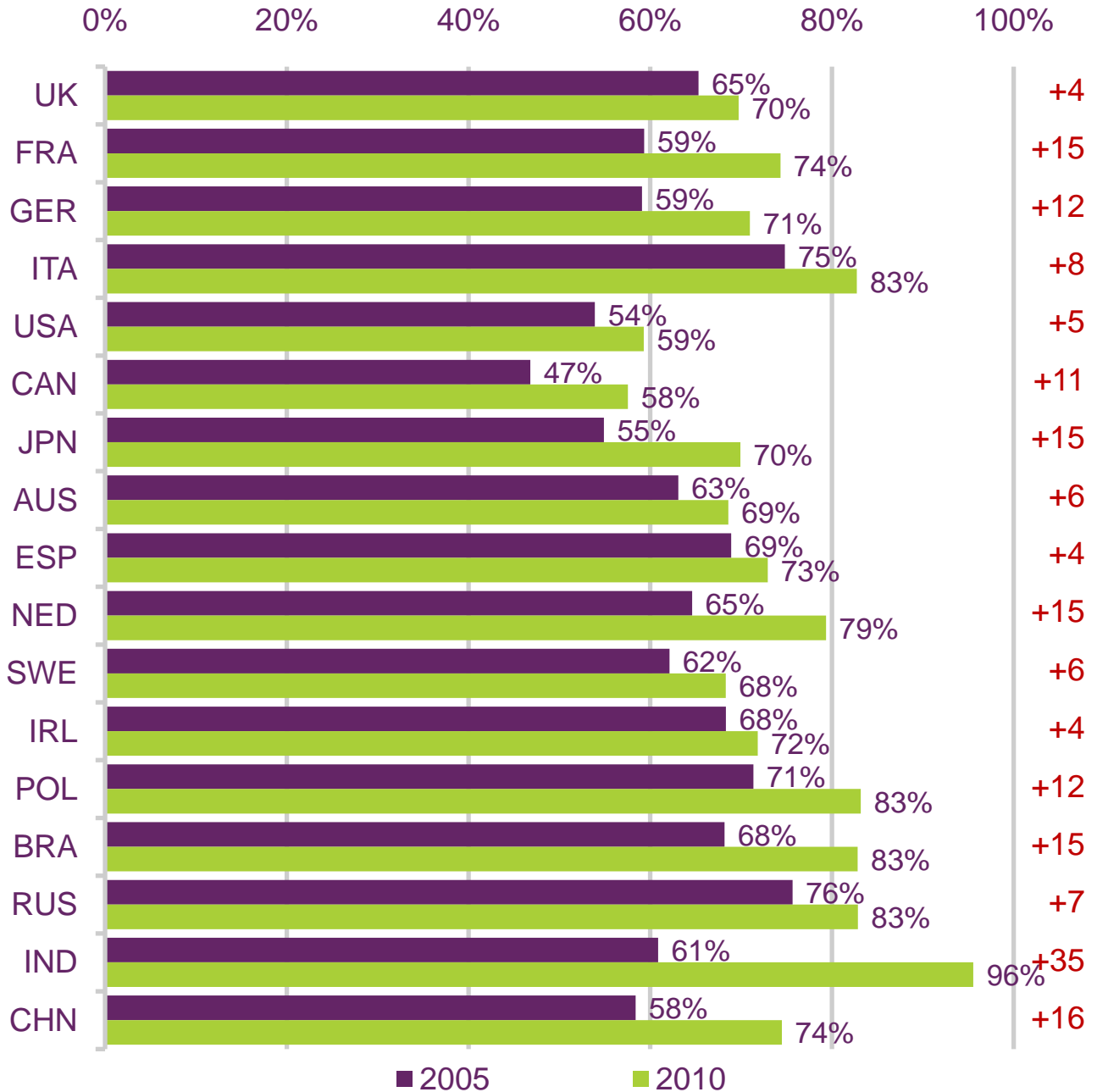
Note: Analysis excludes the BRIC countries

# Figure 6.22

## Mobile as a proportion of total voice connections, 2005 and 2010

Proportion of total connections (%)

5 year  
percentage  
point change



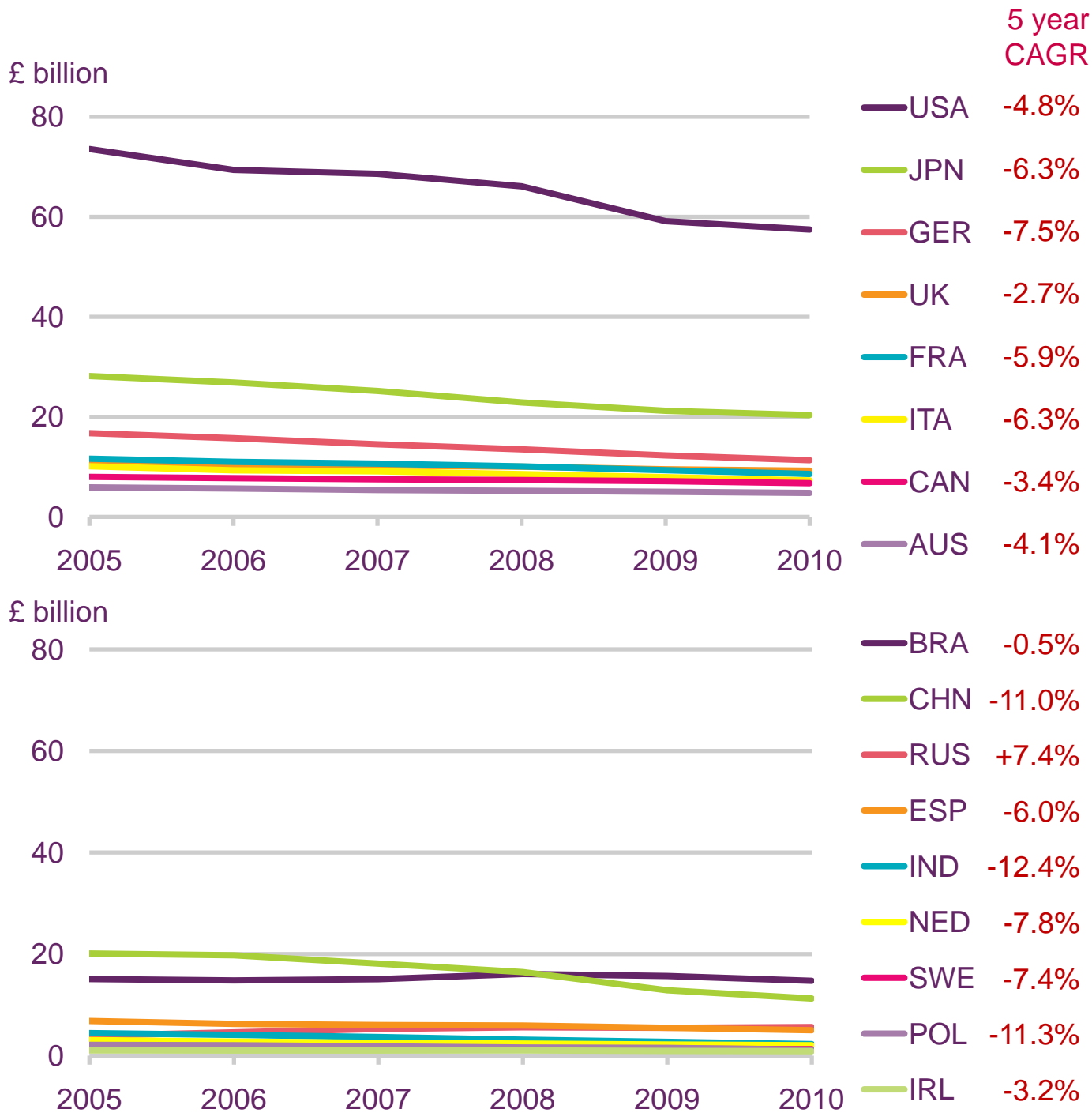
Source: IDATE / industry data / Ofcom

Note: Calculation excludes mobile broadband connections

# Fixed voice services

# Figure 6.23

## Fixed-line voice retail revenues, 2005 to 2010



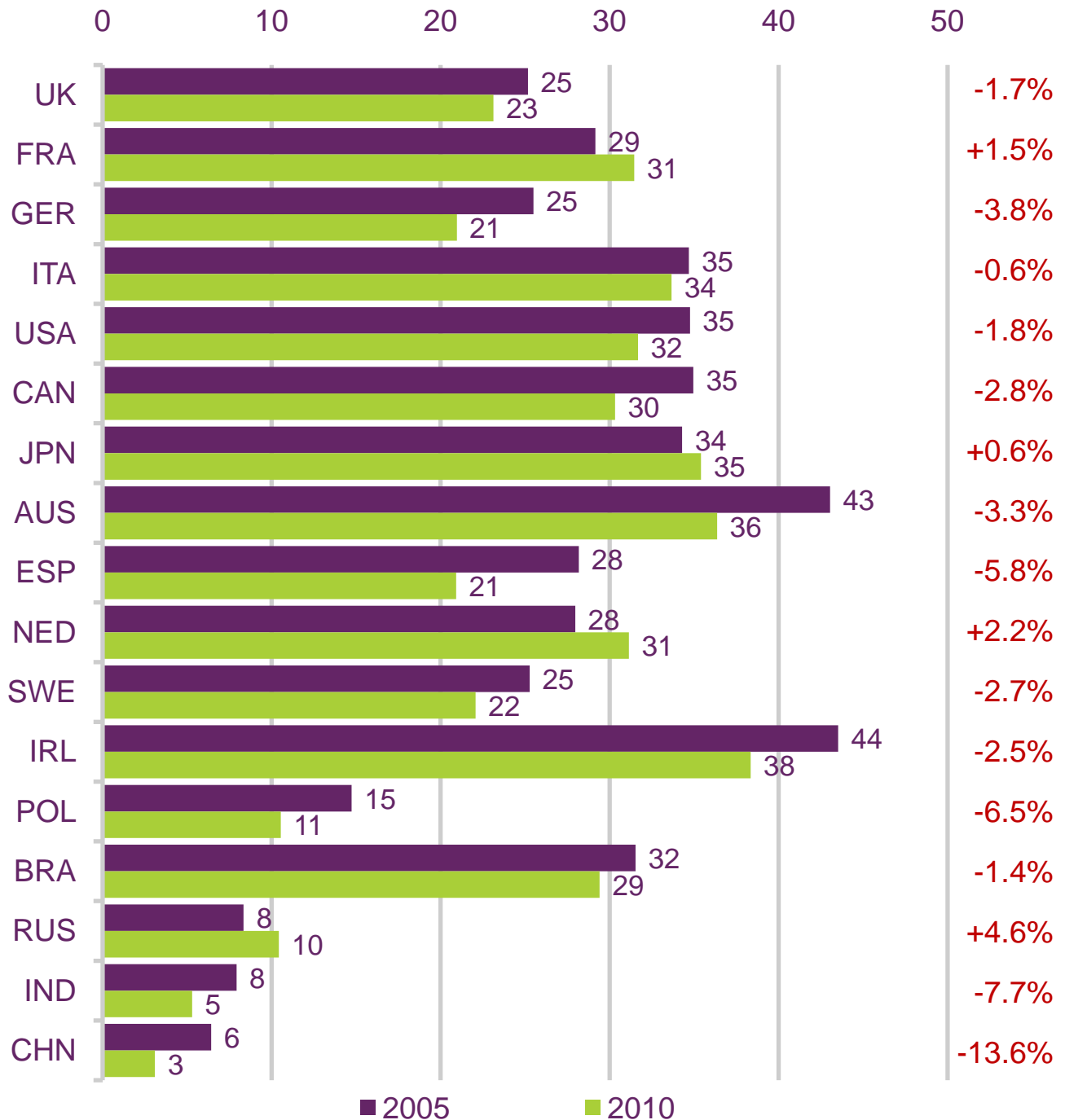
Source: IDATE / industry data / Ofcom

# Figure 6.24

## Average monthly revenue per fixed line, 2005 and 2010

£ per month

5 year  
CAGR



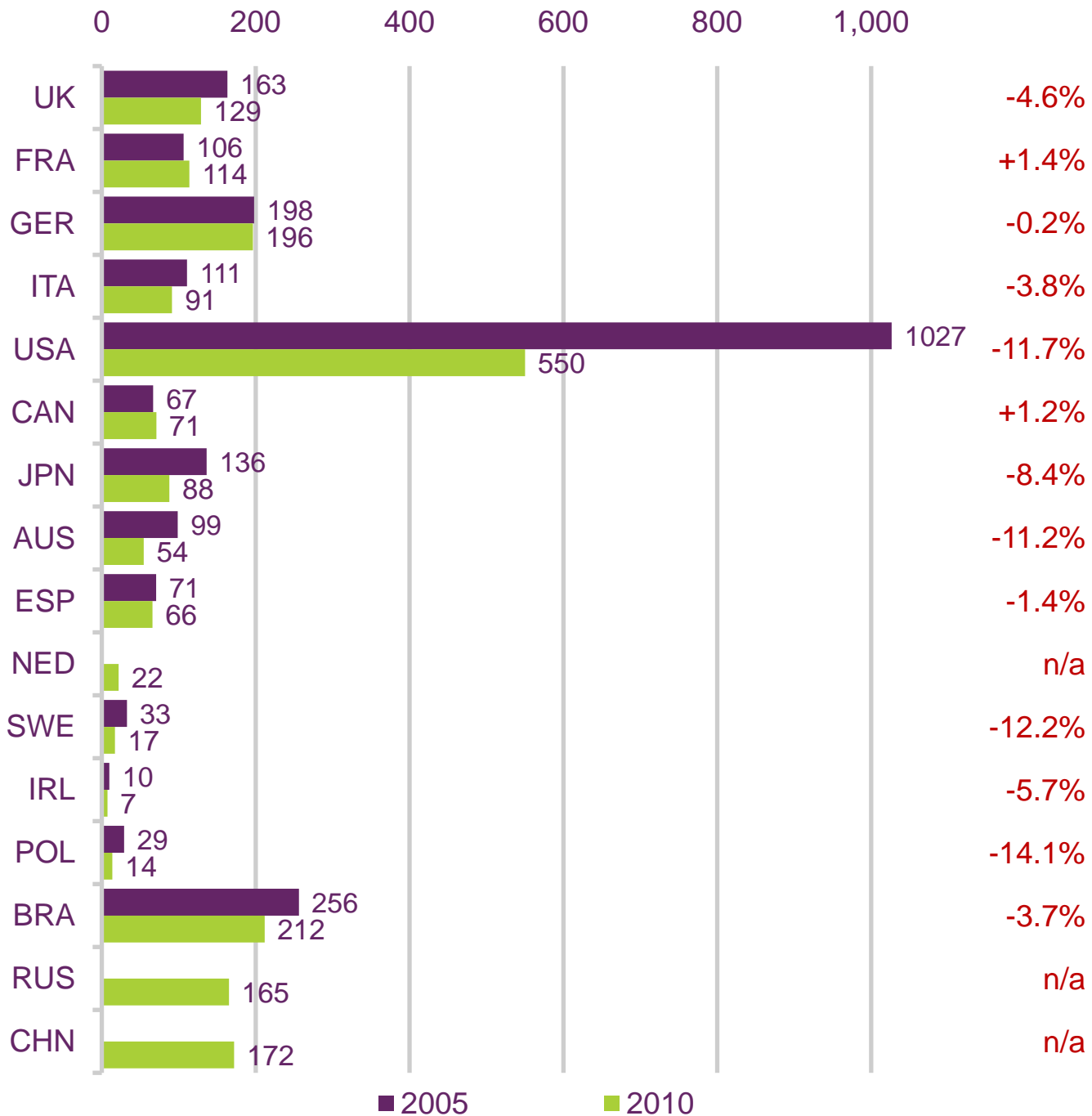
Source: IDATE / industry data / Ofcom

# Figure 6.25

## Fixed-line voice call volumes, 2005 and 2010

Call minutes (billions)

5 year  
CAGR

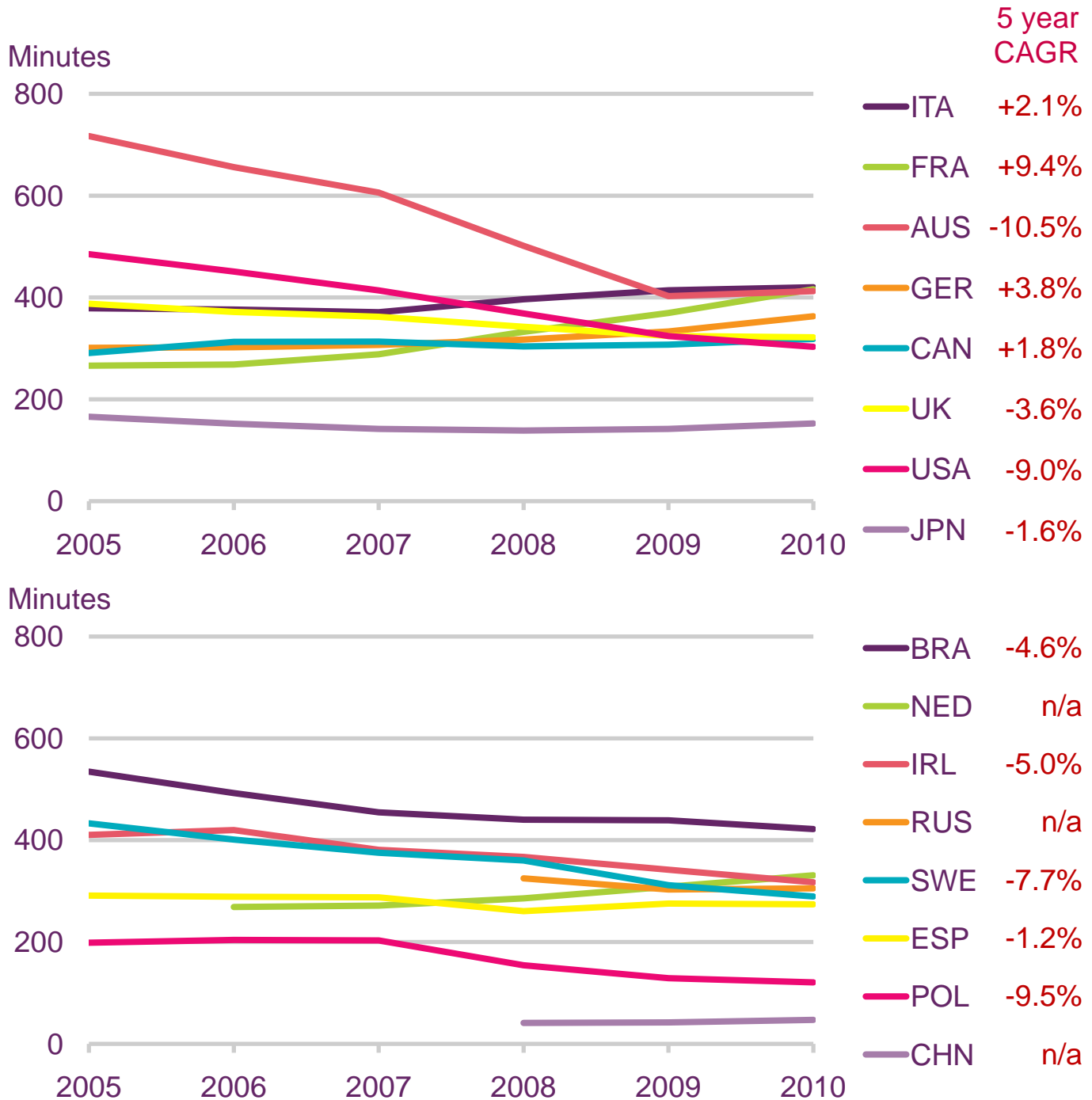


Source: IDATE / industry data / Ofcom

Note: Figures for USA and CAN exclude local and VoIP calls and include incoming mobile calls

# Figure 6.26

## Monthly outbound minutes per fixed line, 2005 to 2010

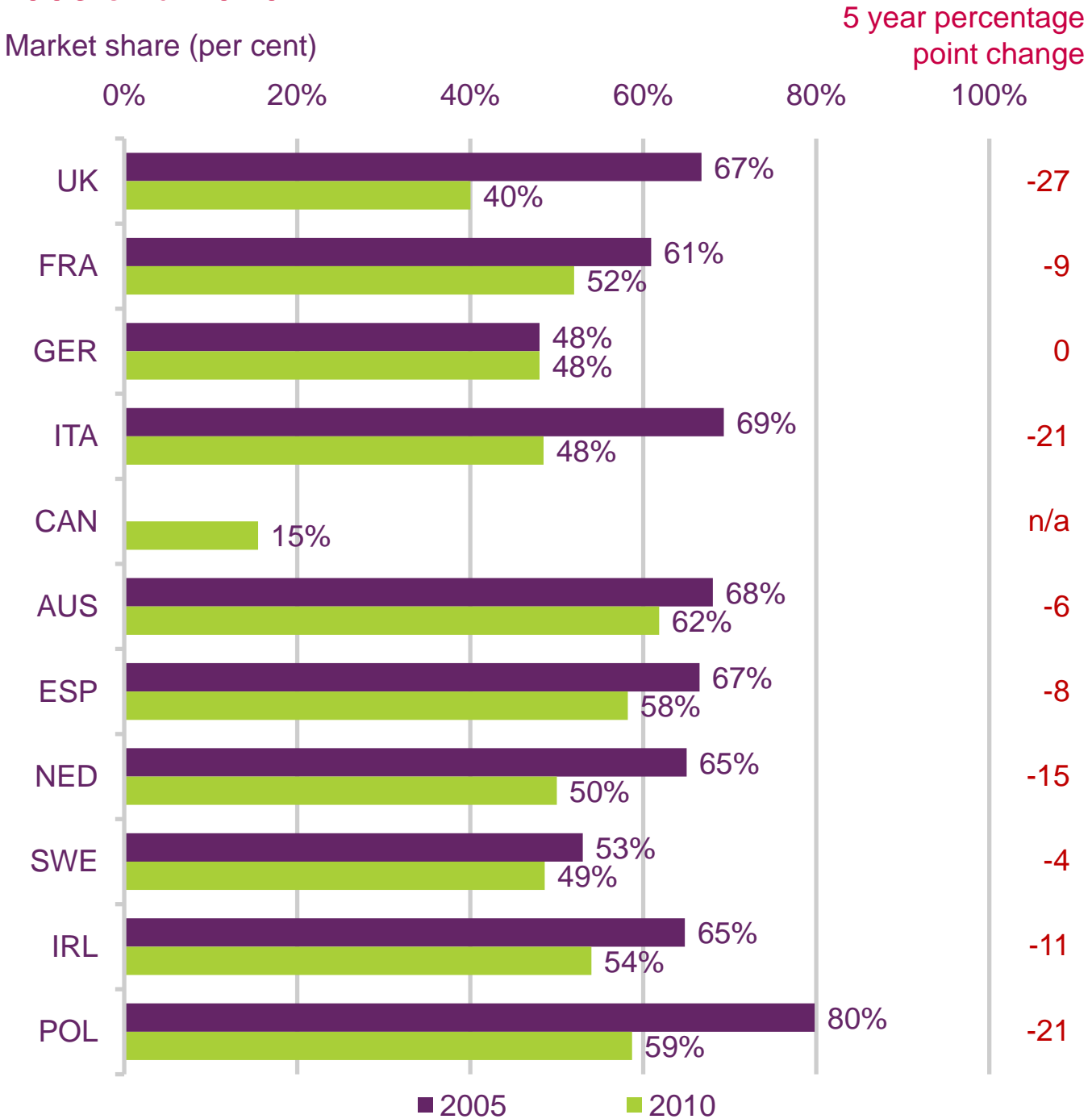


Source: IDATE / industry data / Ofcom

Note: Figures for USA and CAN exclude local and VoIP calls and include incoming mobile calls

# Figure 6.27

## Incumbent operator's share of fixed voice call volumes, 2005 and 2010

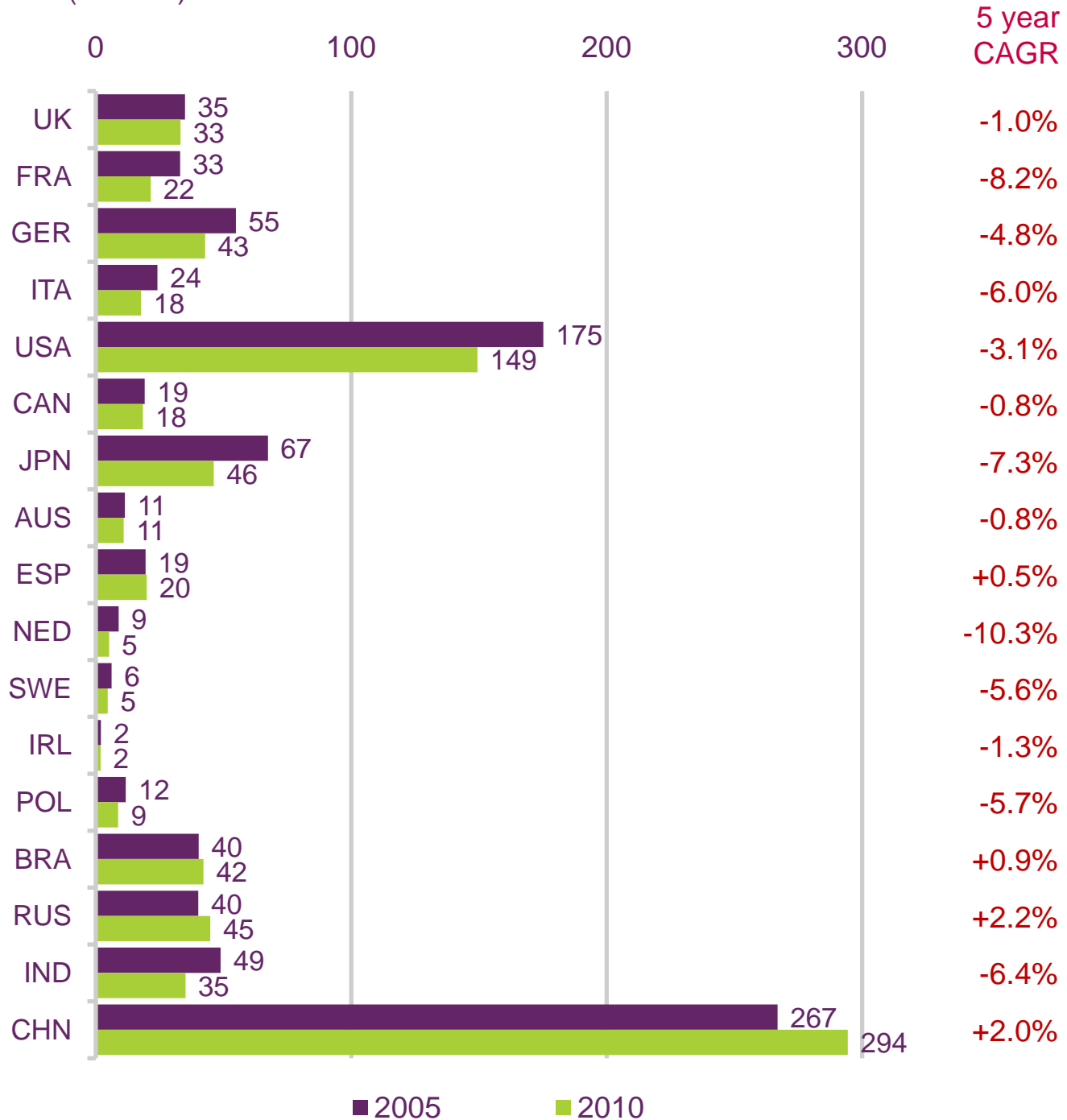


Source: IDATE / industry data / Ofcom

# Figure 6.28

## Fixed exchange lines, 2005 and 2010

Lines (millions)

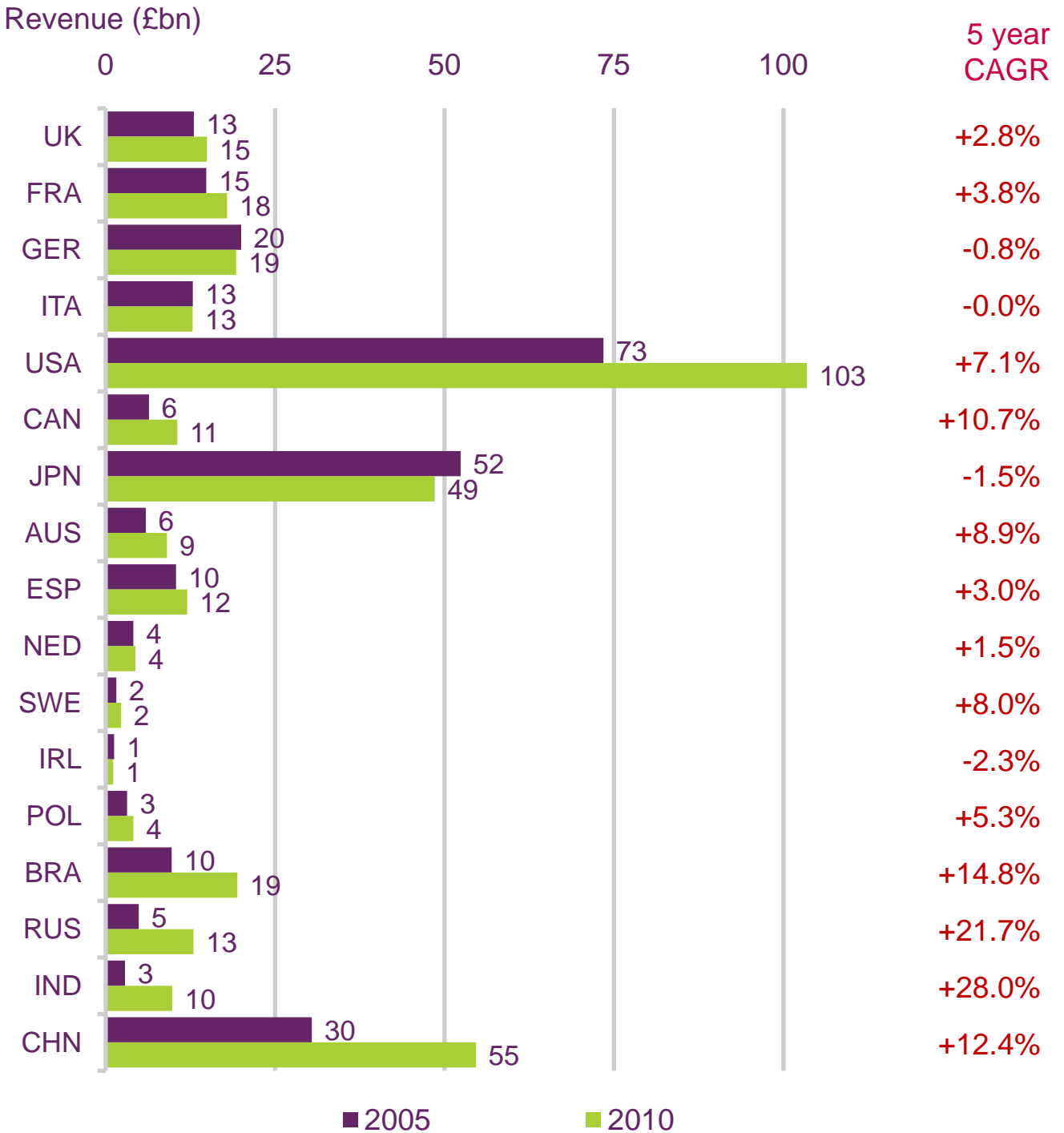


Source: IDATE / industry data / Ofcom

# Mobile voice and data services

# Figure 6.29

## Mobile retail revenues, 2005 and 2010

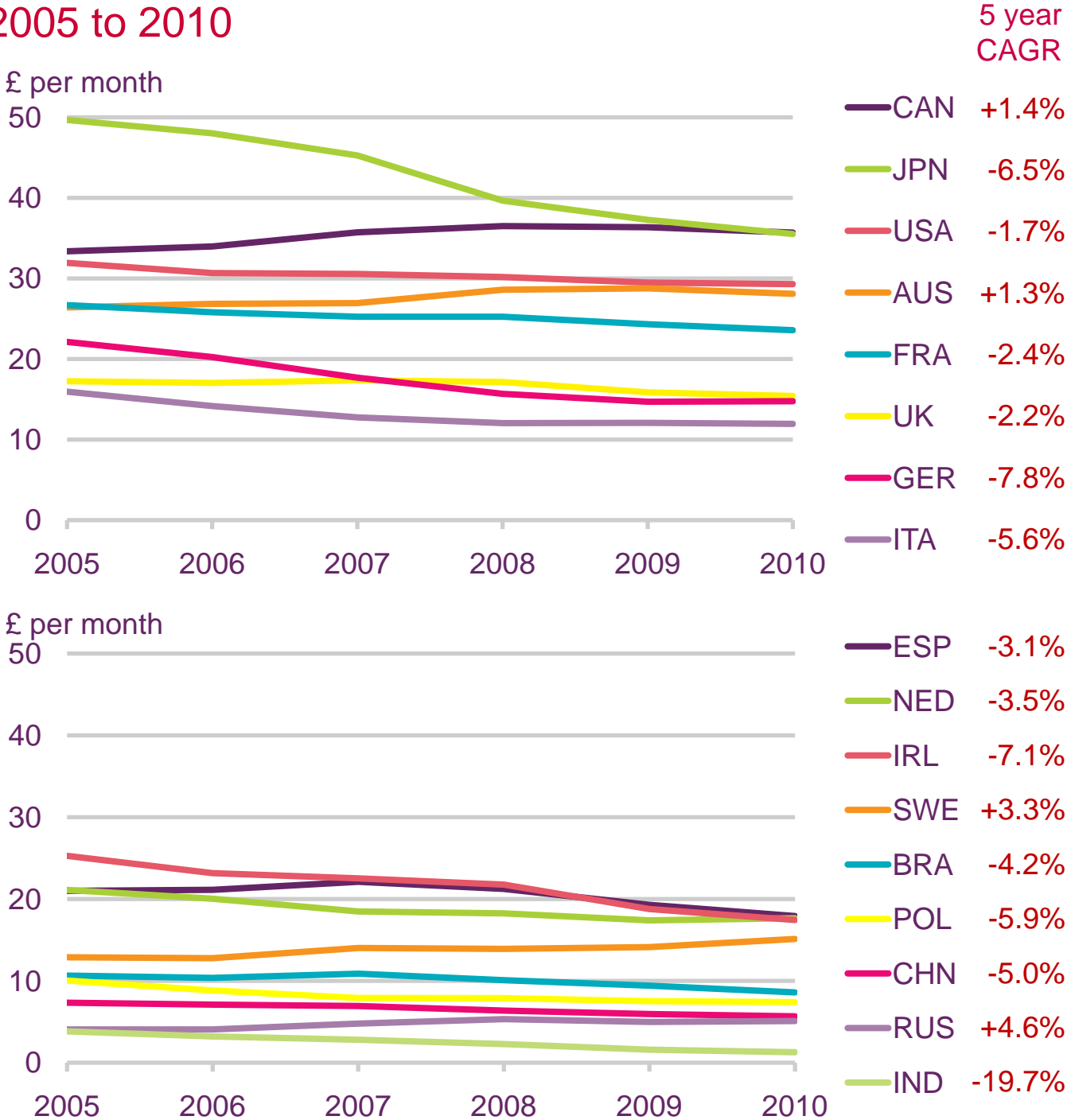


Source: IDATE / industry data / Ofcom

Note: USA and CAN include revenues from incoming calls

# Figure 6.30

## Average monthly revenue per mobile connection, 2005 to 2010

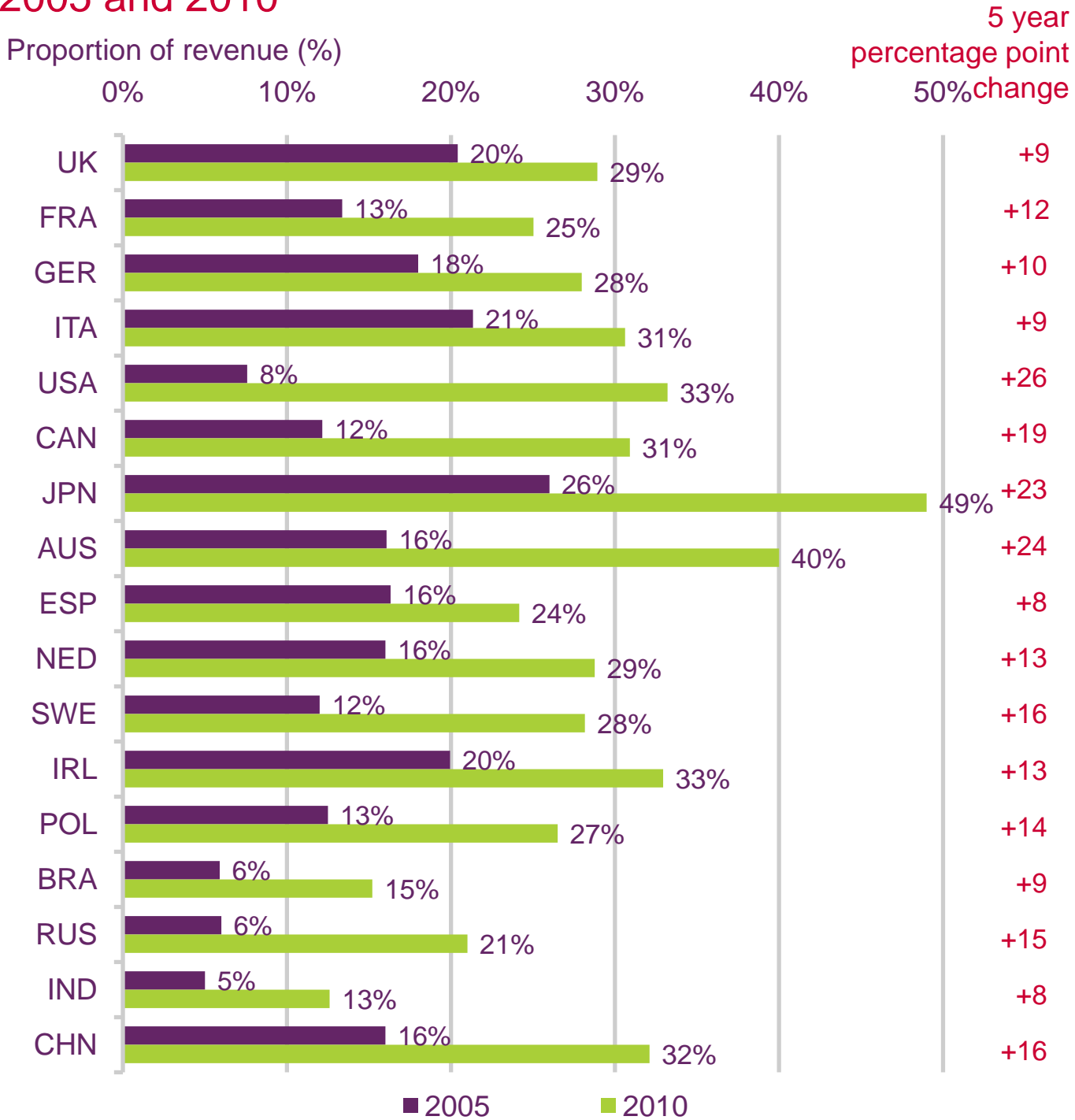


Source: IDATE / industry data / Ofcom

Note: USA and CAN include revenues from incoming calls

# Figure 6.31

Data as a proportion of total mobile service revenue, 2005 and 2010



Source: IDATE / industry data / Ofcom

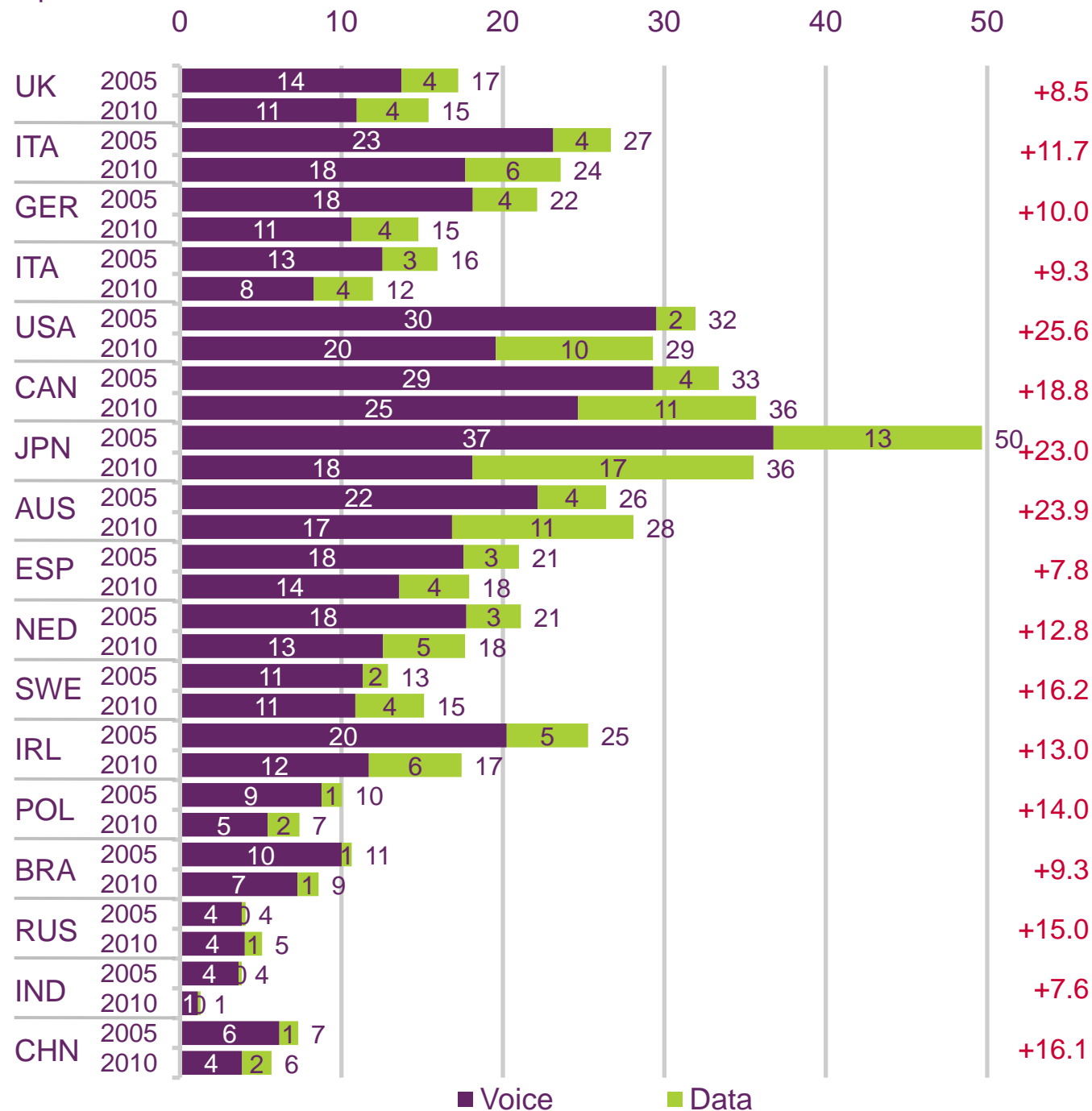
Note: USA and CAN include revenues from incoming calls

# Figure 6.32

## Average monthly voice and data revenue per mobile connection, 2005 and 2010

£ per month

5 year percentage point change in proportion data

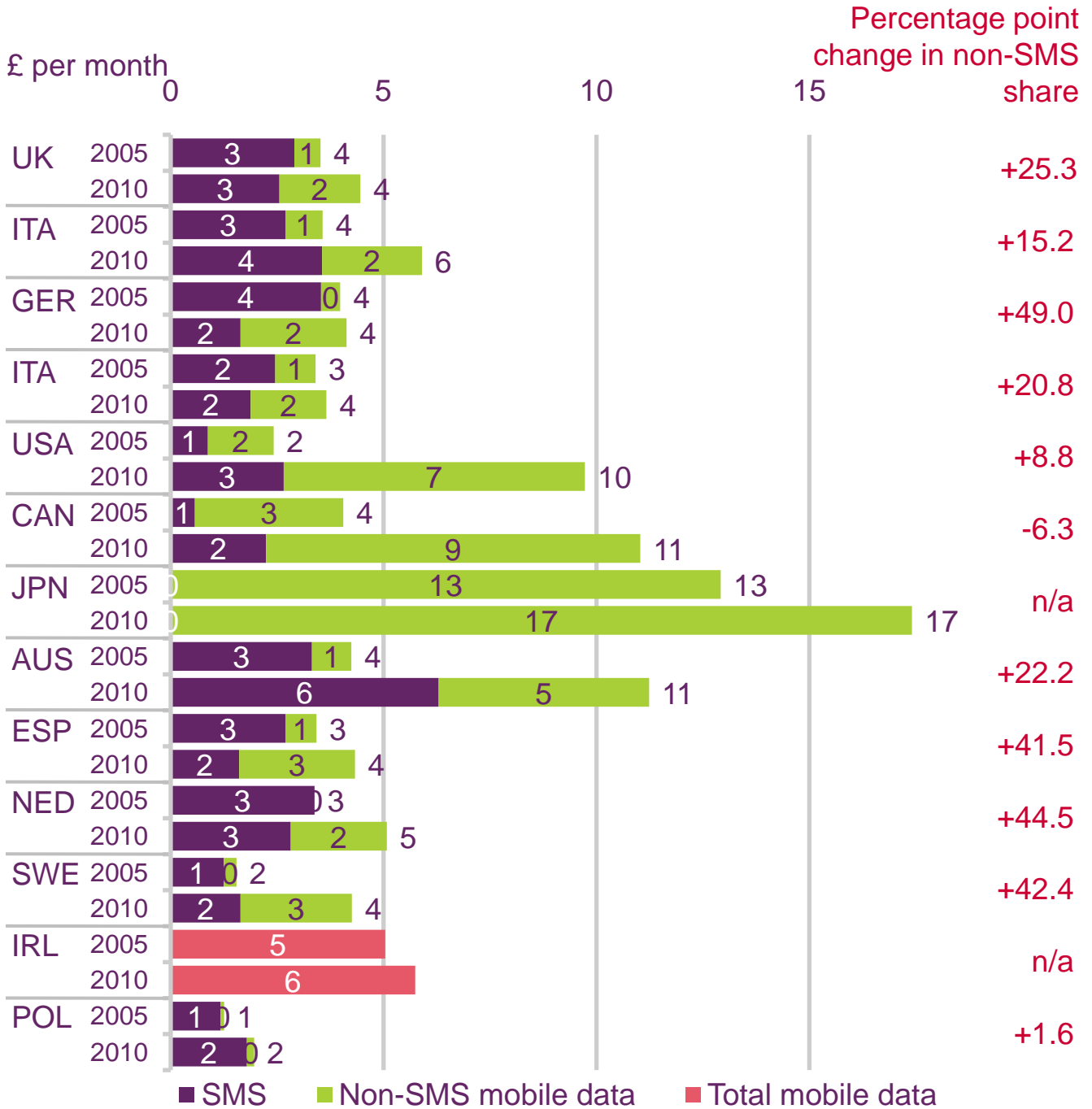


Source: IDATE / industry data / Ofcom

Note: USA and CAN include revenues from incoming calls

# Figure 6.33

## Average monthly SMS and non-SMS data revenue per mobile connection, 2005 and 2010



Source: IDATE / industry data / Ofcom

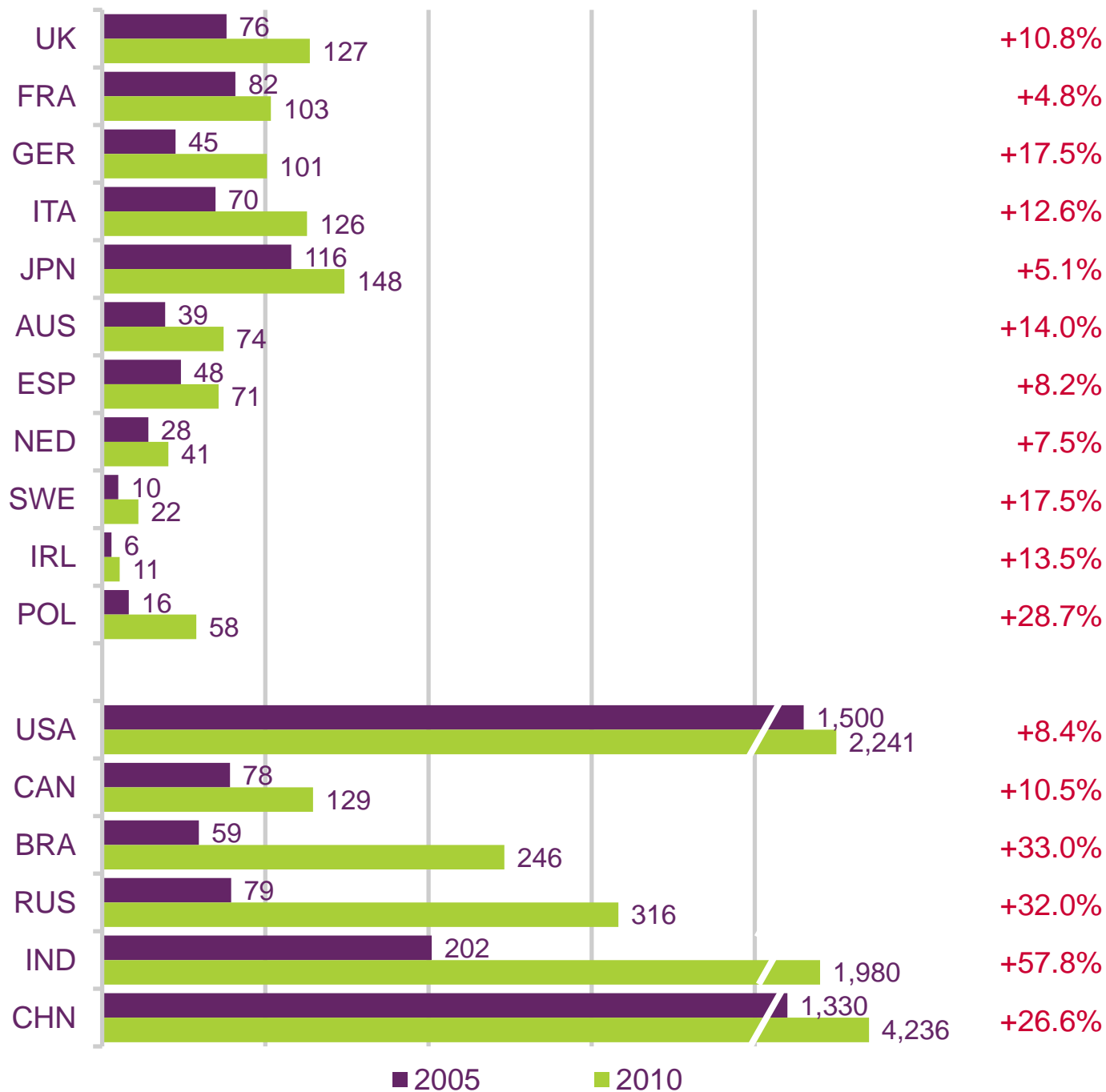
# Figure 6.34

## Mobile voice call volumes, 2005 and 2010

Outgoing minutes (billions)

0 100 200 300 400

5 year  
CAGR

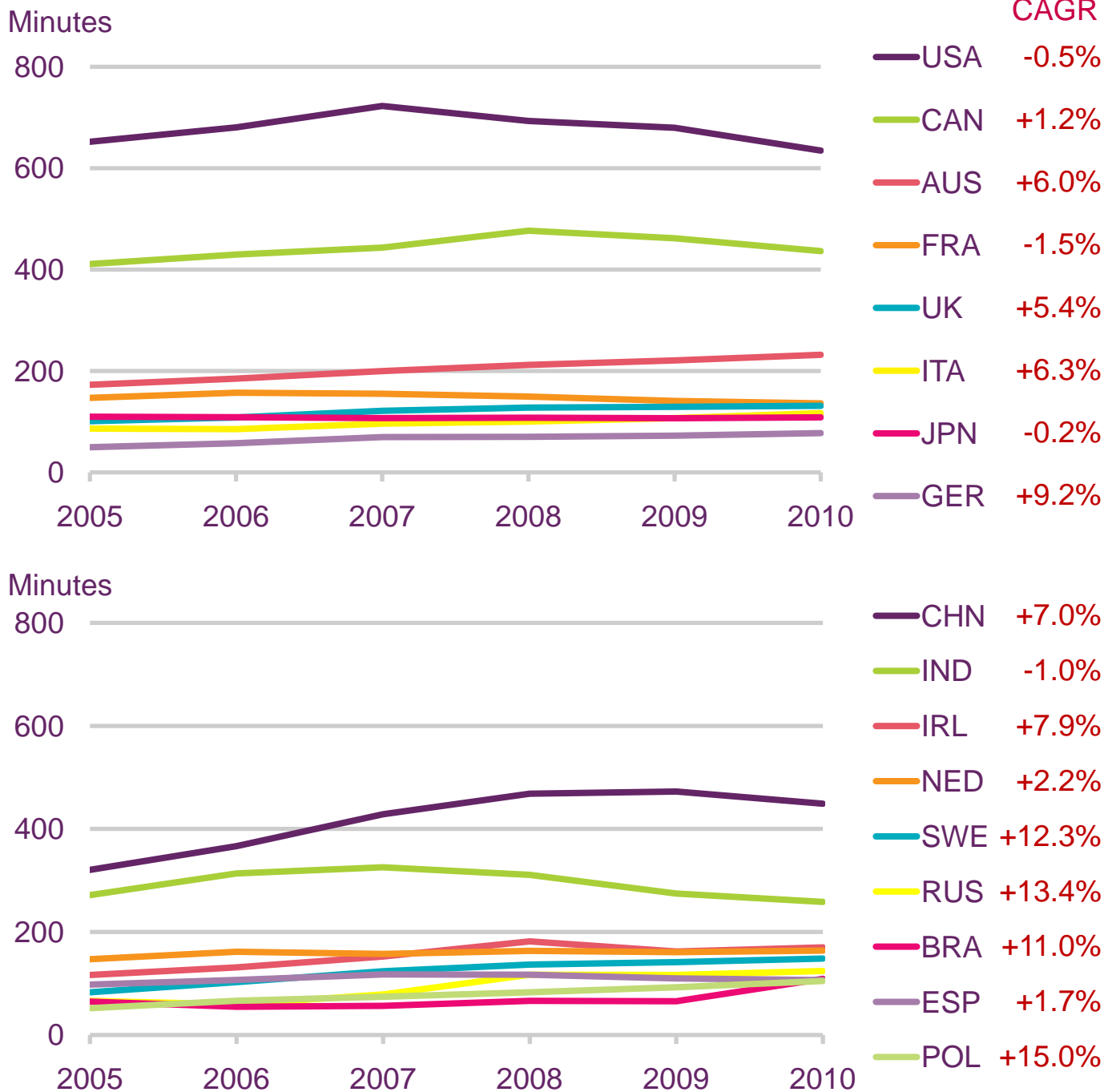


Source: IDATE / industry data / Ofcom

Note: USA, CAN and CHN include incoming calls; BRA, RUS and IND include fixed-to-mobile and off-net incoming calls

# Figure 6.35

## Monthly outbound minutes per mobile connection, 2005 to 2010



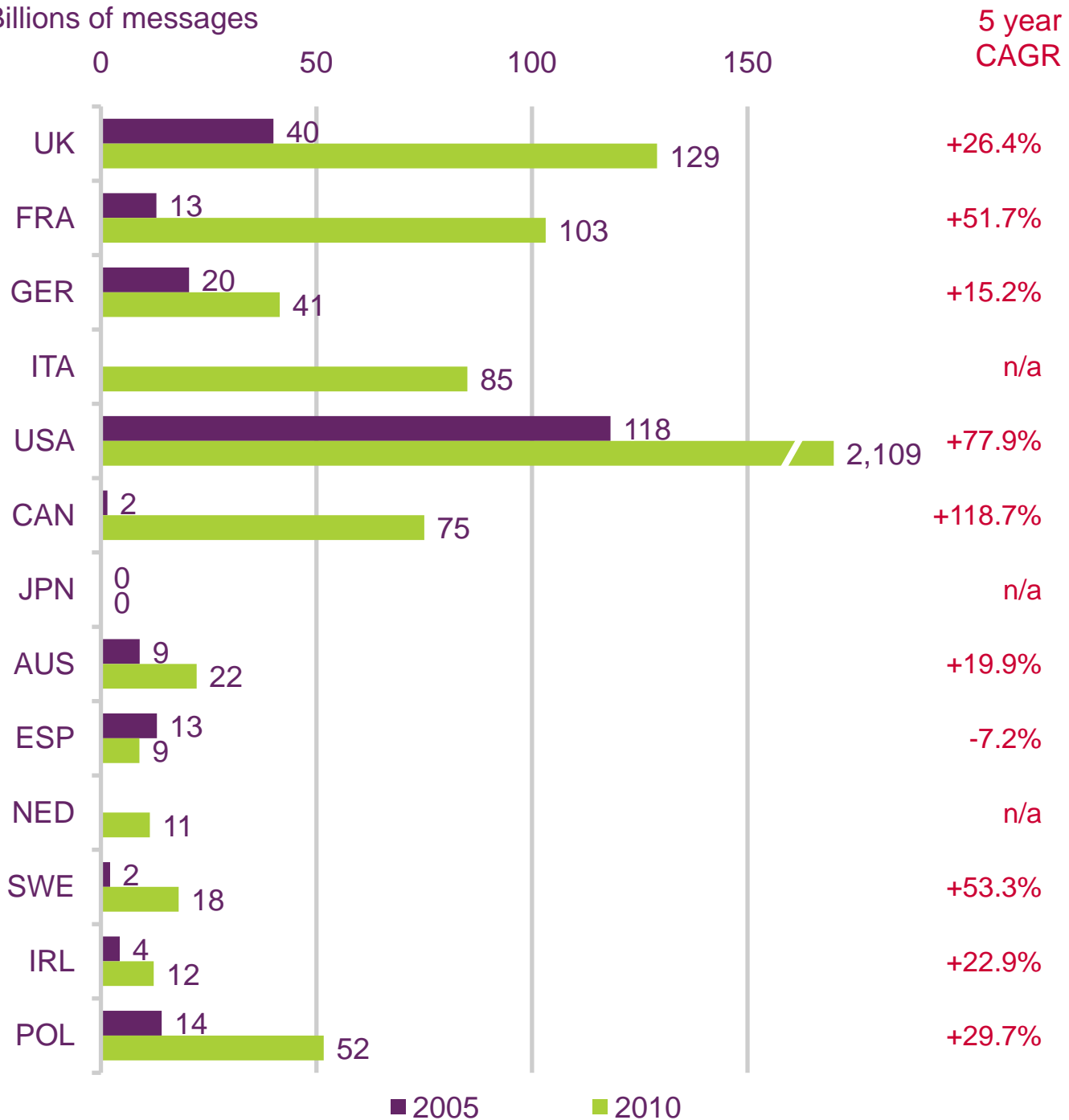
Source: IDATE / industry data / Ofcom

Note: USA, CAN and CHN include incoming calls; BRA, RUS and IND include fixed-to-mobile and off-net incoming calls

# Figure 6.36

## Mobile messaging volumes, 2005 and 2010

Billions of messages



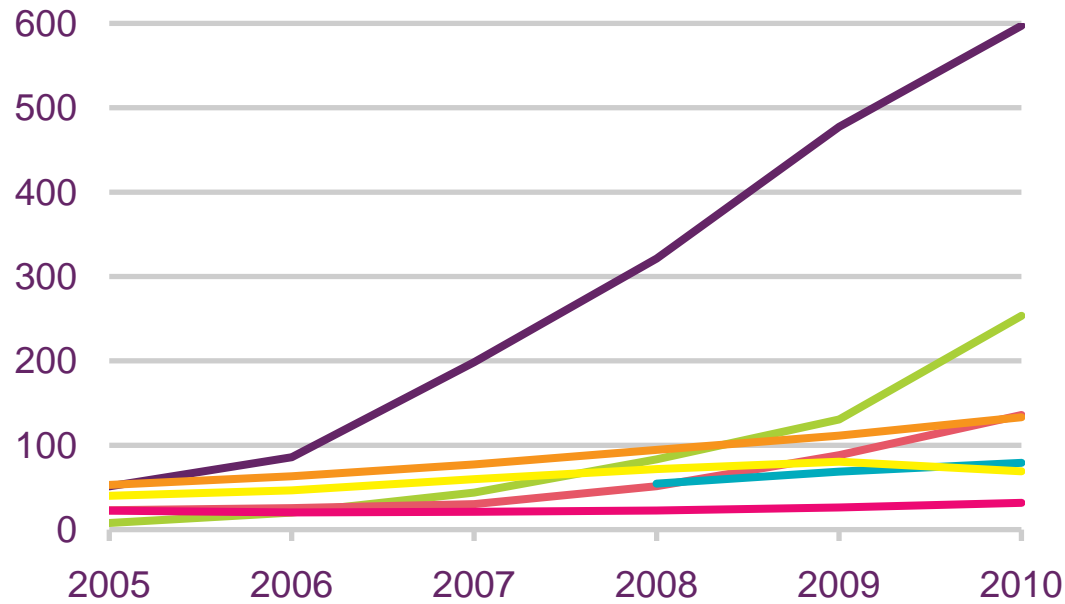
Source: IDATE / industry data / Ofcom

Note: Figures for the USA include push-to-text and are not directly comparable to those for the other comparator countries

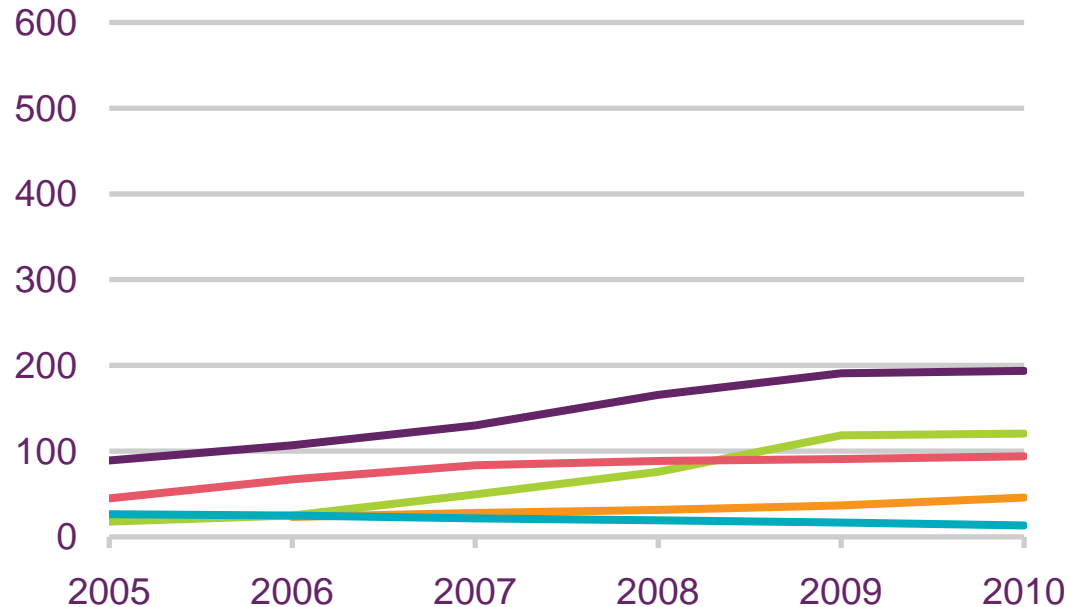
# Figure 6.37

## Monthly outbound messages per mobile connection, 2005 to 2010

Messages



Messages



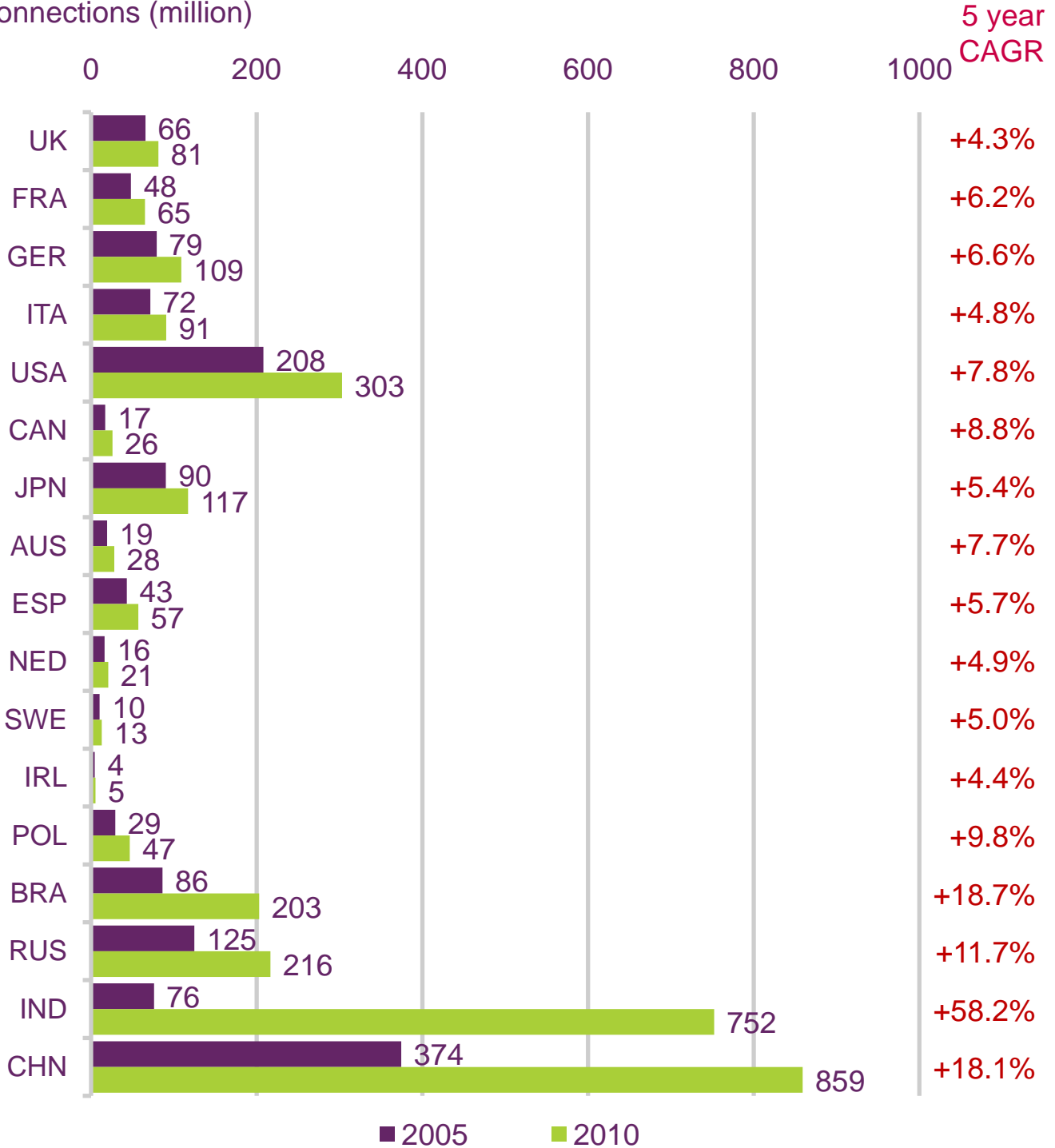
Source: IDATE / industry data / Ofcom

Note: Figures for the USA include push-to-text and are not comparable to the other comparator countries

# Figure 6.38

## Mobile connections, 2005 and 2010

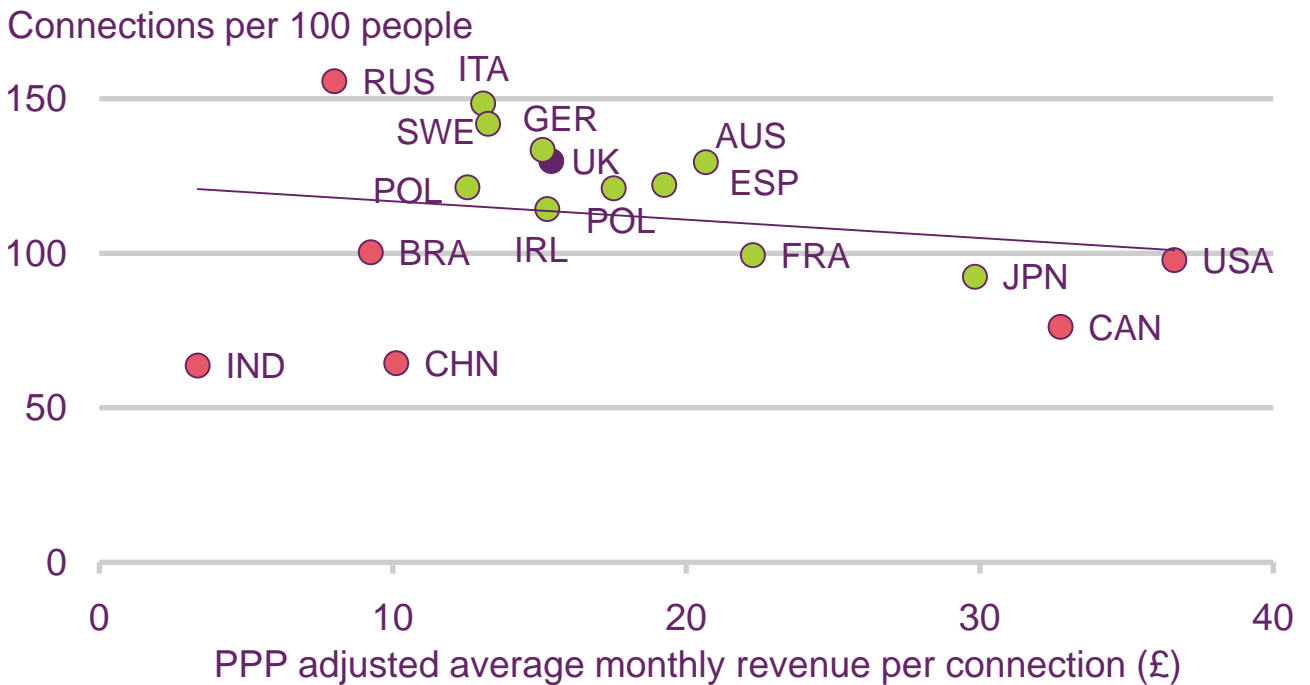
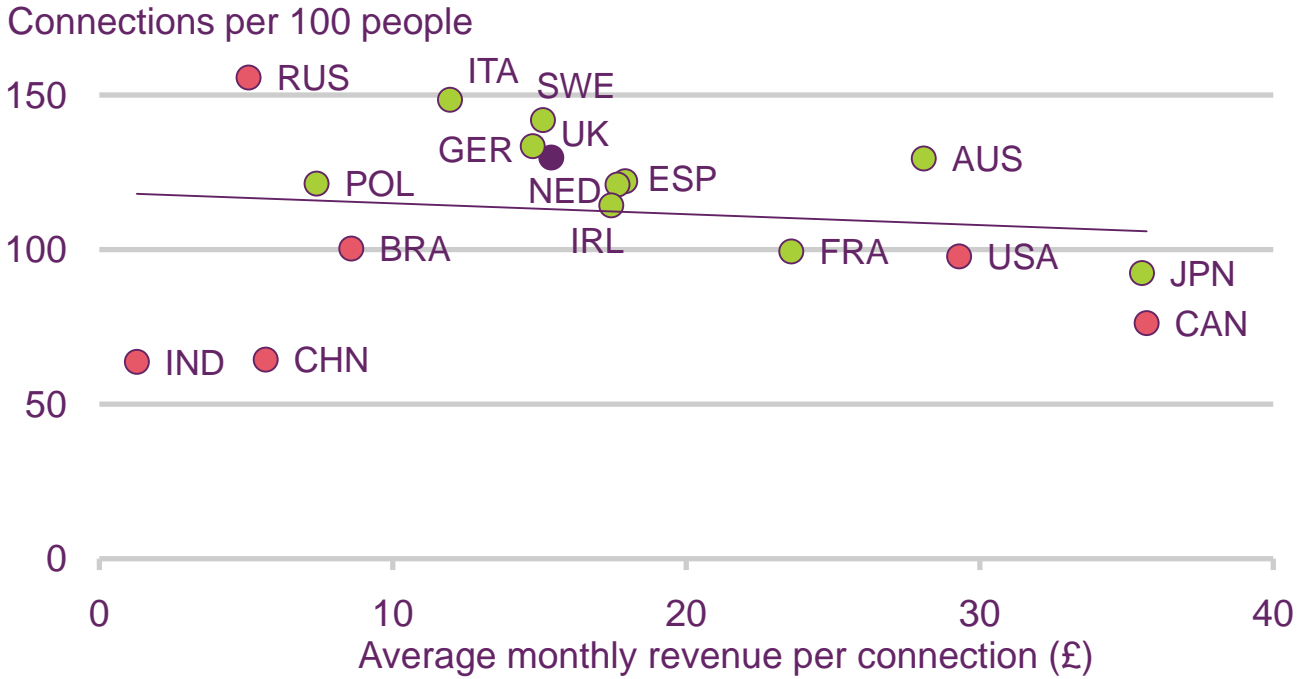
Connections (million)



Source: IDATE / industry data / Ofcom

# Figure 6.39

## Mobile take-up and average monthly revenue per connection, 2010

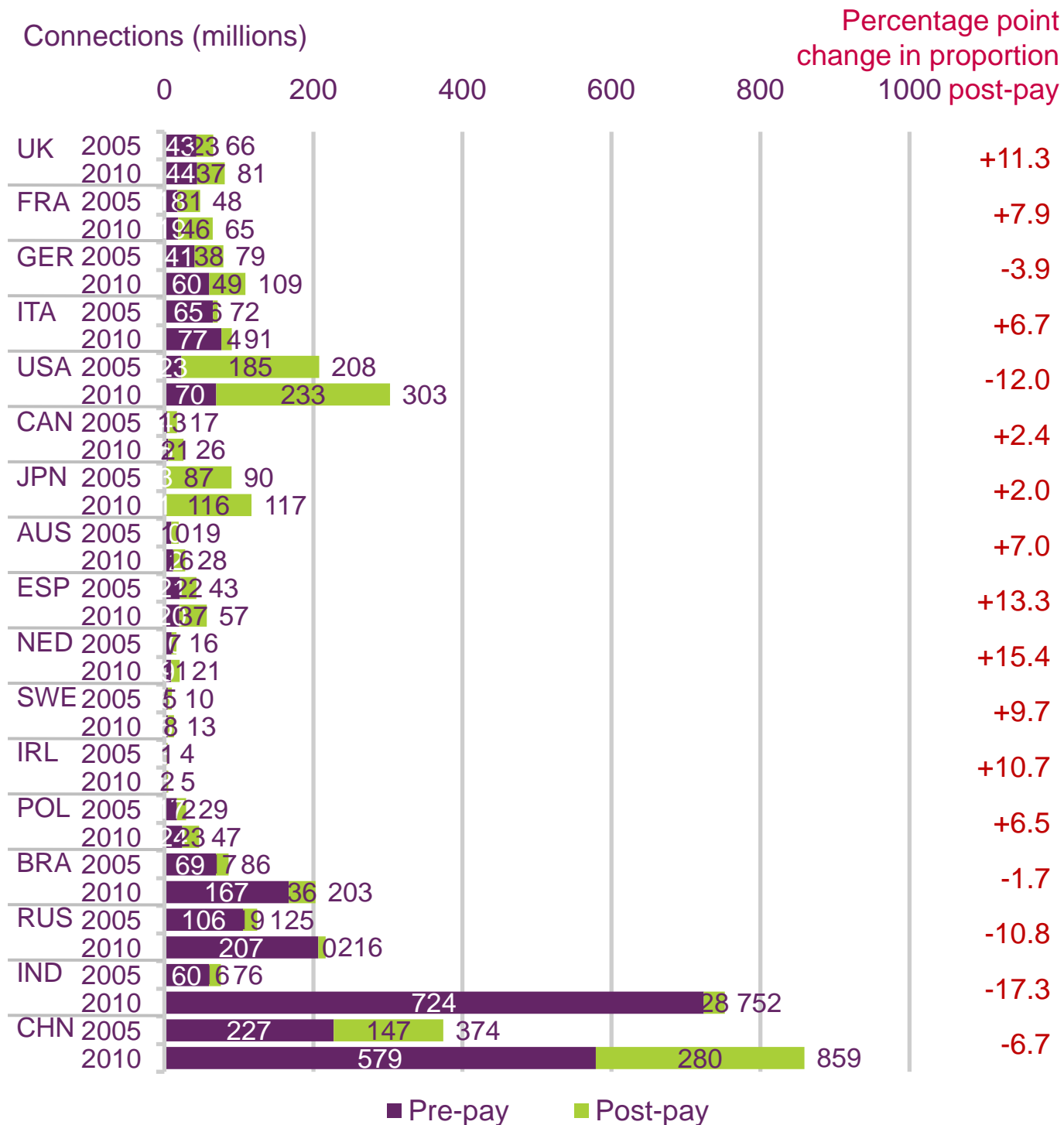


Source: IDATE / industry data / OECD / IMF / Ofcom

Note: USA and CAN include revenues from incoming calls

# Figure 6.40

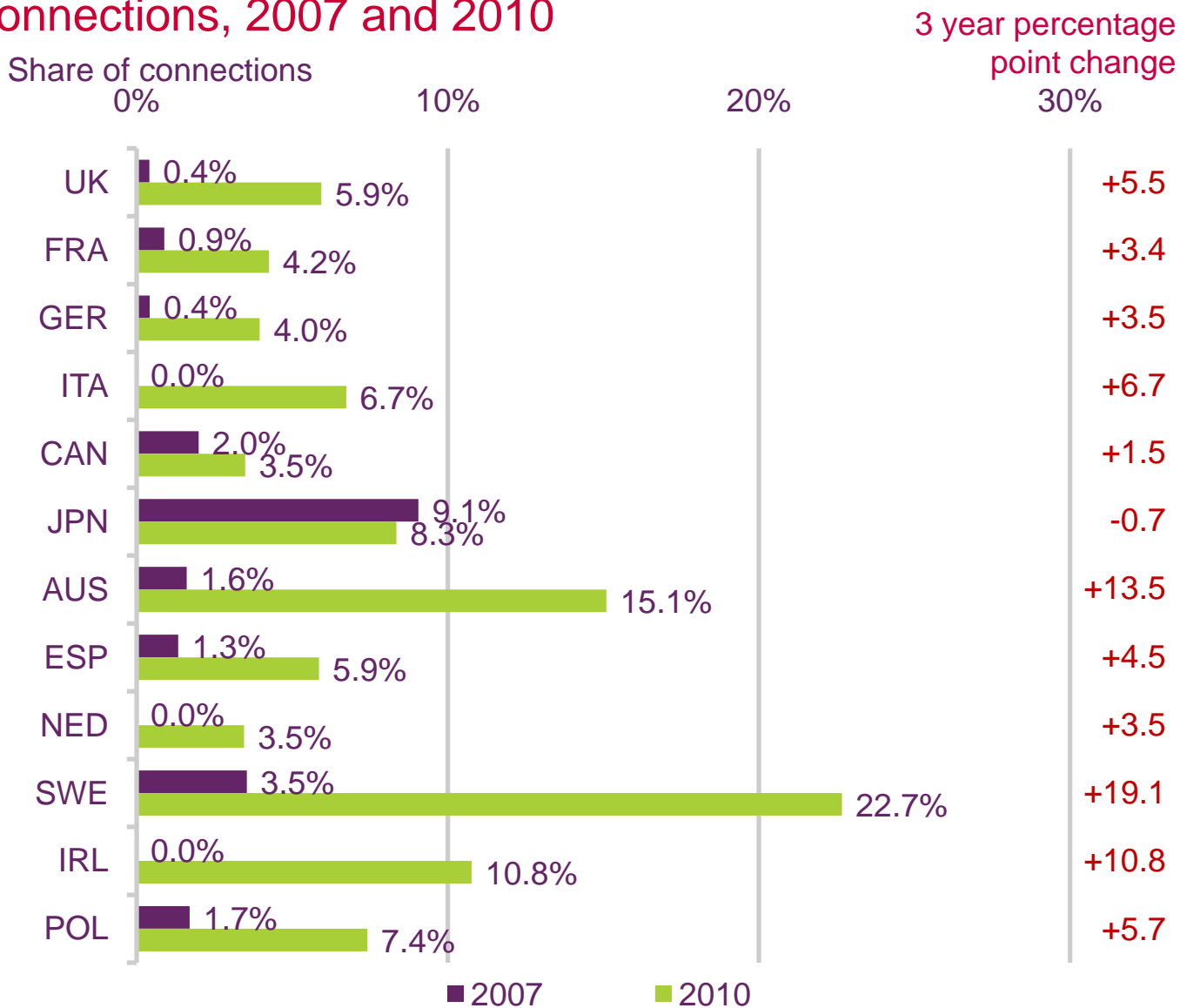
## Mobile connections, by type, 2005 and 2010



Source: IDATE / industry data / Ofcom

# Figure 6.41

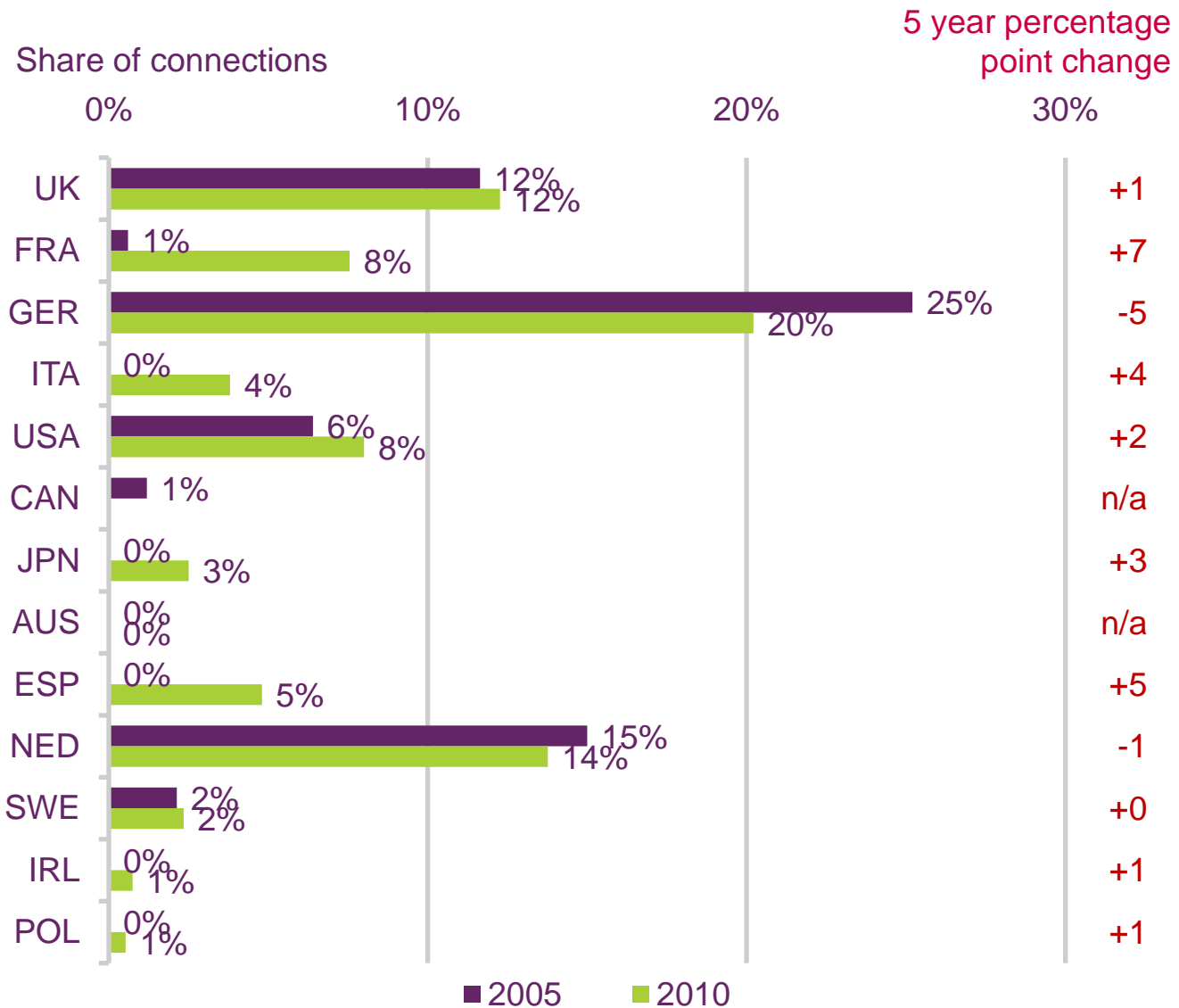
## Mobile broadband as a proportion of total mobile connections, 2007 and 2010



Source: IDATE / industry data / Ofcom

# Figure 6.42

## MVNO share of total mobile connections, 2005 and 2010

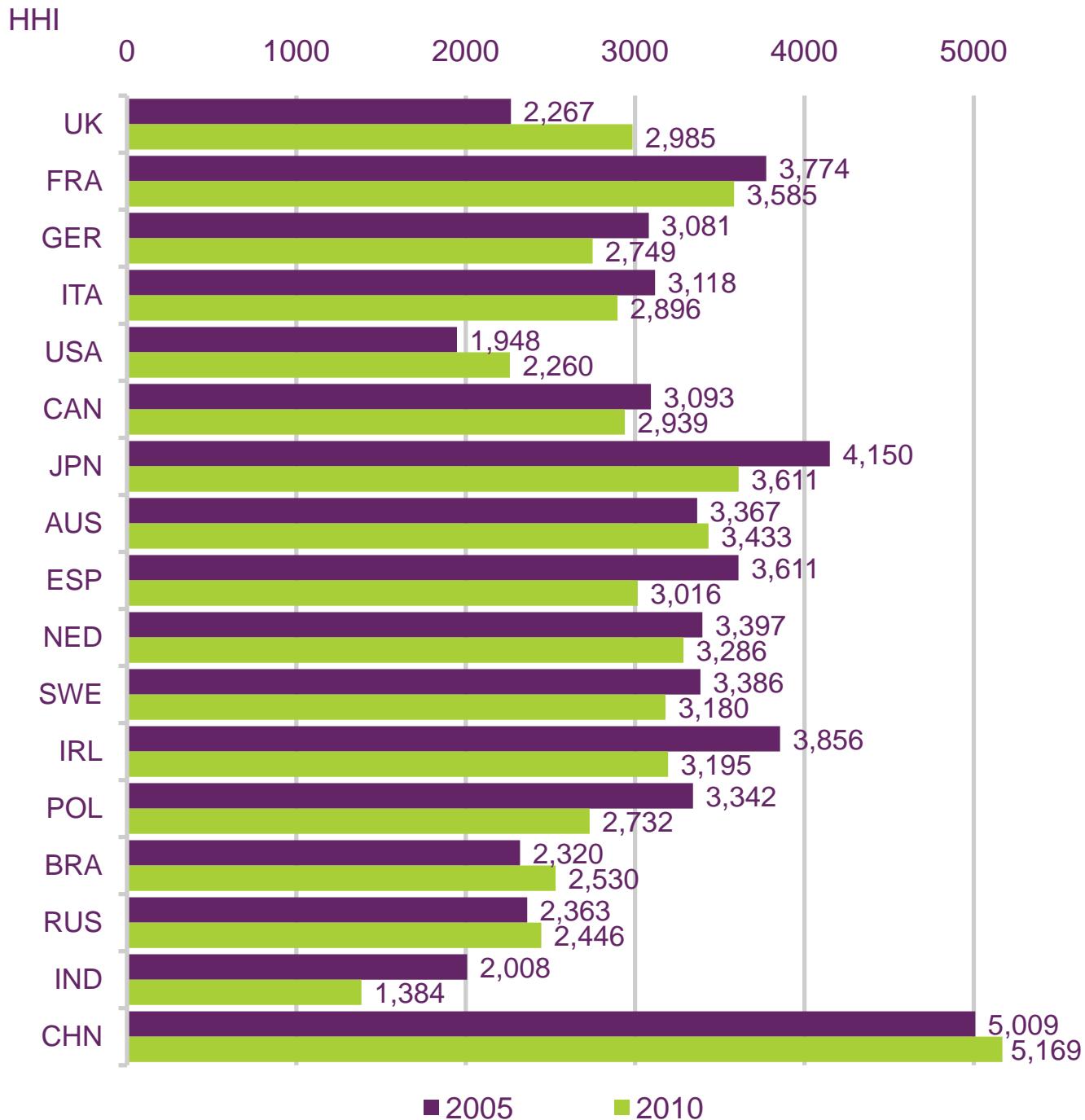


Source: IDATE / industry data / Ofcom

Note: UK and GER figures includes resellers' connections in addition to full MVNOs

# Figure 6.43

## Herfindahl-Hirschman index of mobile concentration, 2005 and 2010



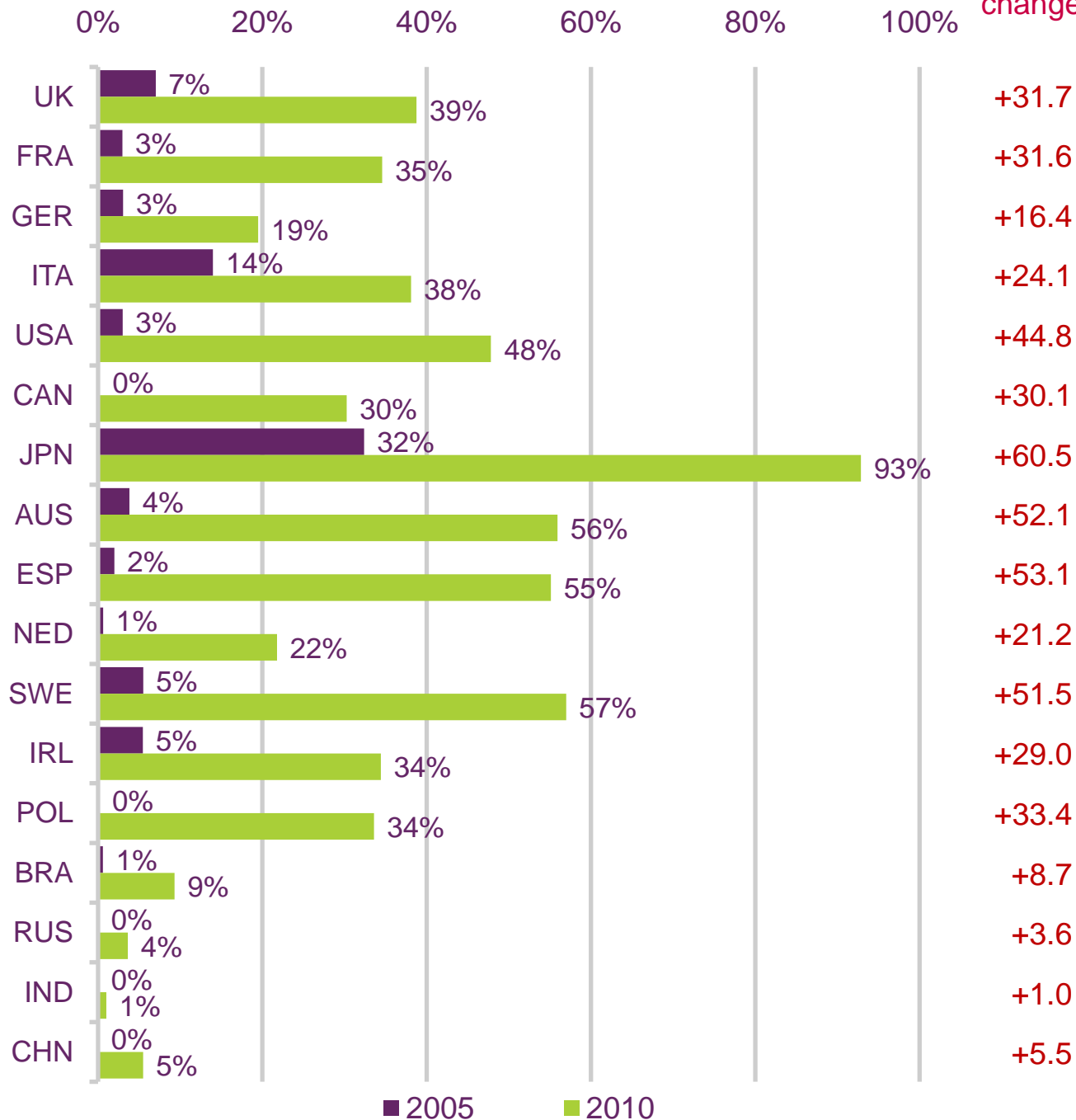
Source: IDATE

# Figure 6.44

## 3G as a proportion of total mobile connections, 2005 and 2010

Percentage of total connections

5 year  
percentage point  
change

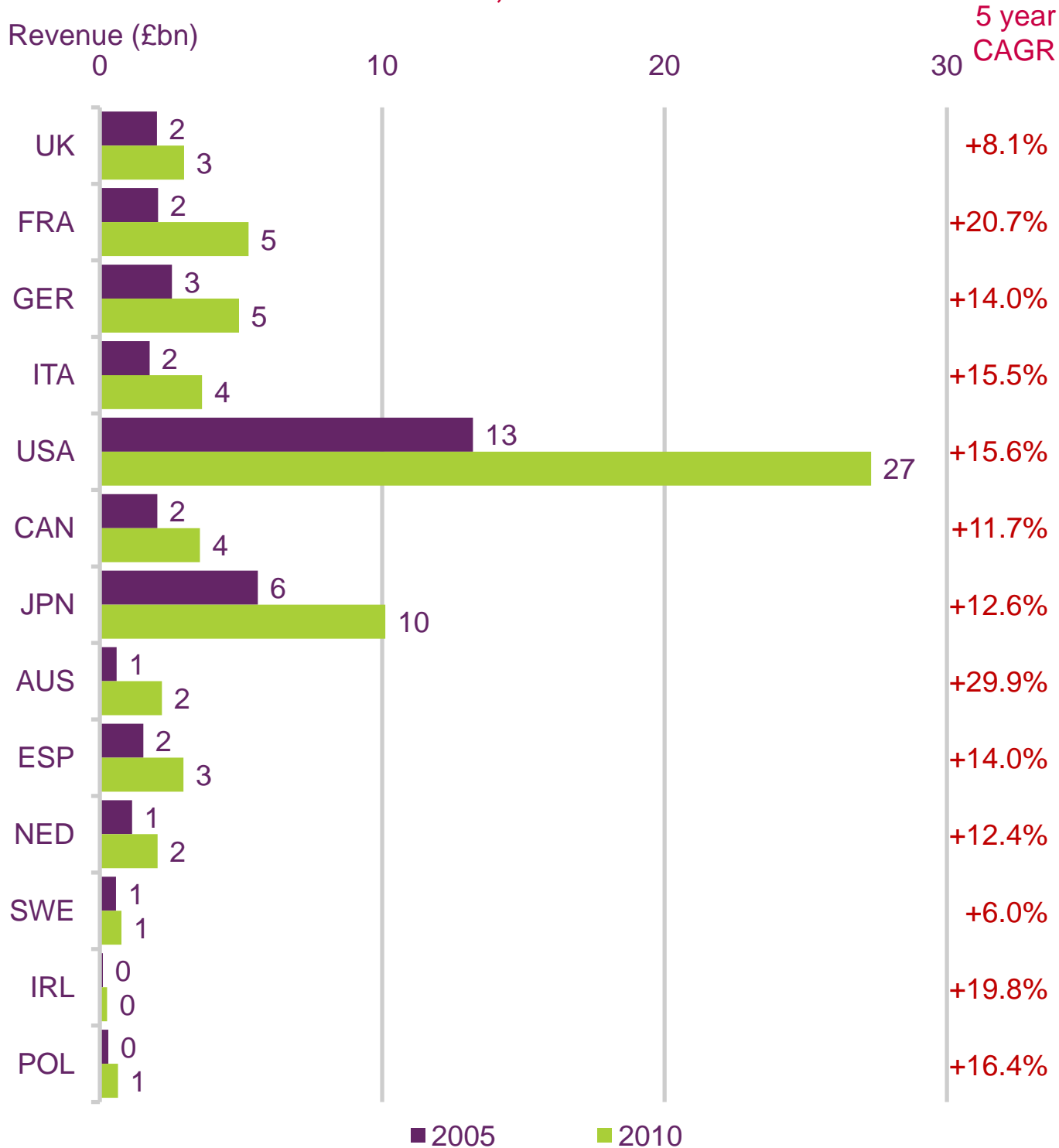


Source: IDATE / industry data / Ofcom

# Broadband services

# Figure 6.45

## Fixed broadband revenues, 2005 and 2010



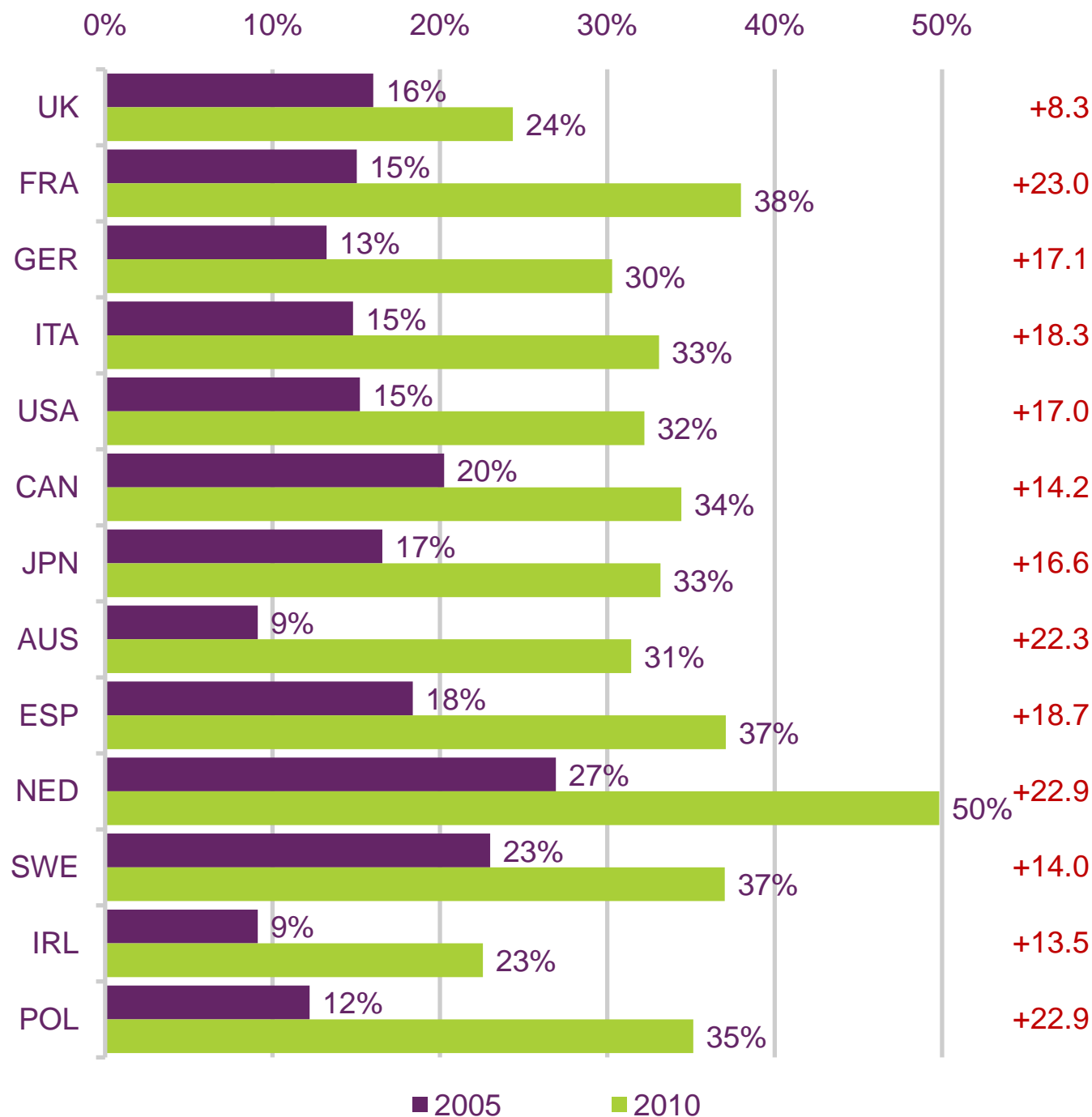
Source: IDATE / industry data / Ofcom

# Figure 6.46

## Fixed broadband as a proportion of total fixed revenues, 2005 and 2010

Percentage share

5 year percentage point change



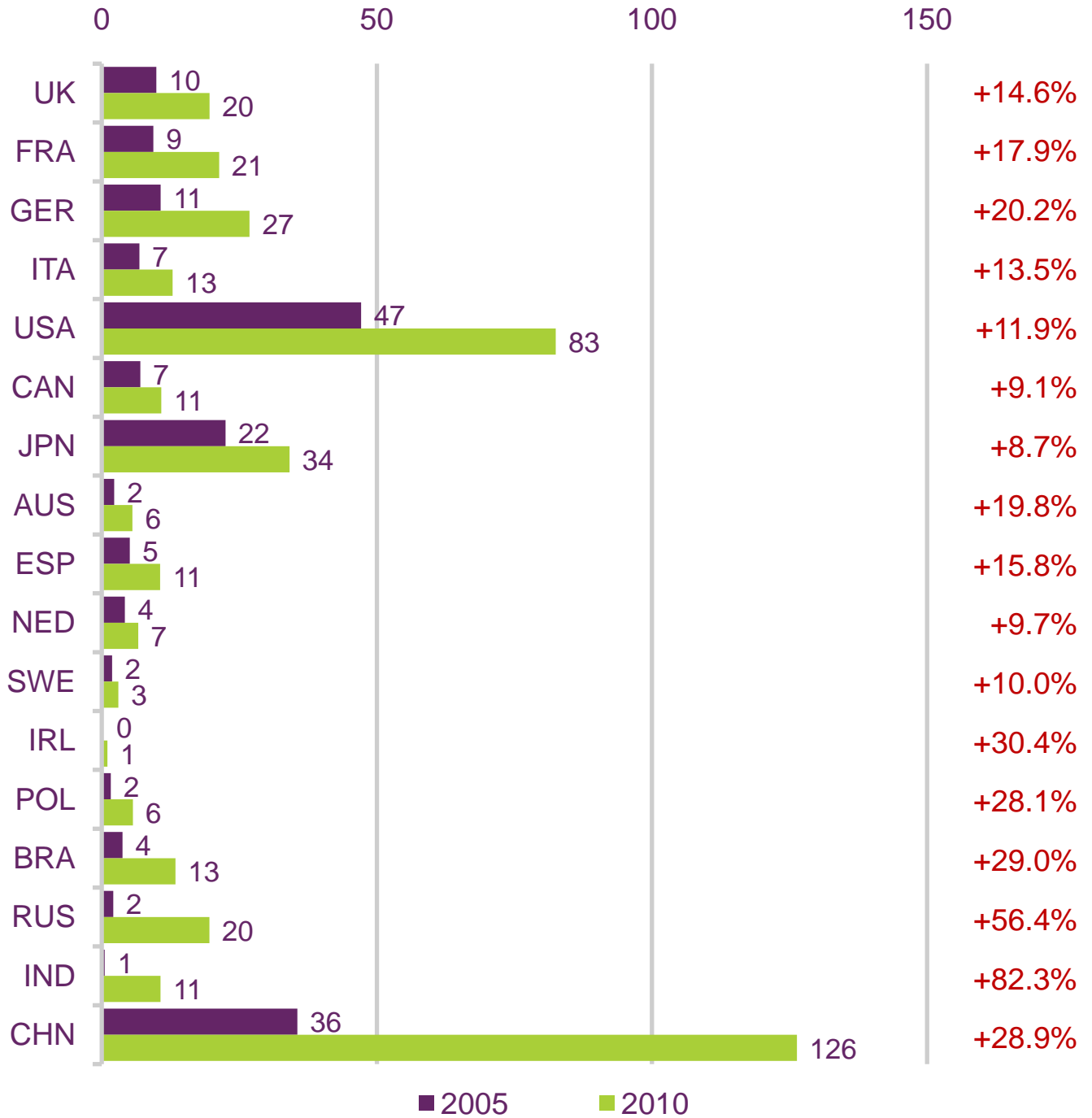
Source: IDATE / industry data / Ofcom

# Figure 6.47

## Fixed broadband connections, 2005 and 2010

Connections (million)

5 year  
CAGR

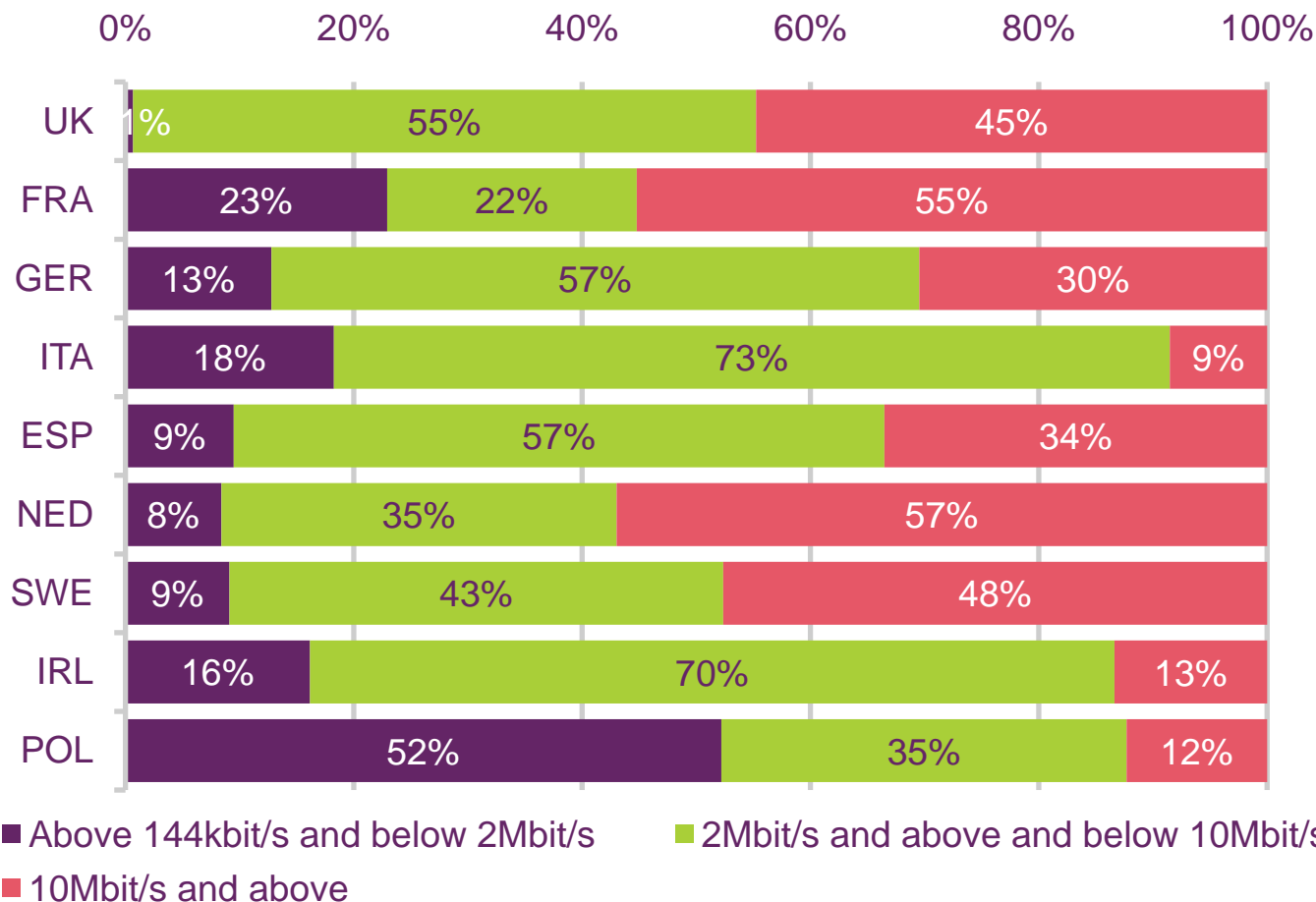


Source: IDATE / industry data / Ofcom

# Figure 6.48

## Split of fixed broadband connections by headline speed, Q4 2010

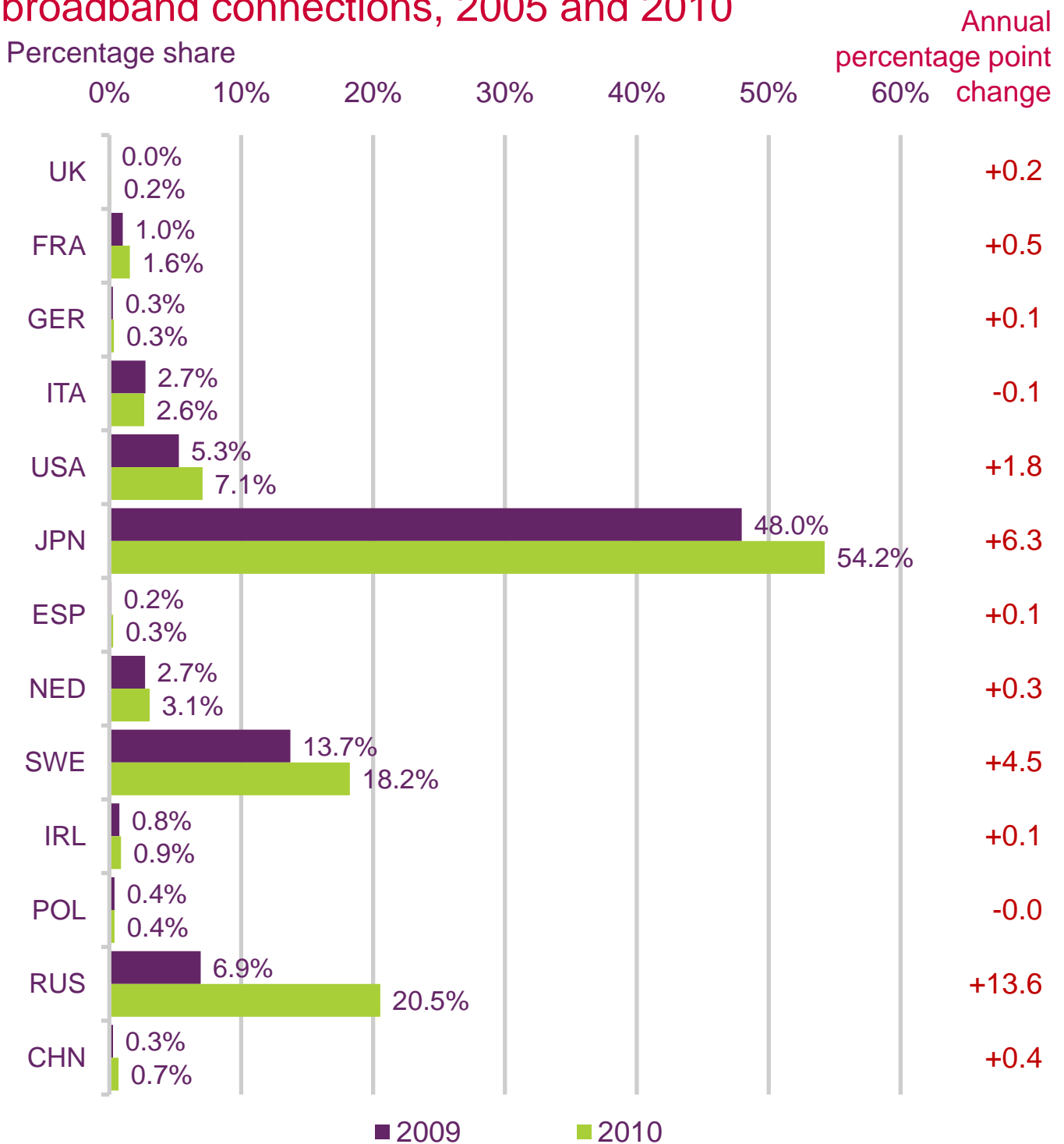
Percentage share



Source: European Commission, [http://ec.europa.eu/information\\_society/digital-agenda/scoreboard/docs/pillar/digital\\_agenda\\_scoreboard\\_telecom\\_database.xls](http://ec.europa.eu/information_society/digital-agenda/scoreboard/docs/pillar/digital_agenda_scoreboard_telecom_database.xls)

# Figure 6.49

## Fibre-based connections as a proportion of all fixed broadband connections, 2005 and 2010



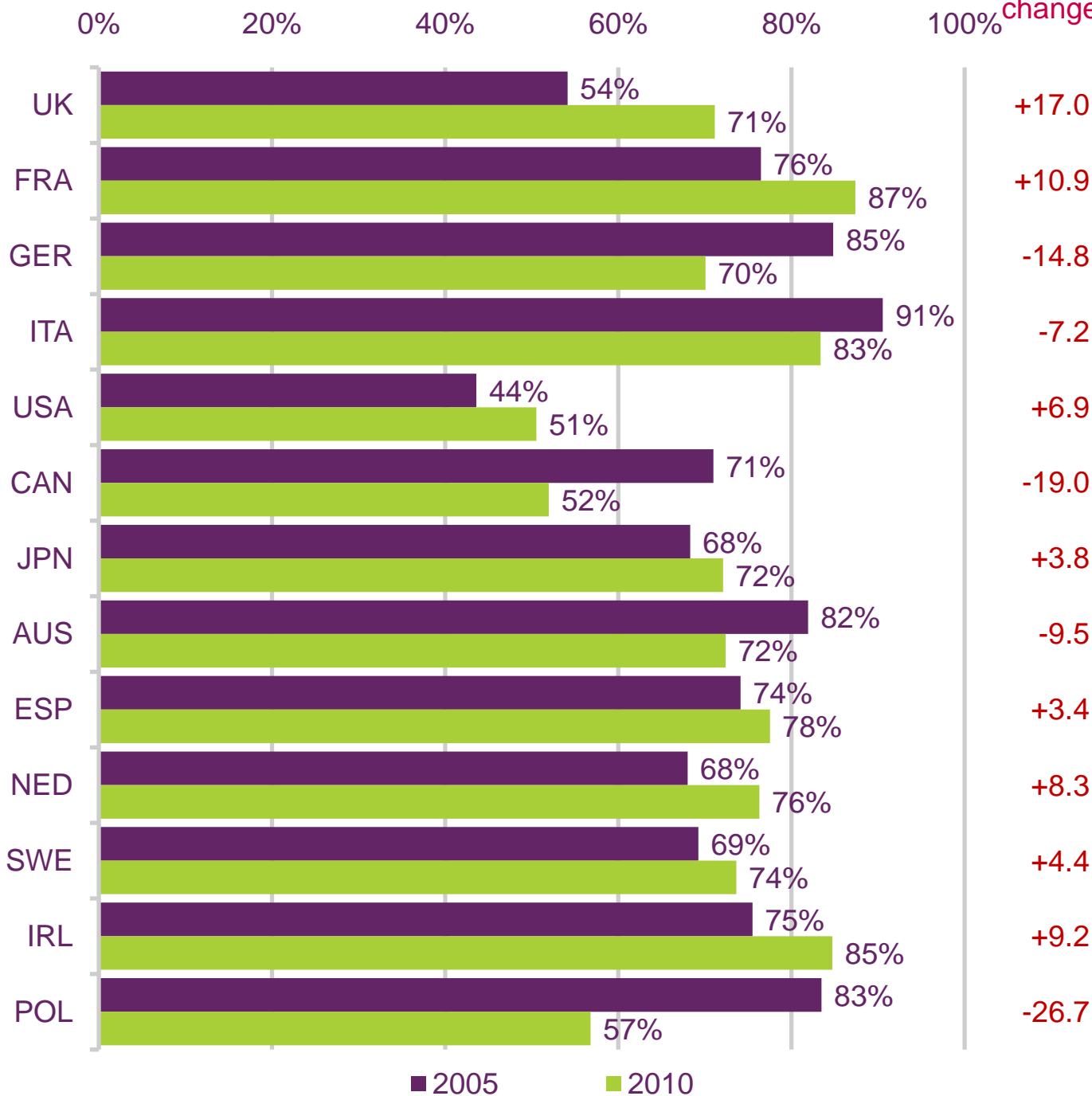
Source: IDATE / industry data / Ofcom

# Figure 6.50

## Retail connection share of the top three fixed broadband providers, 2005 and 2010

Percentage share

5 year percentage  
point change  
change



Source: IDATE / industry data / Ofcom

# ICMR 2011 telecoms user section charts

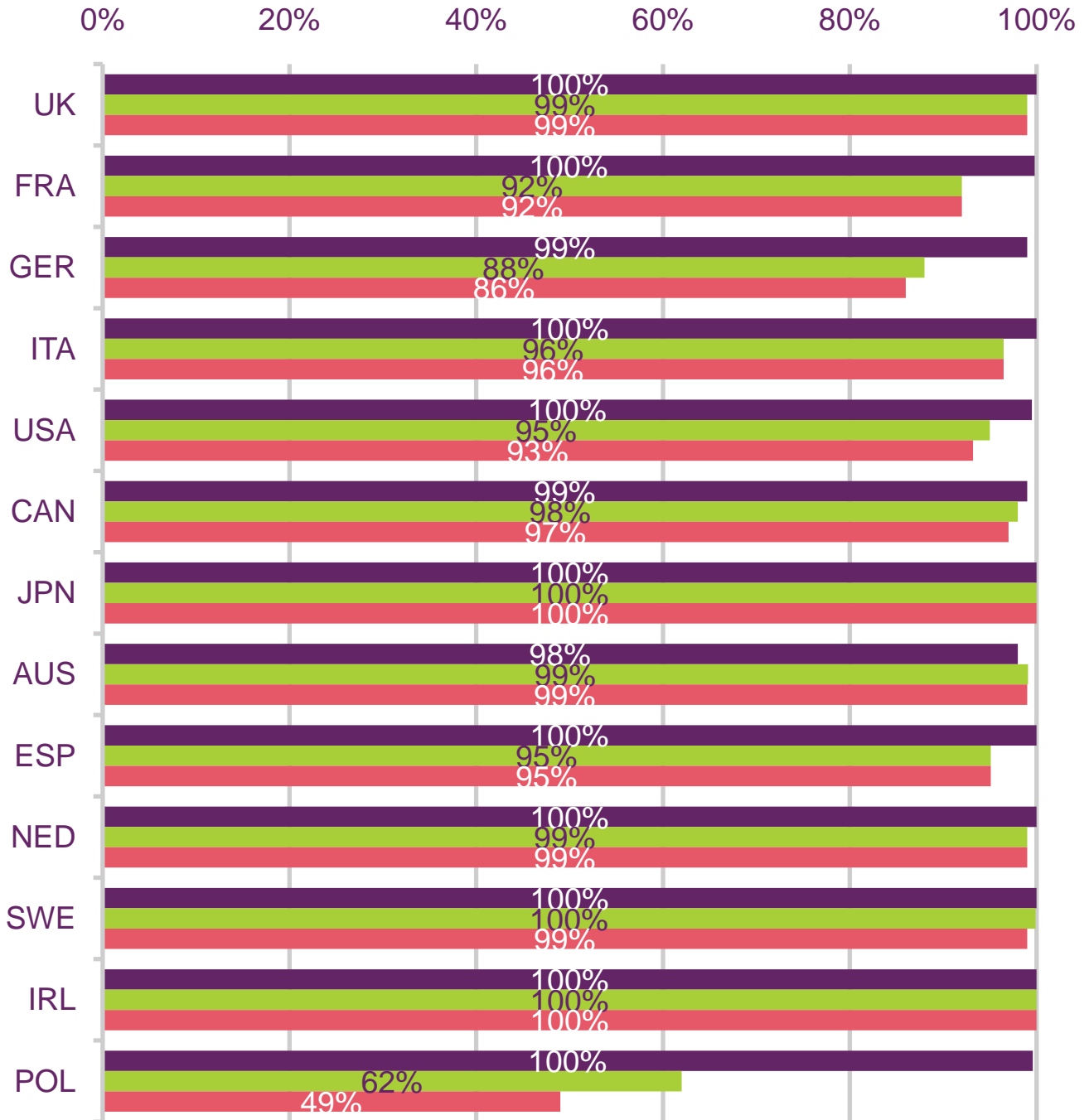
November 2011

# Availability of mobile and broadband services

# Figure 6.51

## Mobile availability for the largest operator, by technology: 2010

Population coverage (per cent)



Source: IDATE and Ofcom.

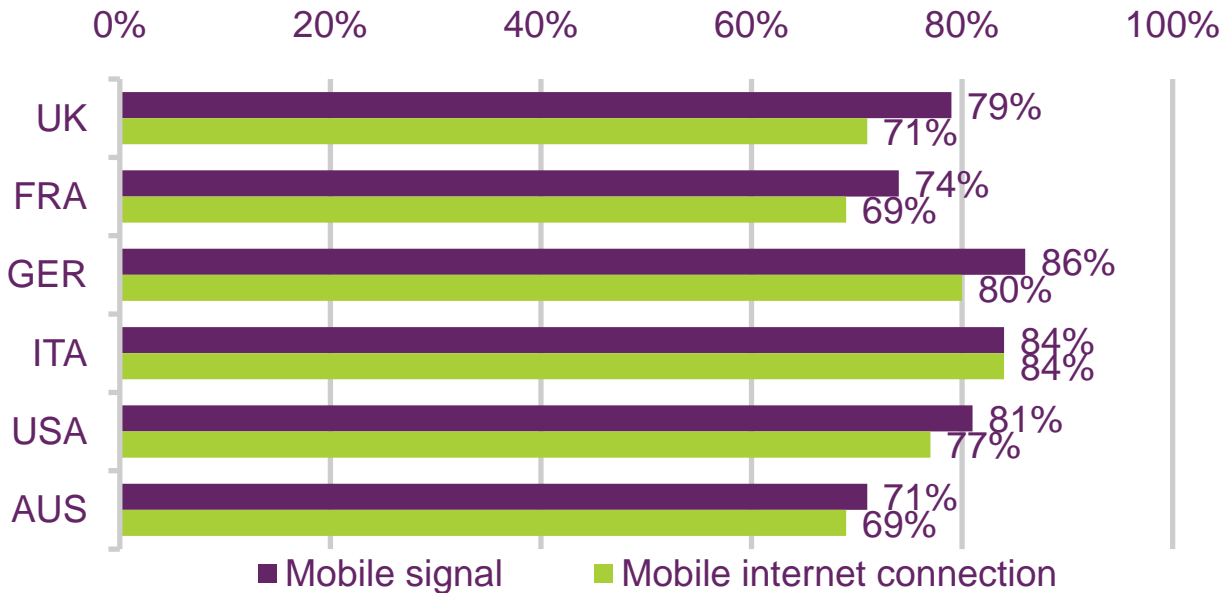
■ 2G ■ 3G ■ HSPA

Note: CDMA 2000 EV-DO standards are available alongside HSPA in the USA and CAN. UK figures are more up-to-date (2011) and show the percentage of premises that are covered by at least one mobile network.

# Figure 6.52

## Consumer perceptions of reliability of voice and data connectivity, 2011

Proportion of respondents that 'agreed' or 'strongly agreed'



Source: Ofcom consumer research, October 2011.

Question: Thinking about when you use your smartphone or mobile phone, please select an answer to each of the following:

I always have a mobile signal when I want to make a call [question asked of all mobile phone users]

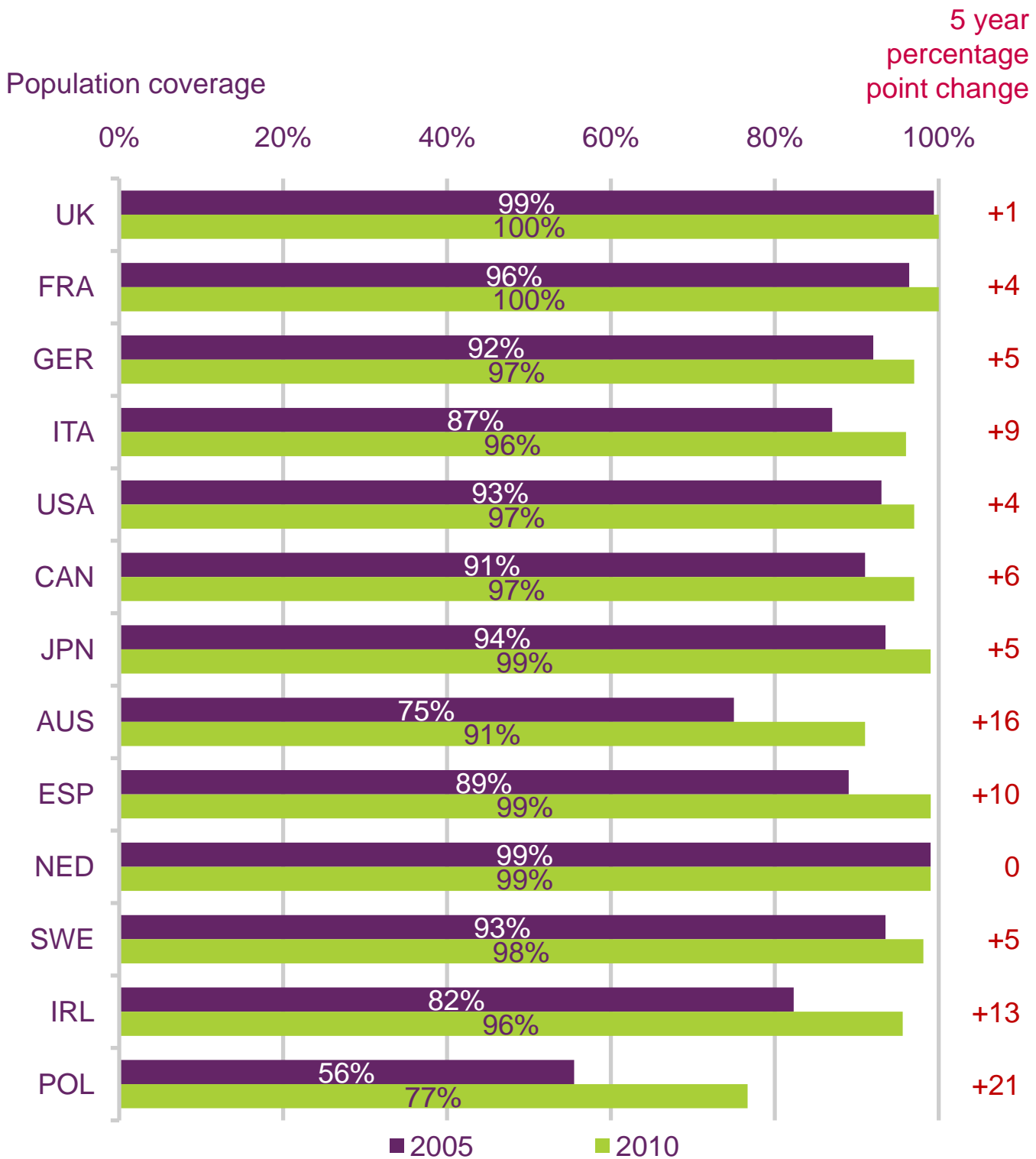
I can always connect to the internet when I want to [question asked only of smartphone users]

[Choose from strongly agree, slightly agree, neither agree nor disagree, slightly disagree, strongly disagree, don't know]

Base: all mobile phone users (number of smartphone users in brackets): UK=929 (506), France=914 (445), Germany=945 (502), Italy=989 (498), USA=902 (416), Australia=957 (490).

# Figure 6.53

## Fixed broadband availability, 2005 and 2010



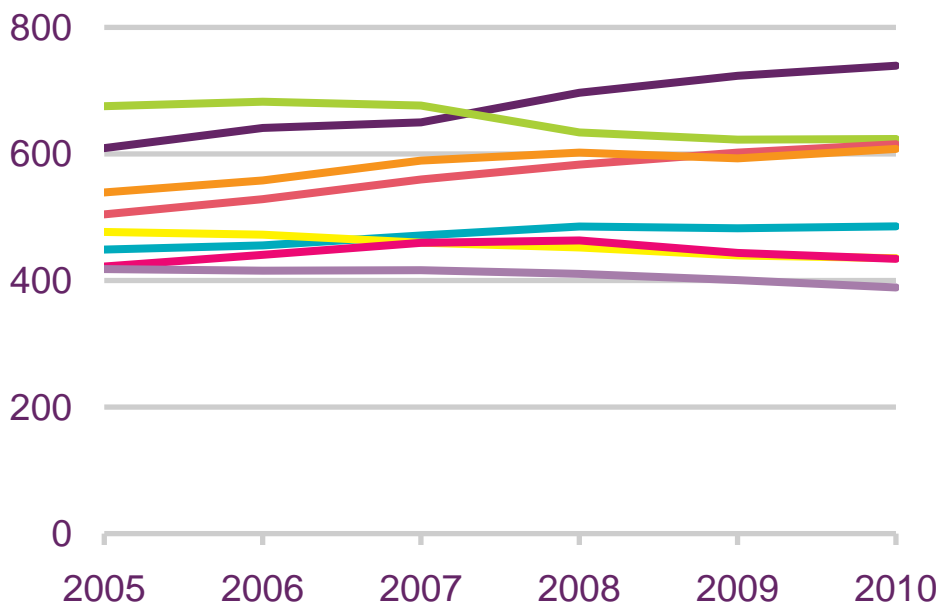
Source: IDATE / industry data / Ofcom

# Expenditure

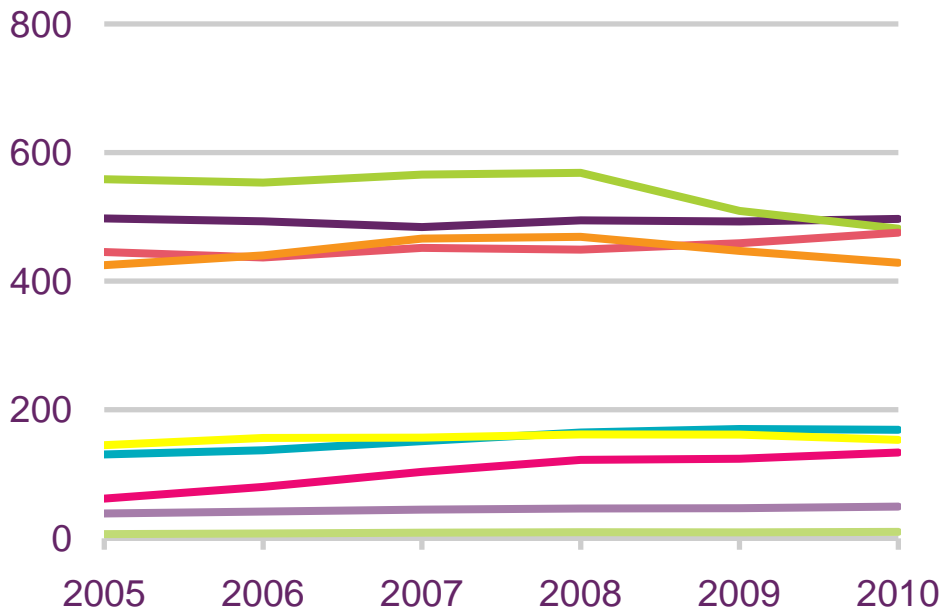
# Figure 6.54

## Total telecoms service retail revenue per capita, 2005 to 2010

£ per capita



£ per capita

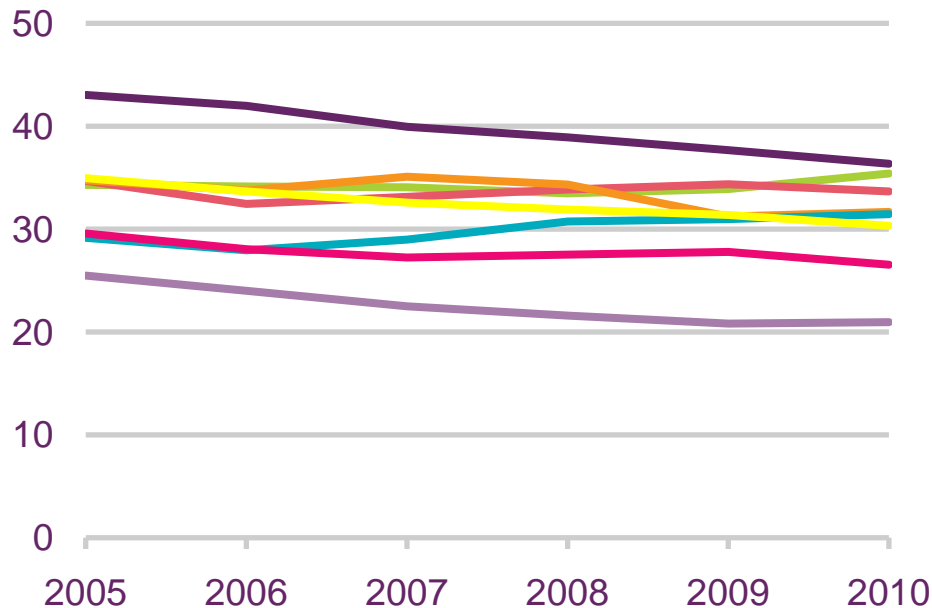


Source: IDATE / industry data / Ofcom

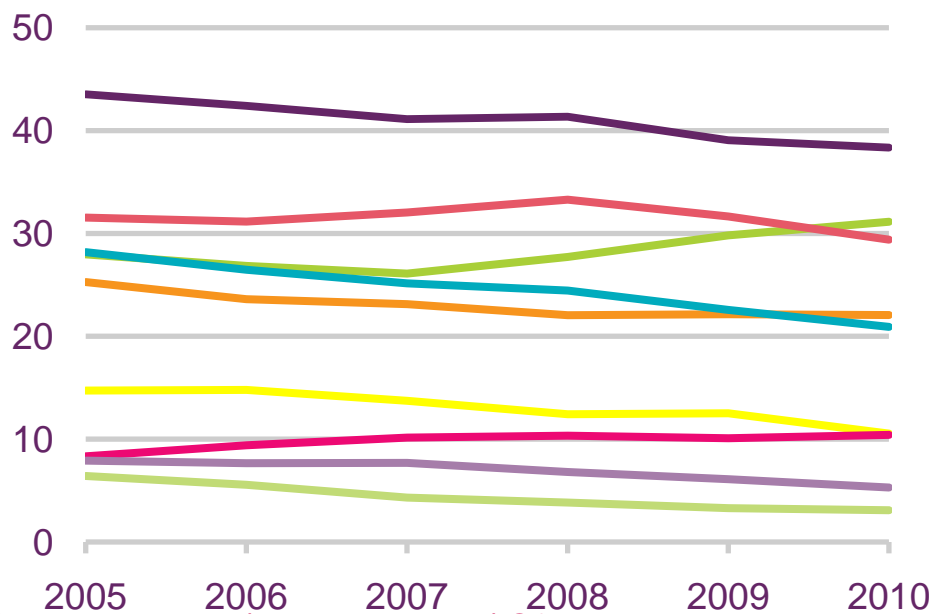
# Figure 6.55

Retail fixed voice average revenue per user, (ARPU):  
2005 to 2010

£ per month



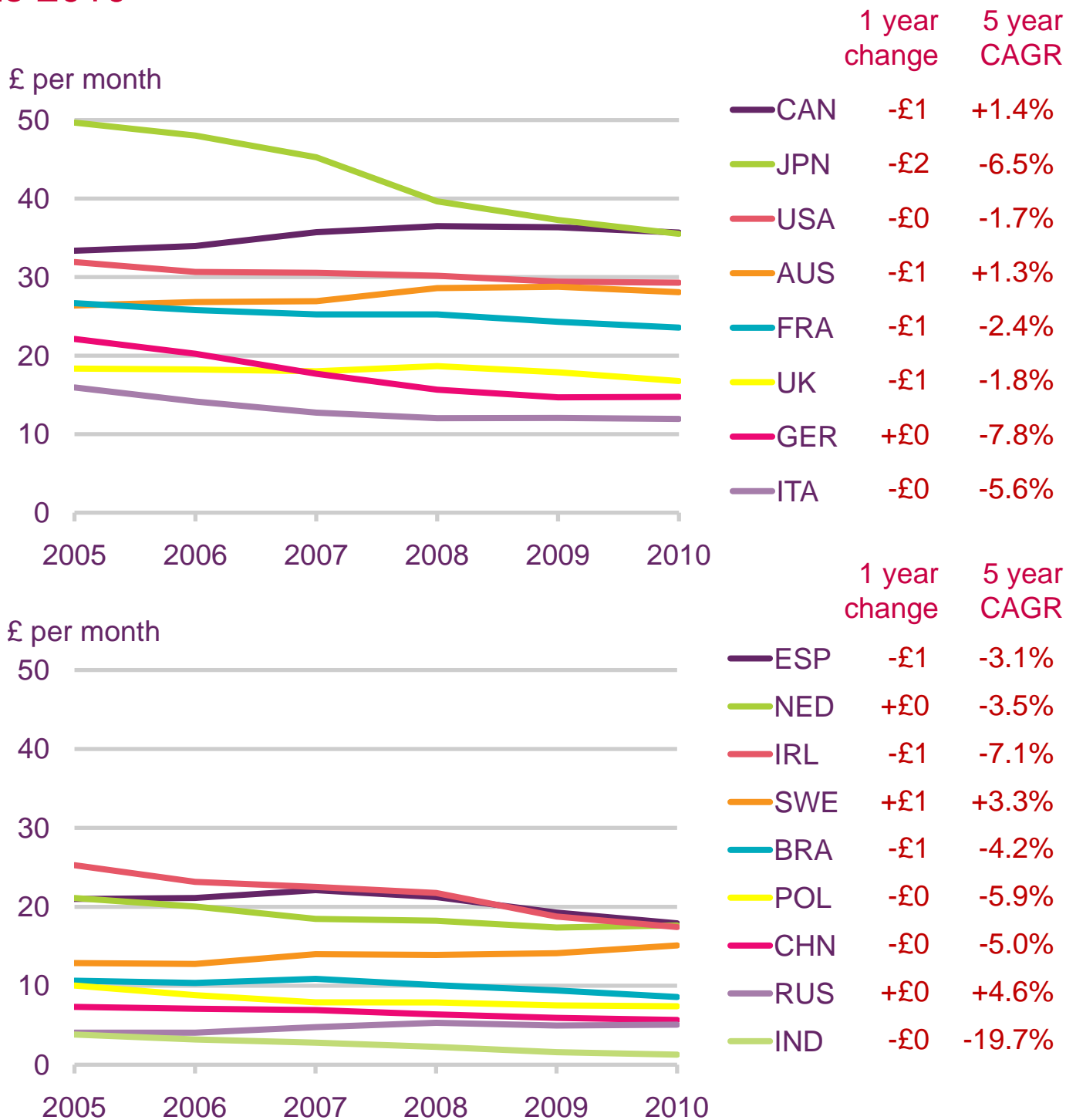
£ per month



Source: IDATE / industry data / Ofcom

# Figure 6.56

## Retail mobile average revenue per user (ARPU): 2005 to 2010

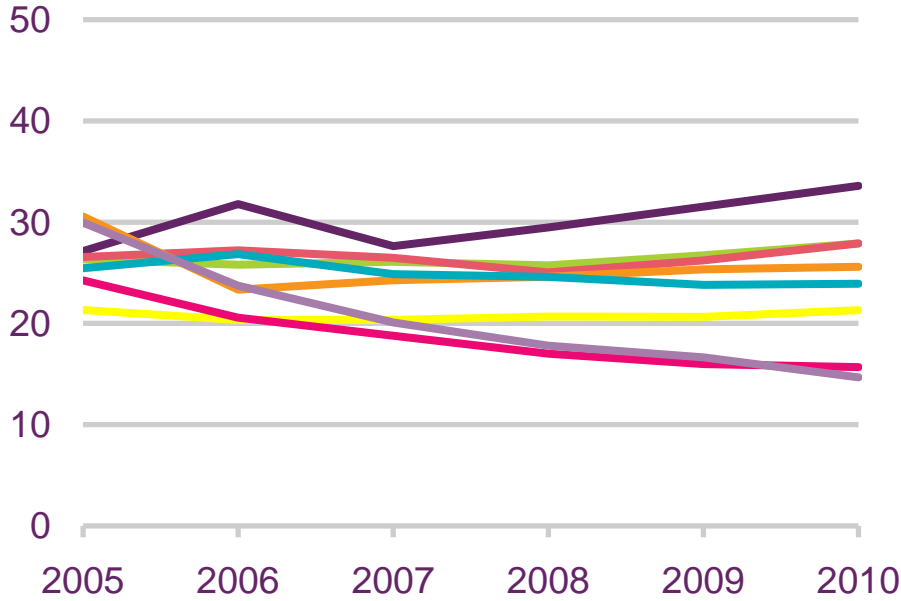


Source: IDATE / industry data / Ofcom

# Figure 6.57

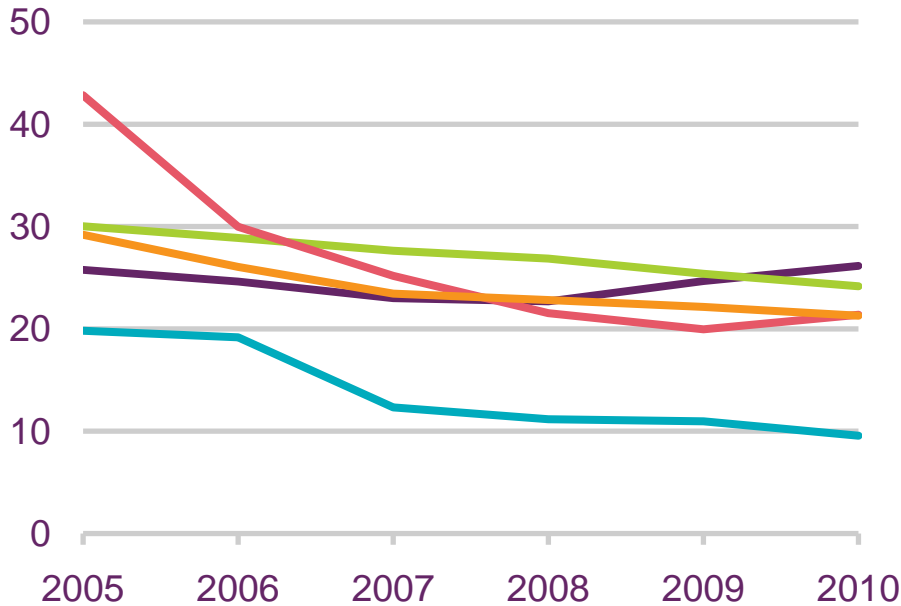
## Retail broadband average revenue per user (ARPU): 2005 to 2010

£ per month



	1 year change	5 year CAGR
AUS	+£2	+4.4%
CAN	+£1	+1.2%
USA	+£2	+1.0%
JPN	+£0	-3.5%
ITA	+£0	-1.2%
FRA	+£1	-0.0%
GER	-£0	-8.3%
UK	-£2	-13.3%

£ per month



	1 year change	5 year CAGR
NED	+£1	+0.3%
ESP	-£1	-4.3%
IRL	+£1	-13.0%
SWE	-£1	-6.1%
POL	-£1	-13.6%

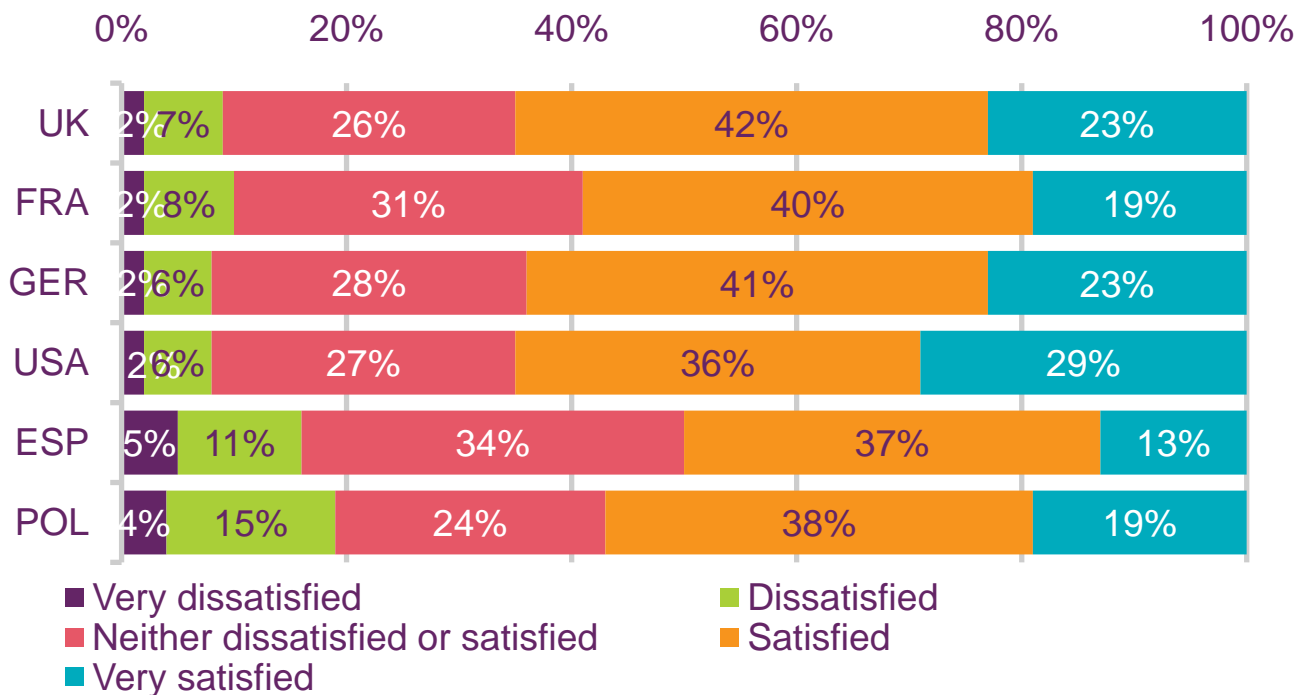
Source: IDATE / industry data / Ofcom

# Satisfaction and switching

# Figure 6.58

## Satisfaction with fixed voice services

Proportion of respondents

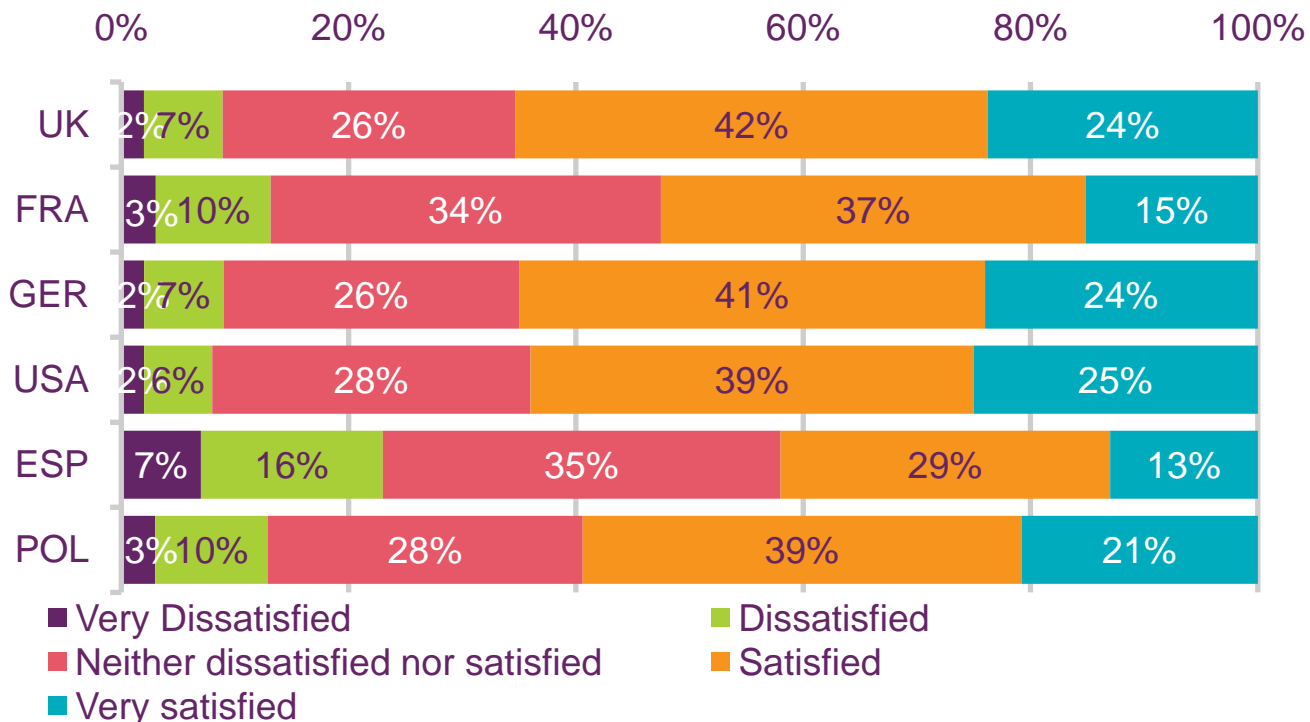


Source: Analysys Mason Connected Consumer survey, 2011.  
Question: Respondents were asked how satisfied they were with their fixed voice provider.

# Figure 6.59

## Satisfaction with mobile voice services

Proportion of respondents

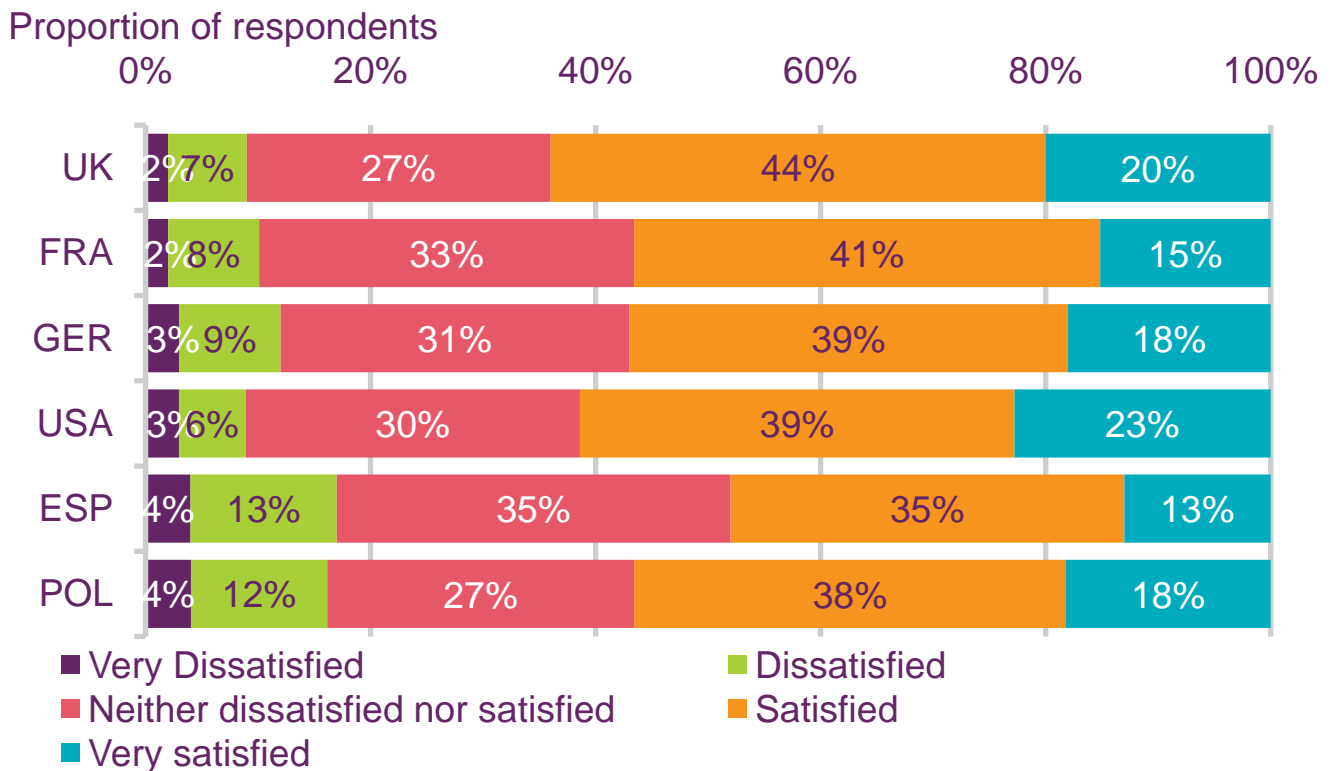


Source: Analysys Mason Connected Consumer survey, 2011.

Question: Respondents were asked how satisfied they were with their mobile voice provider.

# Figure 6.60

## Satisfaction with fixed broadband services



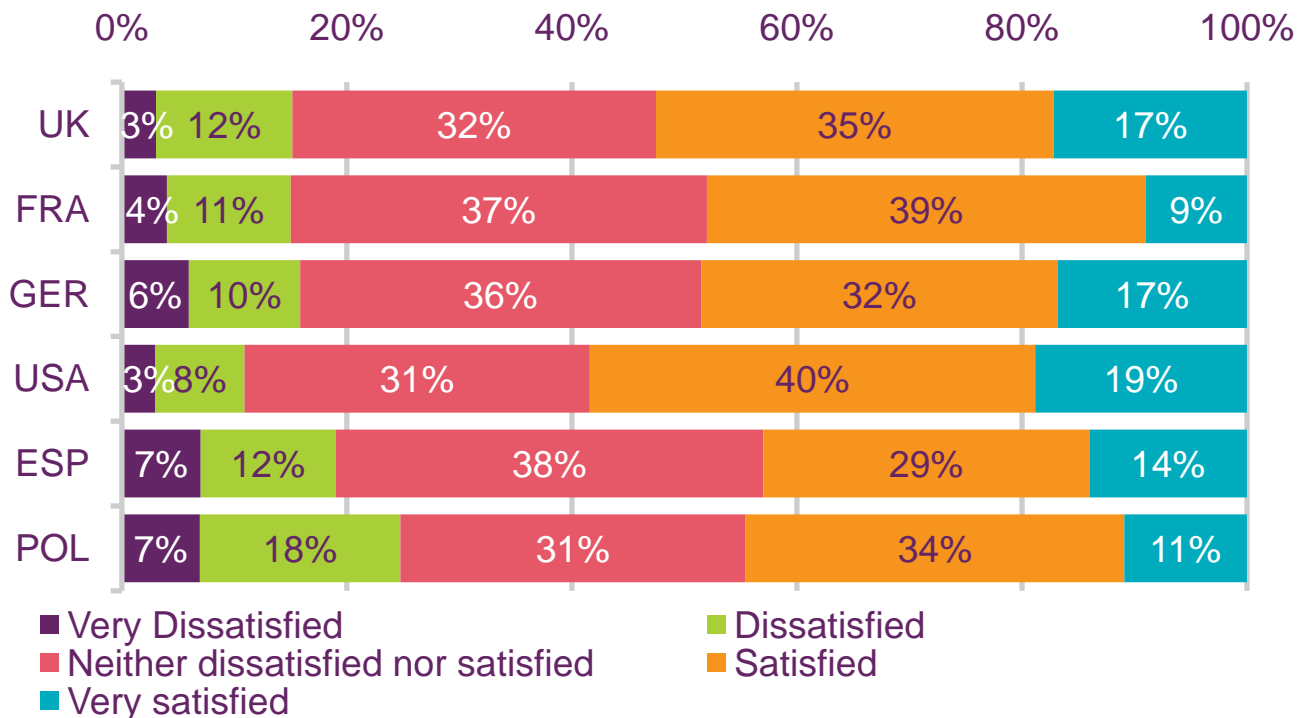
Source: Analysys Mason Connected Consumer survey, 2011.

Question: Respondents were asked how satisfied they were with their fixed broadband provider.

# Figure 6.61

## Satisfaction with mobile broadband services

Proportion of respondents



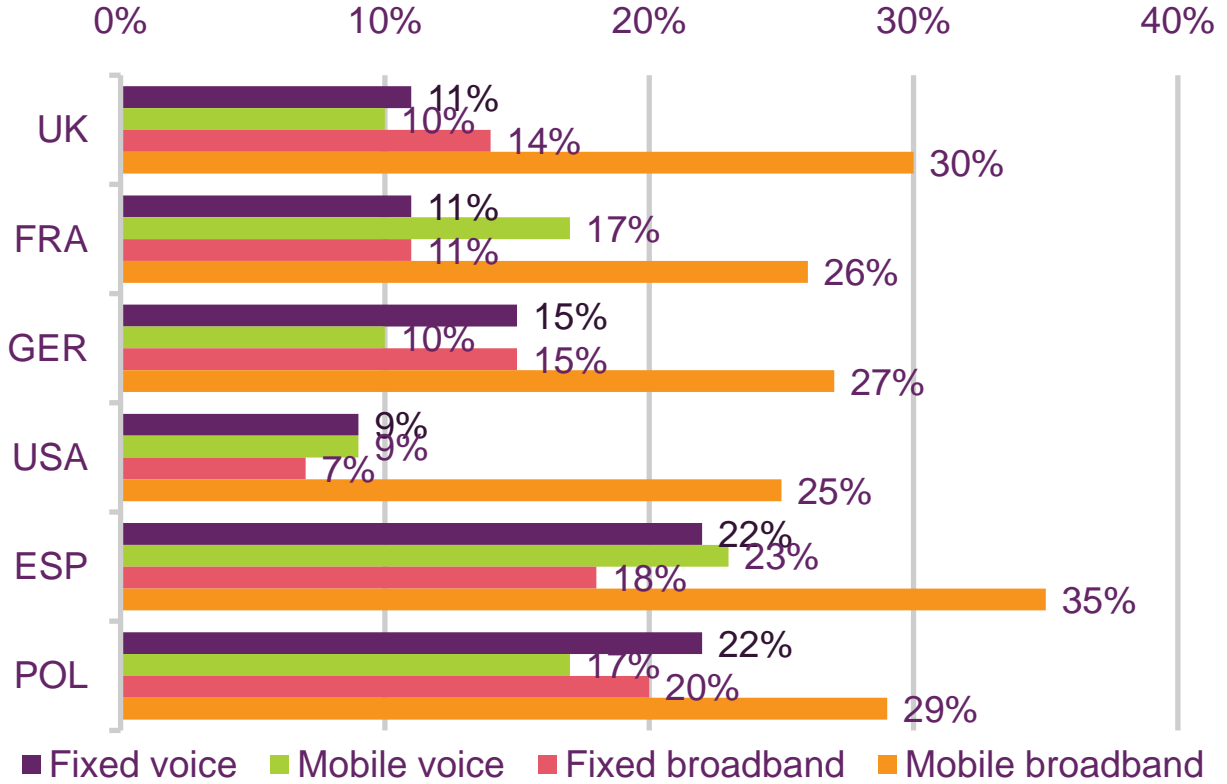
Source: Analysys Mason Connected Consumer survey, 2011.

Question: Respondents were asked how satisfied they were with their mobile broadband provider.

# Figure 6.62

## Proportion of subscribers who intend to change service provider: 2011

Proportion of subscribers that intend to change provider

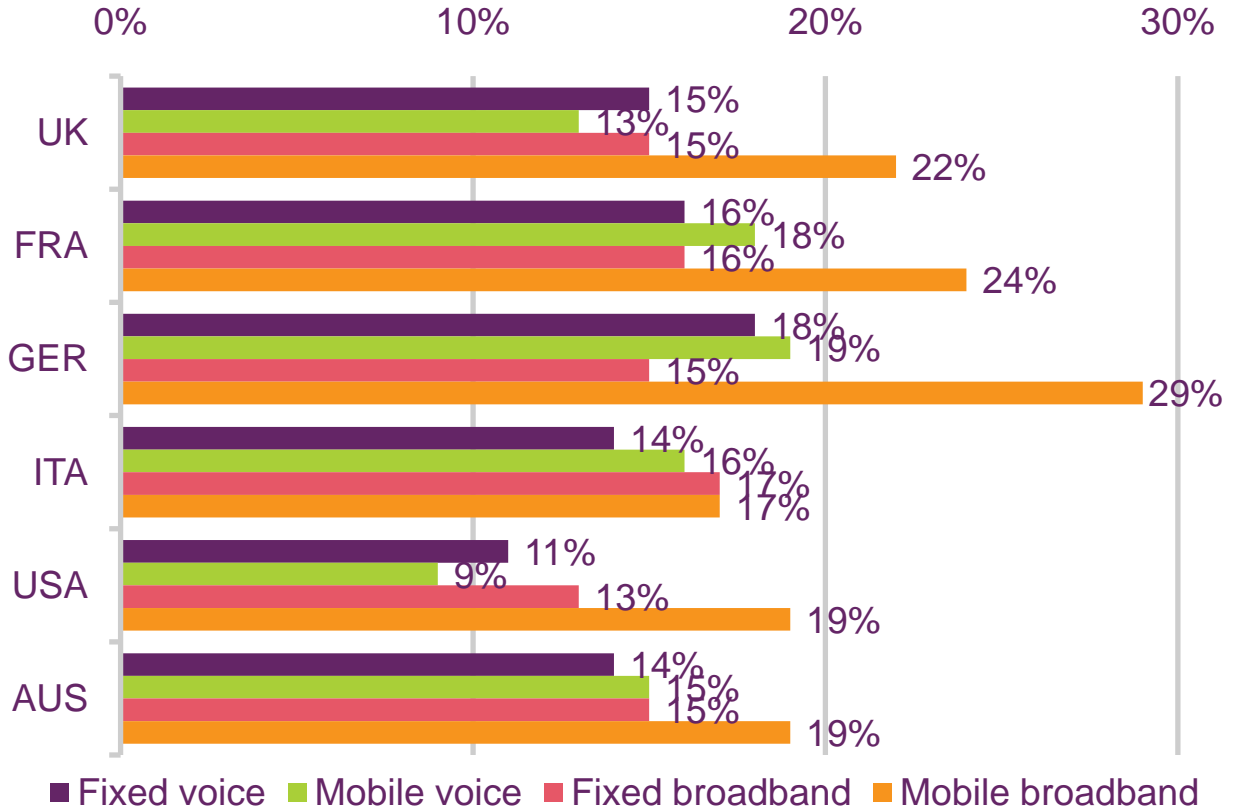


Source: Analysys Mason Connected Consumer survey 2011

# Figure 6.63

## Proportion of users who have switched provider in the last 12 months: 2011

Proportion of subscribers that have switched provider

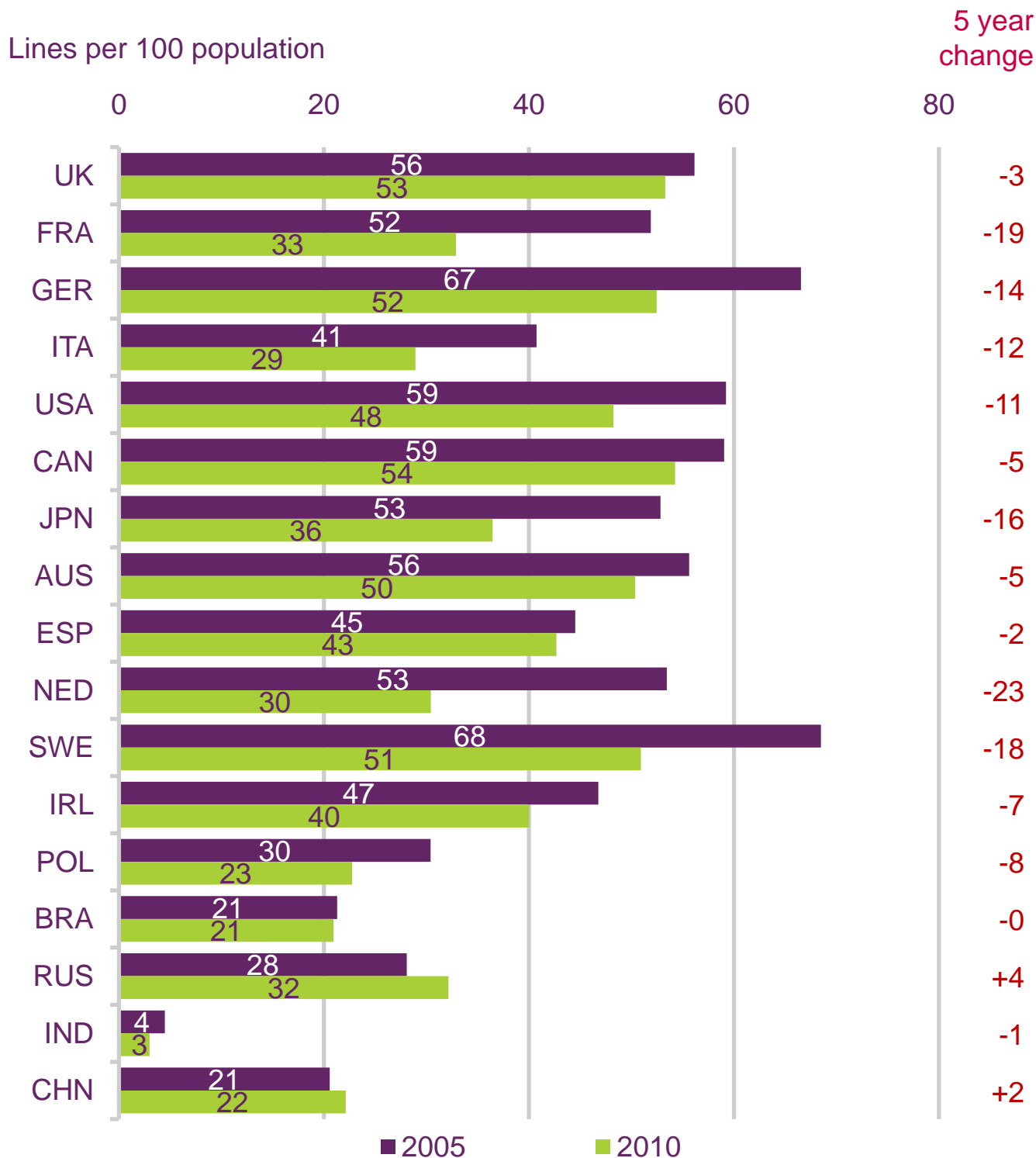


Source: Ofcom consumer research, October 2011. Base: subscribers to each service of more than one year. Options given: Switched provider in the last 12 months; stayed with the same provider over the last twelve months.

# Voice

# Figure 6.64

## Fixed lines per 100 population, 2005 and 2010

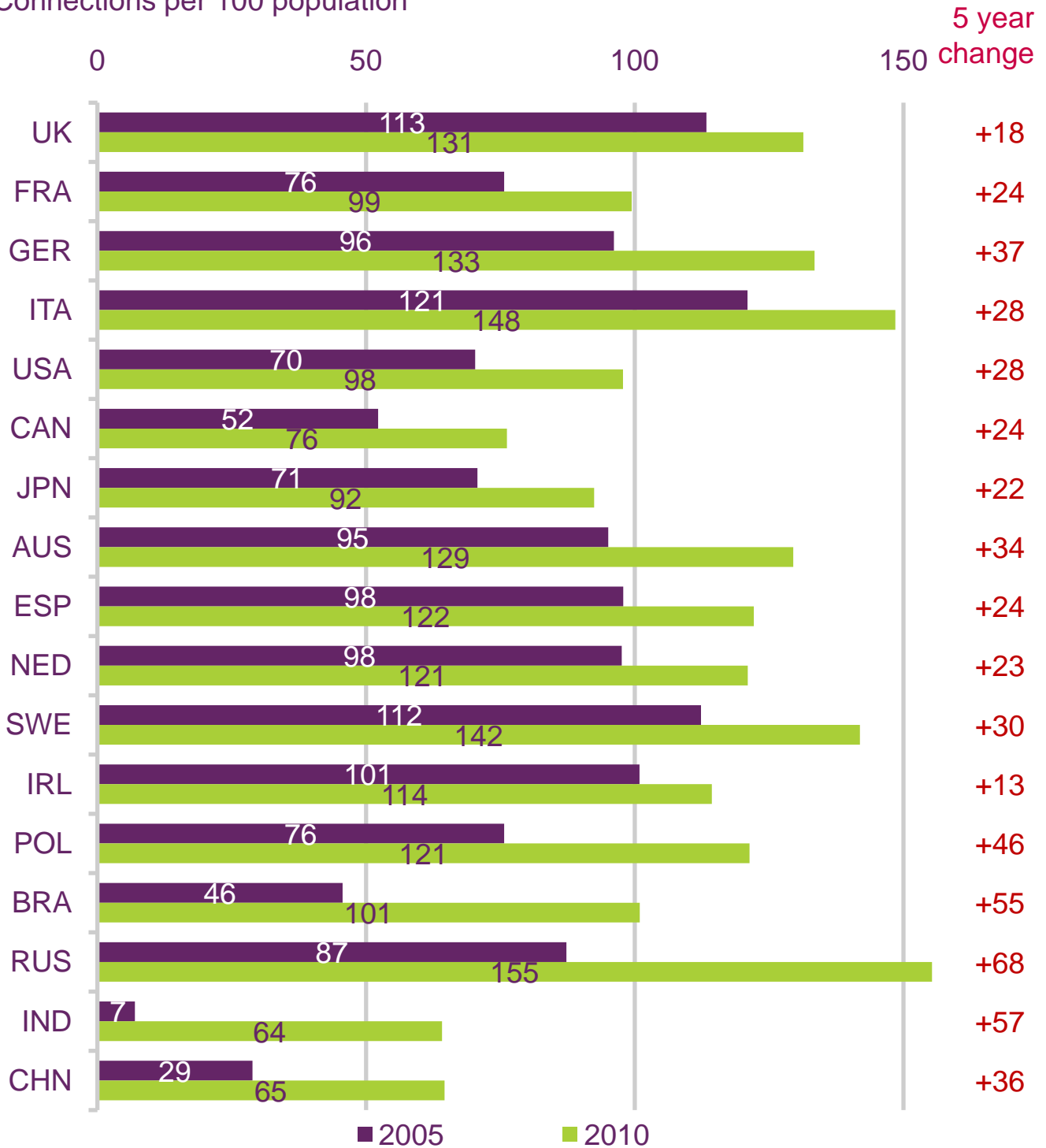


Source: IDATE / industry data / Ofcom

# Figure 6.65

## Mobile connections per 100 population

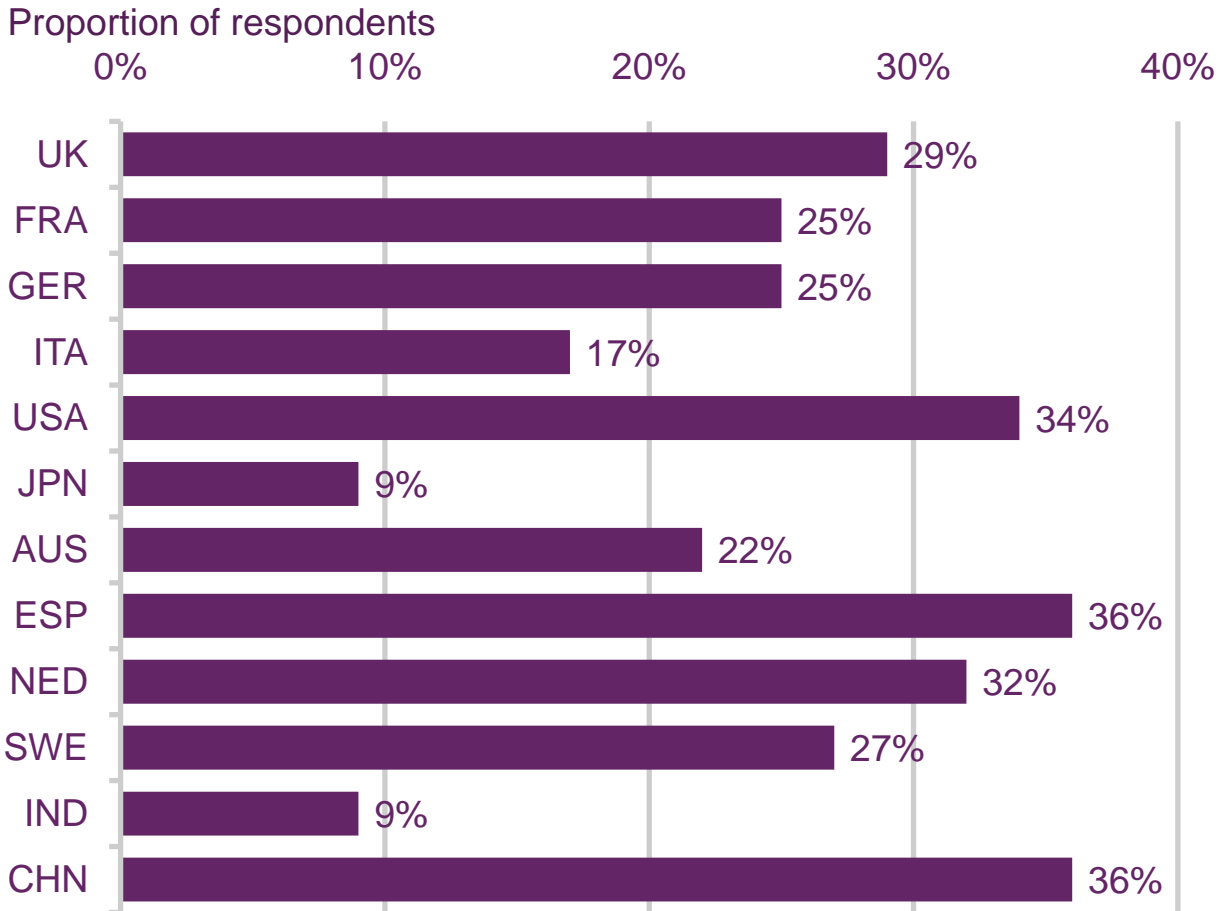
Connections per 100 population



Source: IDATE / industry data / Ofcom

# Figure 6.66

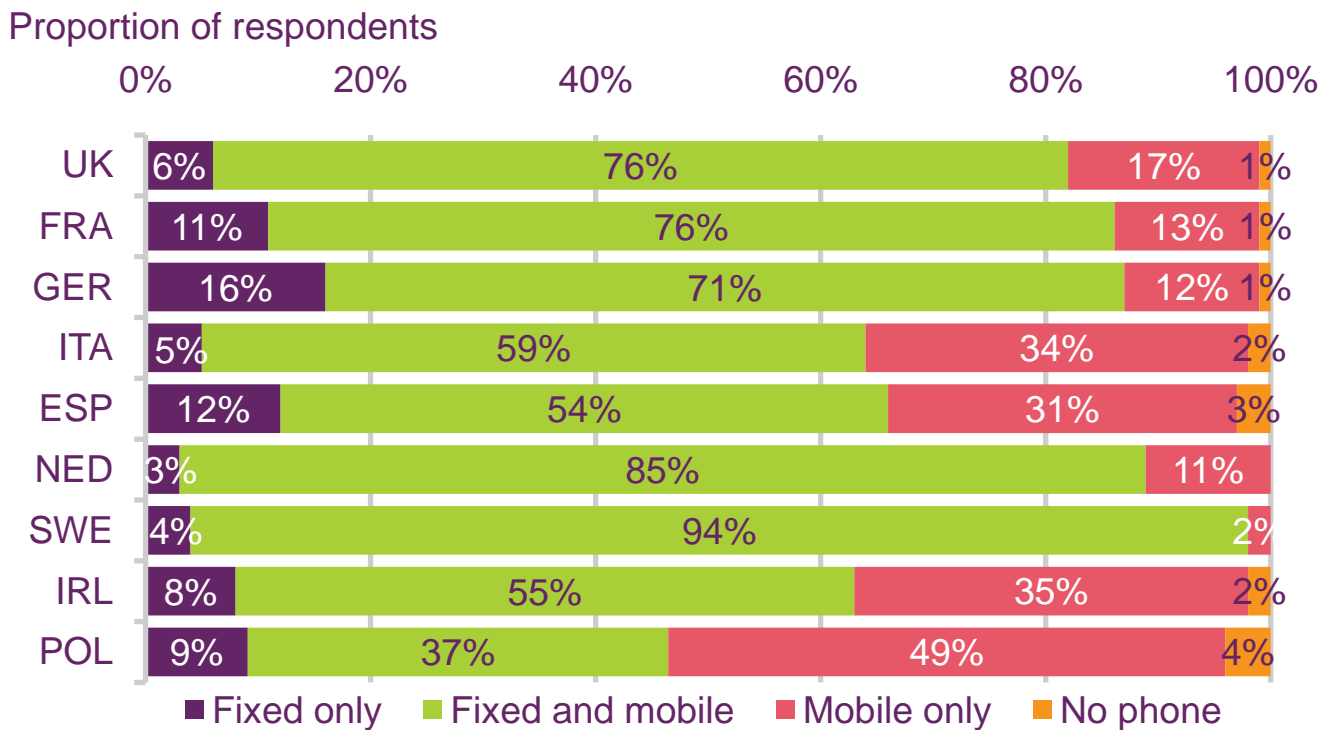
## Mobile subscribers aged 18+ with two or more handsets



Source: Forrester Research, Inc. European Technographics® Benchmark Survey, Q2 2011; North American Technographics Benchmark Survey, Q2/Q3 2011 (US, Canada); Asia Pacific Technographics Benchmark Survey, Q2 2011. Data published in Forrester Research 'Global Mobile Behaviors 2011'.

# Figure 6.67

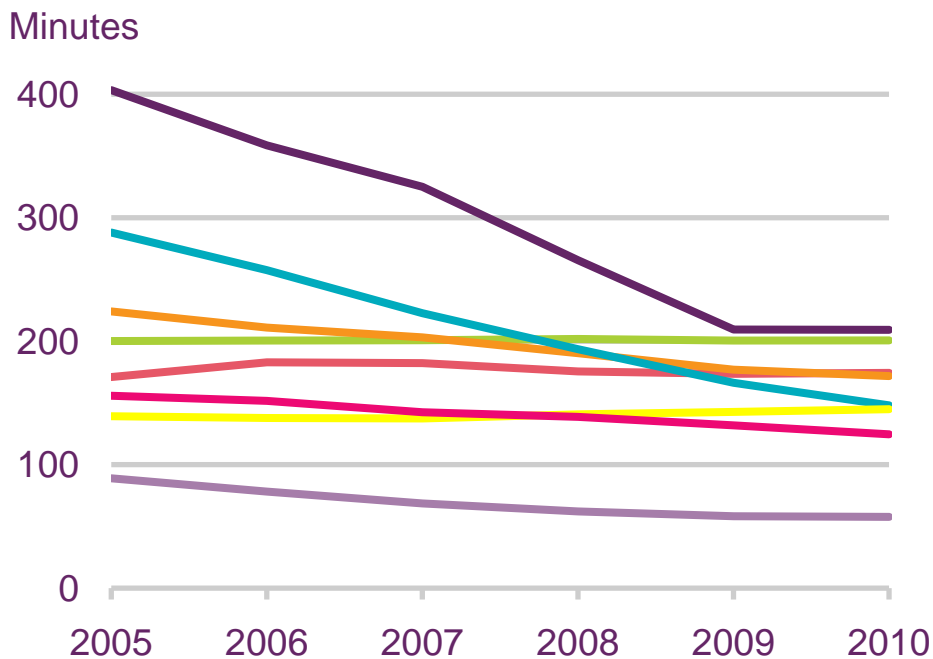
## Household penetration of fixed and mobile telephony: 2011



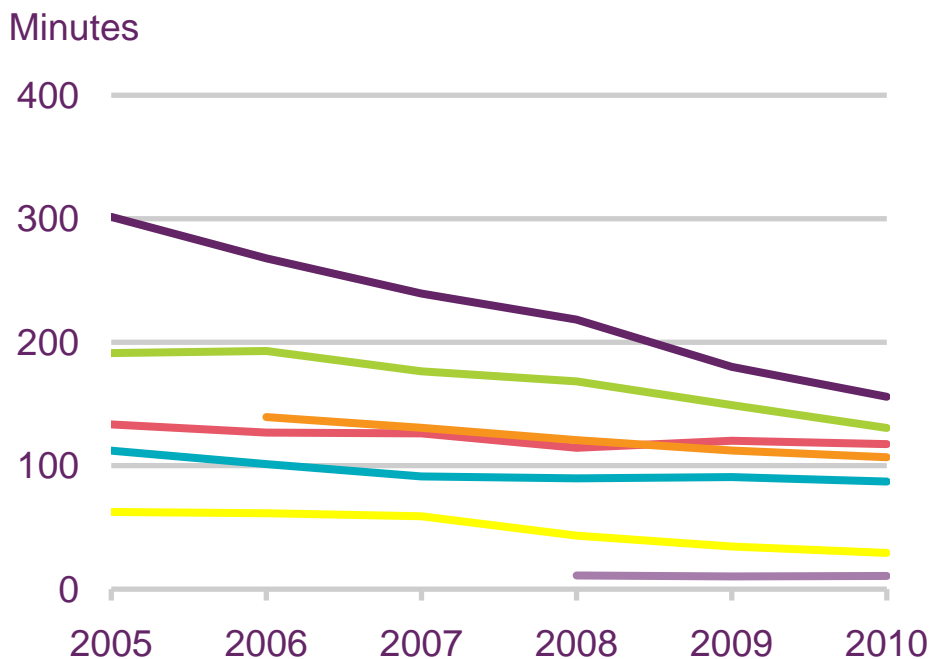
Source: European Commission consumer research, July 2011. Base: UK=1322, Germany=1622, Spain 1004, France=1035, Ireland=1007, Italy 1027, Netherlands=1012, Poland=1000, Sweden=1024.

# Figure 6.68

## Monthly fixed line voice call minutes per person: 2005 to 2010



	1 year change	5 year CAGR
AUS	-0	-12.3%
GER	+0	+0.1%
CAN	+1	+0.4%
UK	-5	-5.2%
USA	-18	-12.5%
FRA	+2	+0.8%
ITA	-7	-4.4%
JPN	-1	-8.3%

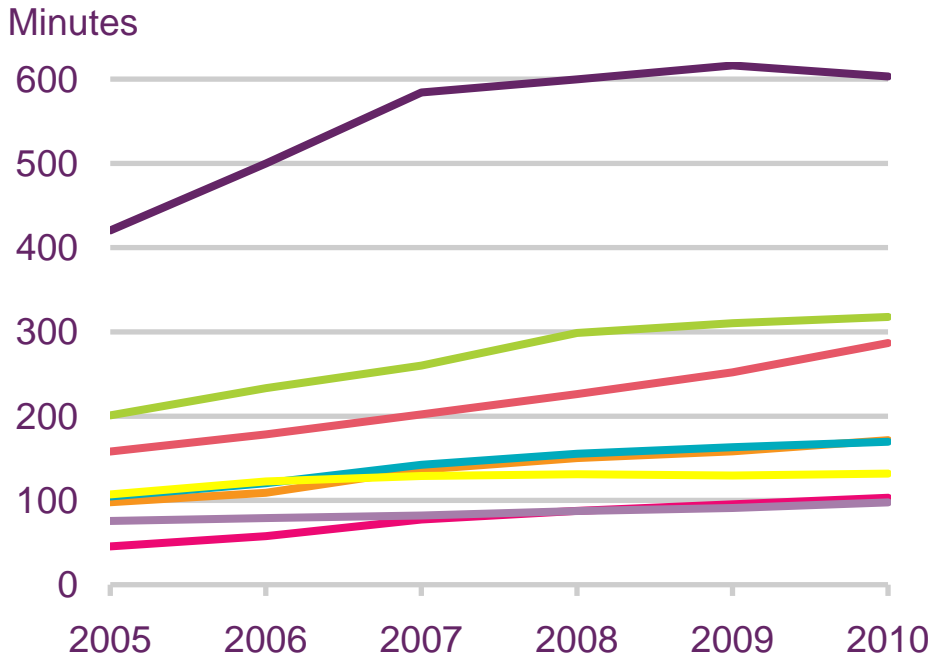


	1 year change	5 year CAGR
SWE	-24	-12.4%
IRL	-19	-7.4%
ESP	-3	-2.5%
NED	-5	n/a
BRA	-4	-4.9%
POL	-5	-14.1%
CHN	+0	n/a

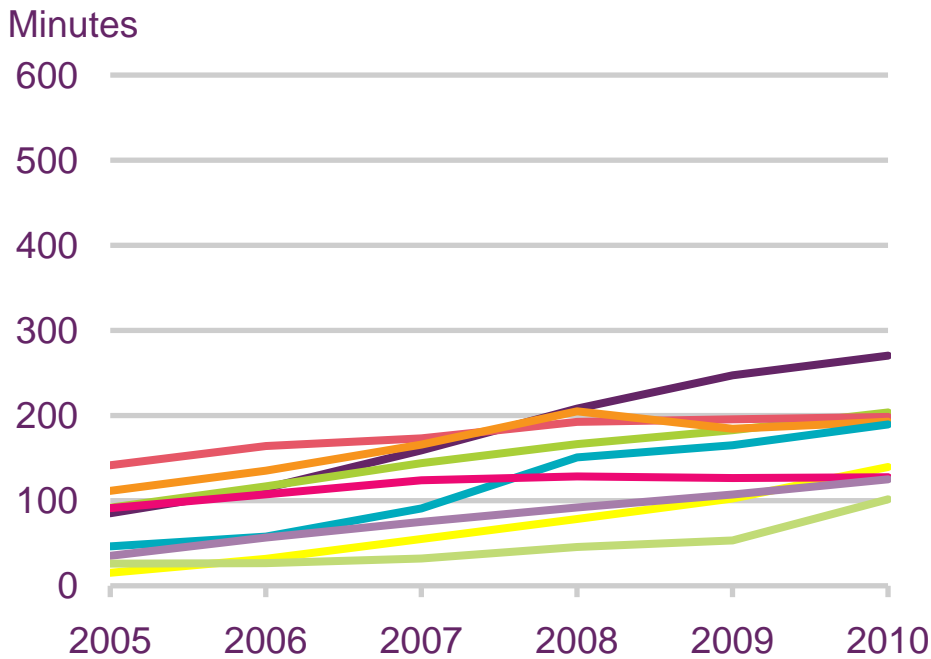
Source: IDATE / industry data / Ofcom

# Figure 6.69

## Monthly mobile voice call minutes per head: 2005 to 2010



	1 year change	5 year CAGR
USA	-13	+7.5%
CAN	+7	+9.6%
AUS	+35	+12.6%
ITA	+13	+11.9%
UK	+7	+10.1%
FRA	+2	+4.2%
GER	+8	+17.8%
JPN	+7	+5.2%



	1 year change	5 year CAGR
CHN	+23	+26.0%
SWE	+21	+17.3%
NED	+3	+7.0%
IRL	+8	+11.6%
RUS	+25	+32.6%
IND	+37	+5.6%
ESP	+1	+6.9%
POL	+18	+28.7%
BRA	+48	+31.4%

Source: IDATE / industry data / Ofcom

Note: USA, Canada and China – incoming calls included; Brazil, India and Russia – incoming calls included except on-net mobile-mobile



# Figure 6.70

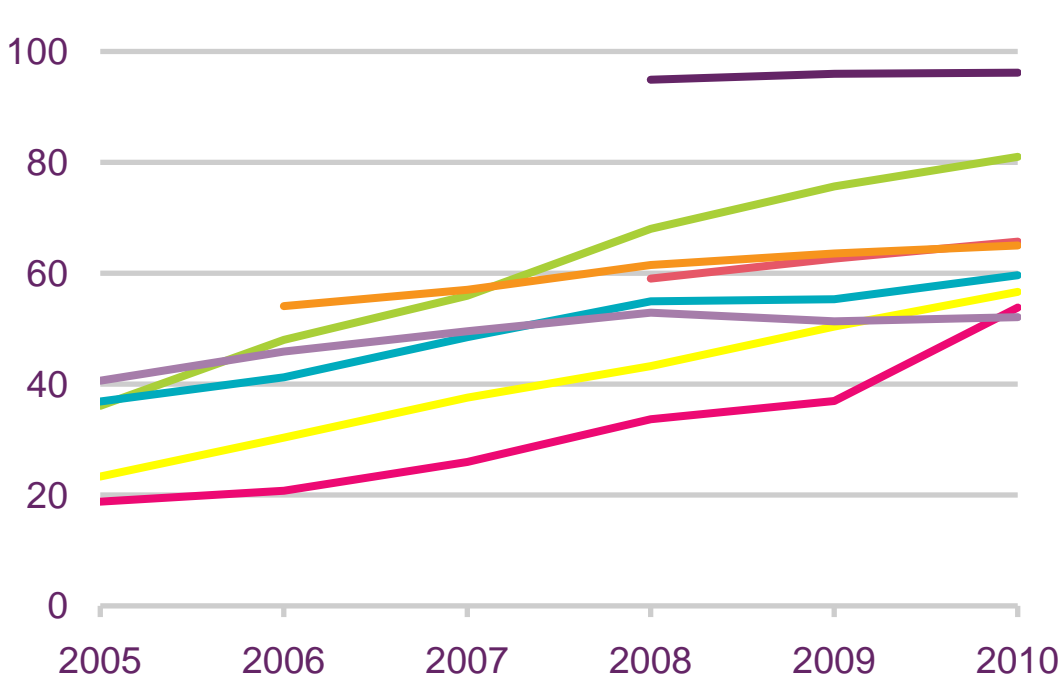
## Percentage of voice minutes originating from a mobile: 2005 to 2010

Per cent



5 year pp  
increase

Per cent



5 year pp  
increase

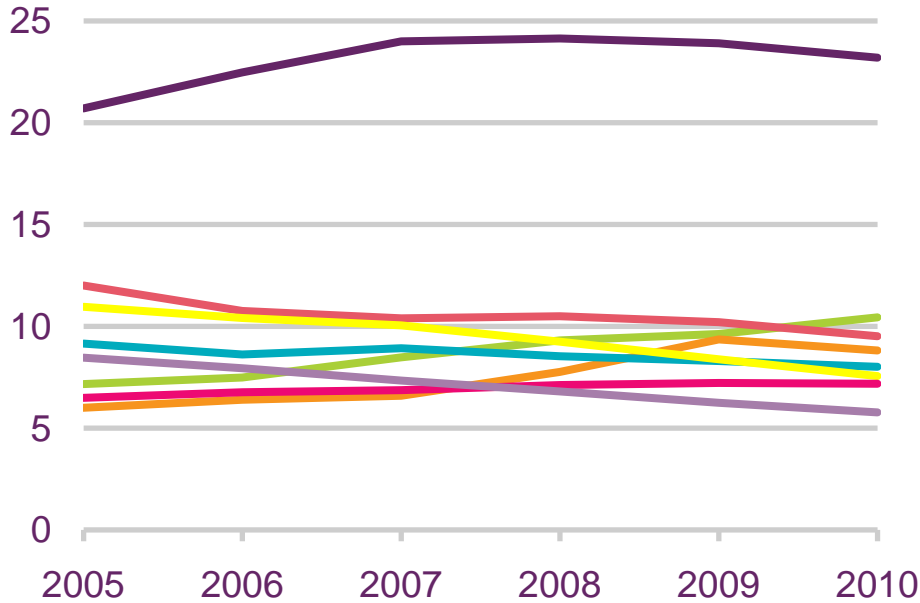
Source: IDATE / industry data / Ofcom

Note: USA, Canada and China – incoming calls included; Brazil, India and Russia – incoming calls included except on-net mobile-mobile

# Figure 6.71

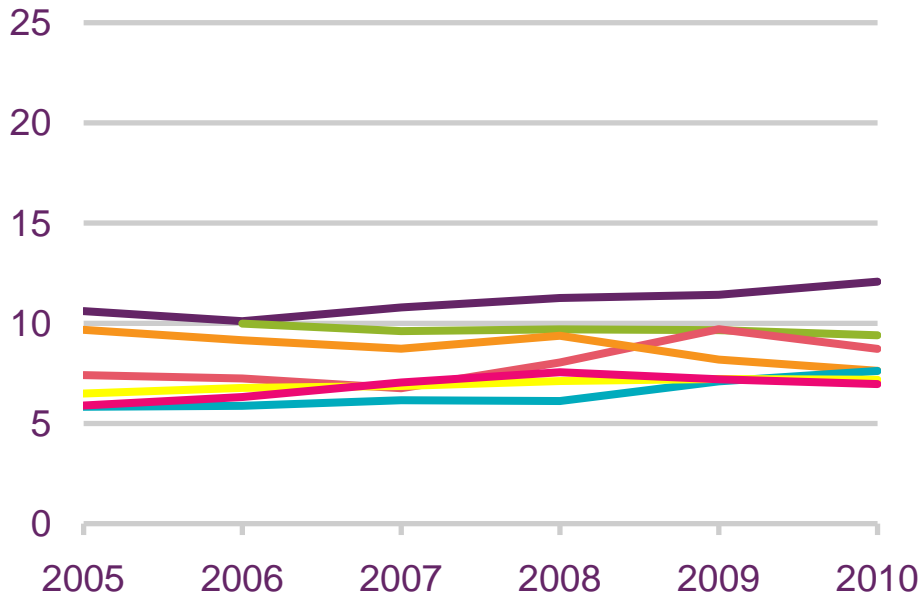
## Average cost of a fixed voice call minute: 2005 to 2010

Pence per minute



	1 year change (p/min)	5 year CAGR
JPN	-0.70	+2.3%
USA	+0.82	+7.8%
CAN	-0.69	-4.5%
AUS	-0.54	+8.0%
ITA	+0.28	-2.6%
FRA	-0.82	-7.2%
UK	-0.04	+2.0%
GER	-0.47	-7.4%

Pence per minute



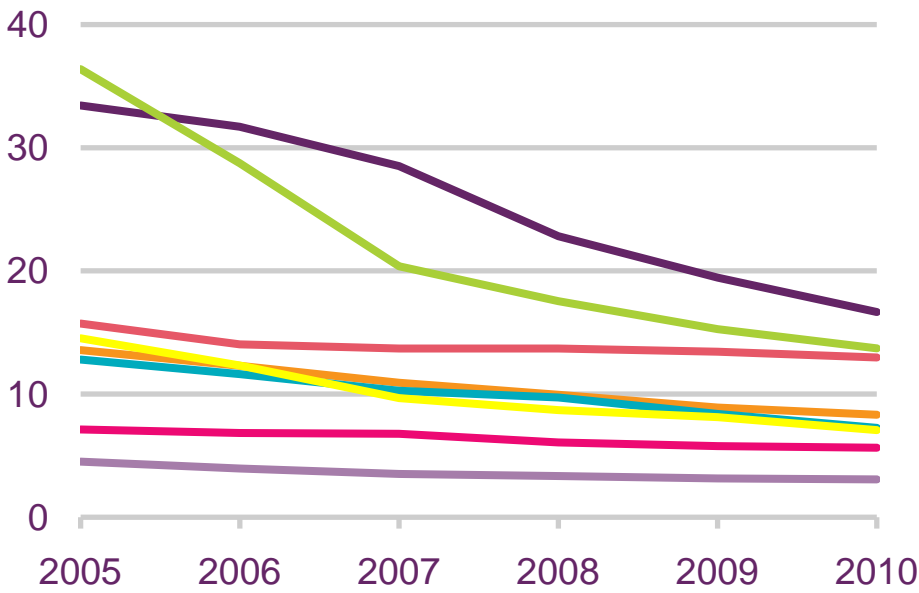
	1 year change (p/min)	5 year CAGR
IRL	+0.66	+2.6%
NED	-0.26	n/a
POL	-0.98	+3.3%
ESP	-0.56	-4.6%
SWE	+0.52	+5.5%
CHN	-0.04	+2.0%
BRA	-0.24	+3.4%

Source: IDATE / industry data / Ofcom

# Figure 6.72

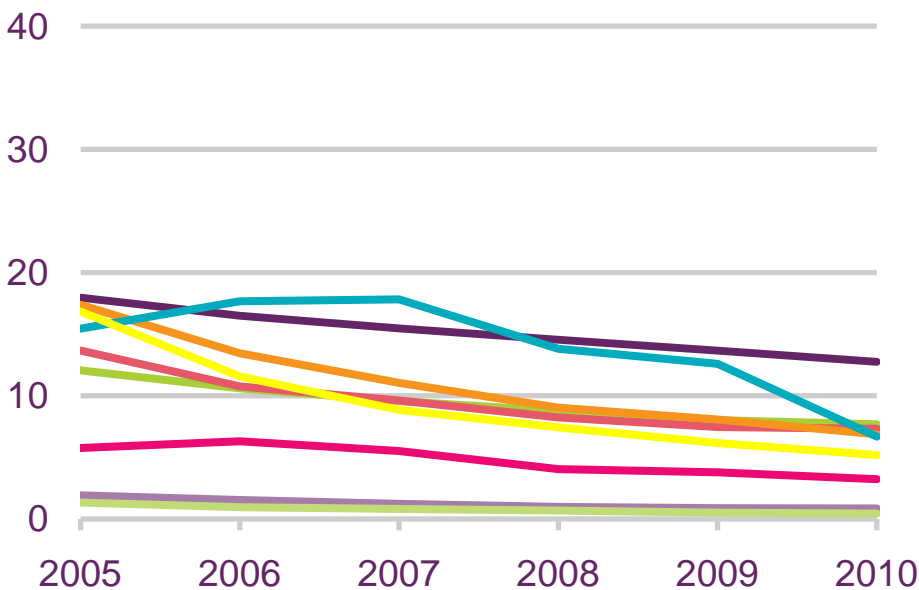
## Average cost of an outgoing mobile voice call minute: 2005 to 2010

Pence per minute



	1 year change (p/min)	5 year CAGR
JPN	-2.79	-13.0%
GER	-1.56	-17.7%
FRA	-0.46	-3.8%
UK	-0.59	-9.3%
AUS	-1.13	-10.7%
ITA	-1.05	-13.4%
CAN	-0.14	-4.6%
USA	-0.07	-7.4%

Pence per minute

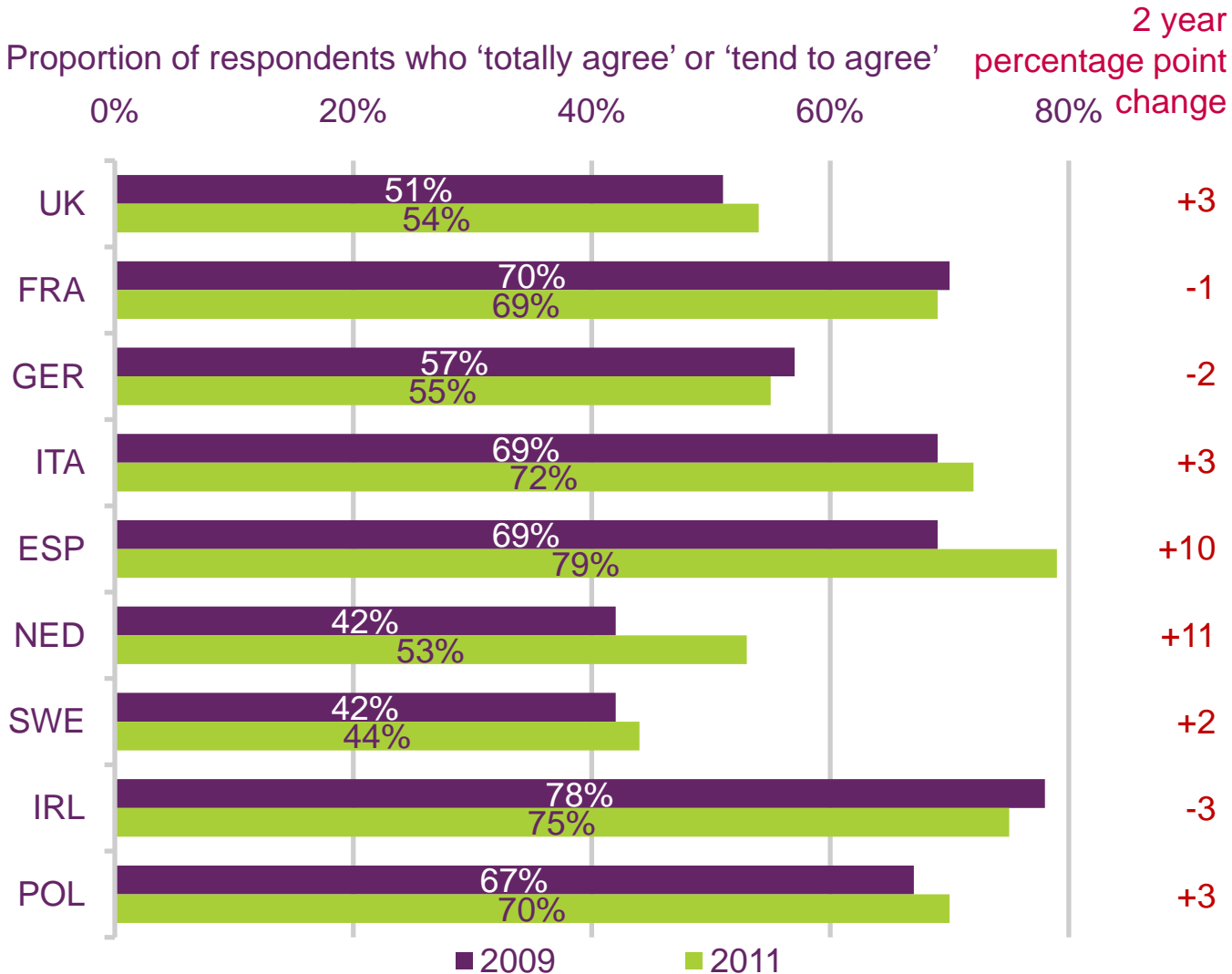


	1 year change (p/min)	5 year CAGR
ESP	-0.91	-6.6%
NED	-0.34	-8.6%
SWE	-0.14	-11.7%
IRL	-1.19	-16.9%
BRA	-5.91	-15.4%
POL	-0.97	-21.0%
RUS	-0.56	-10.9%
CHN	-0.02	-14.9%
IND	-0.08	-20.2%

Source: IDATE / industry data / Ofcom

# Figure 6.73

## Level of concerns about the affordability of voice: 2009 and 2011



Source: European Commission consumer research, published July 2011.

Base: UK=1322, Germany=1622, Spain 1004, France=1035, Ireland=1007, Italy 1027, Netherlands=1012, Poland=1000, Sweden=1024.

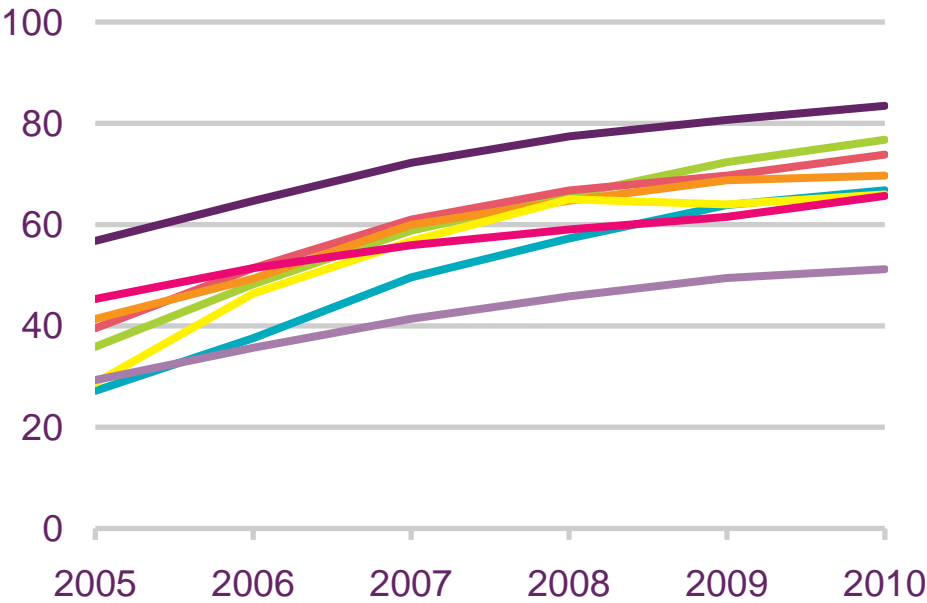
Statement: You limit your calls with your mobile phone because you are concerned about communication charges. Answers: Totally agree/tend to agree/tend to disagree/totally disagree/not applicable/don't know.

# Broadband

# Figure 6.74

## Fixed broadband connections per 100 households: 2005 to 2010

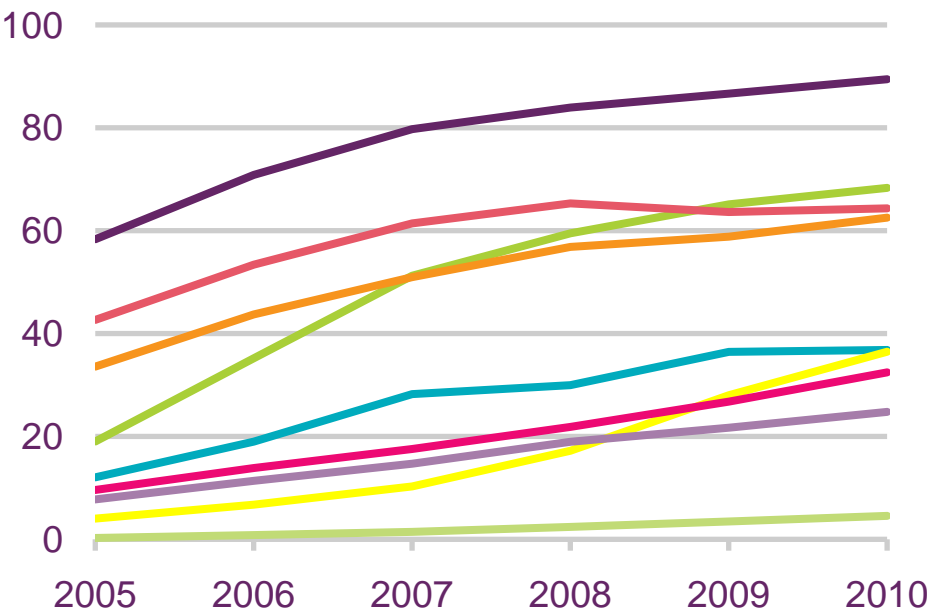
Connections per 100 households



1 year pp change    5 year pp change

CAN	+3	+27
FRA	+4	+41
UK	+4	+34
USA	+1	+28
GER	+3	+40
AUS	+2	+37
JPN	+4	+20
ITA	+2	+22

Connections per 100 households



1 year change    5 year change

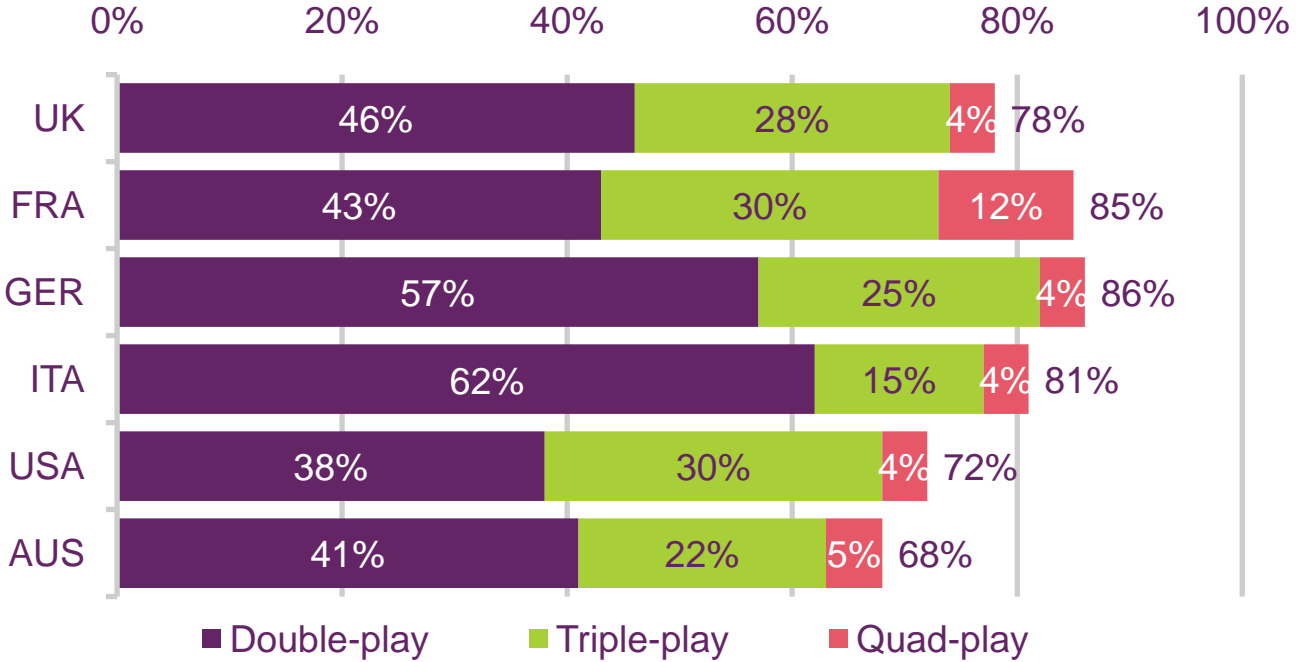
NED	+3	+31
IRL	+3	+49
SWE	+1	+22
ESP	+4	+29
POL	+0	+25
RUS	+8	+32
CHN	+6	+23
BRA	+3	+17
IND	+1	+4

Source: IDATE / industry data / Ofcom

# Figure 6.75

## Take-up of multi-service 'bundles' among fixed broadband customers

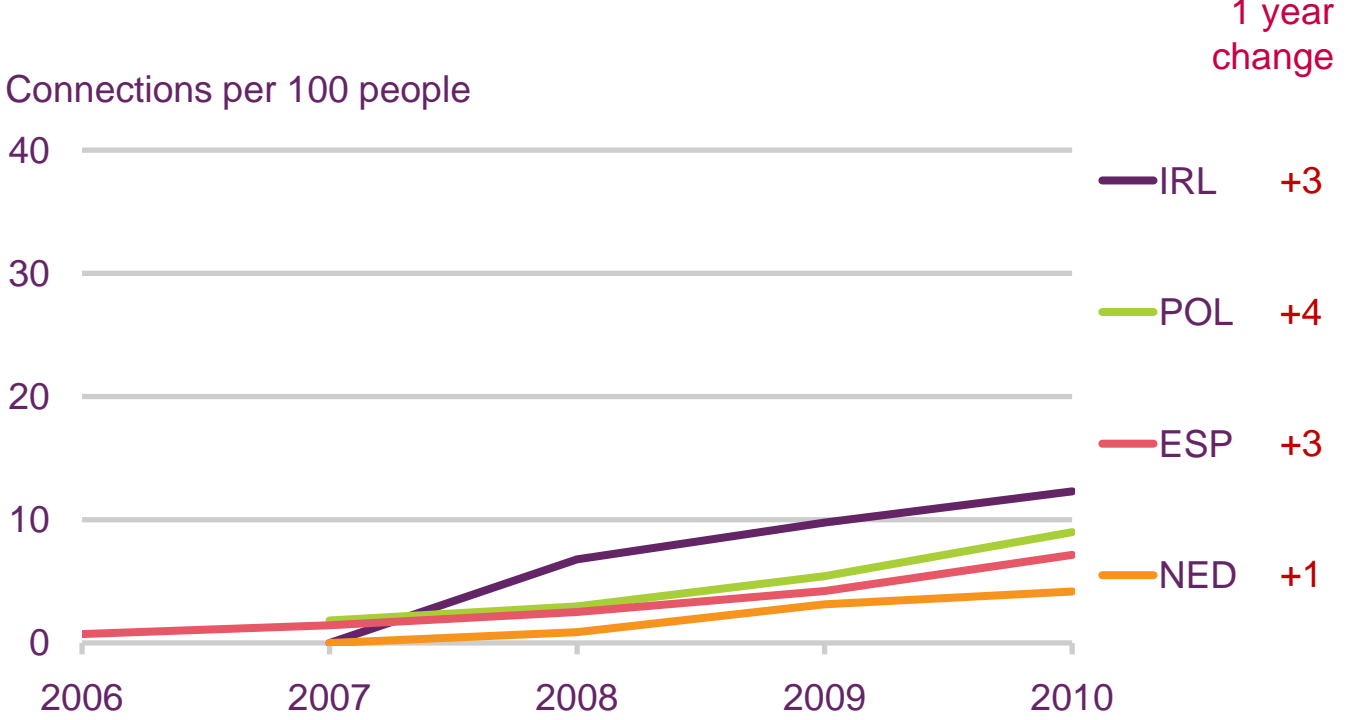
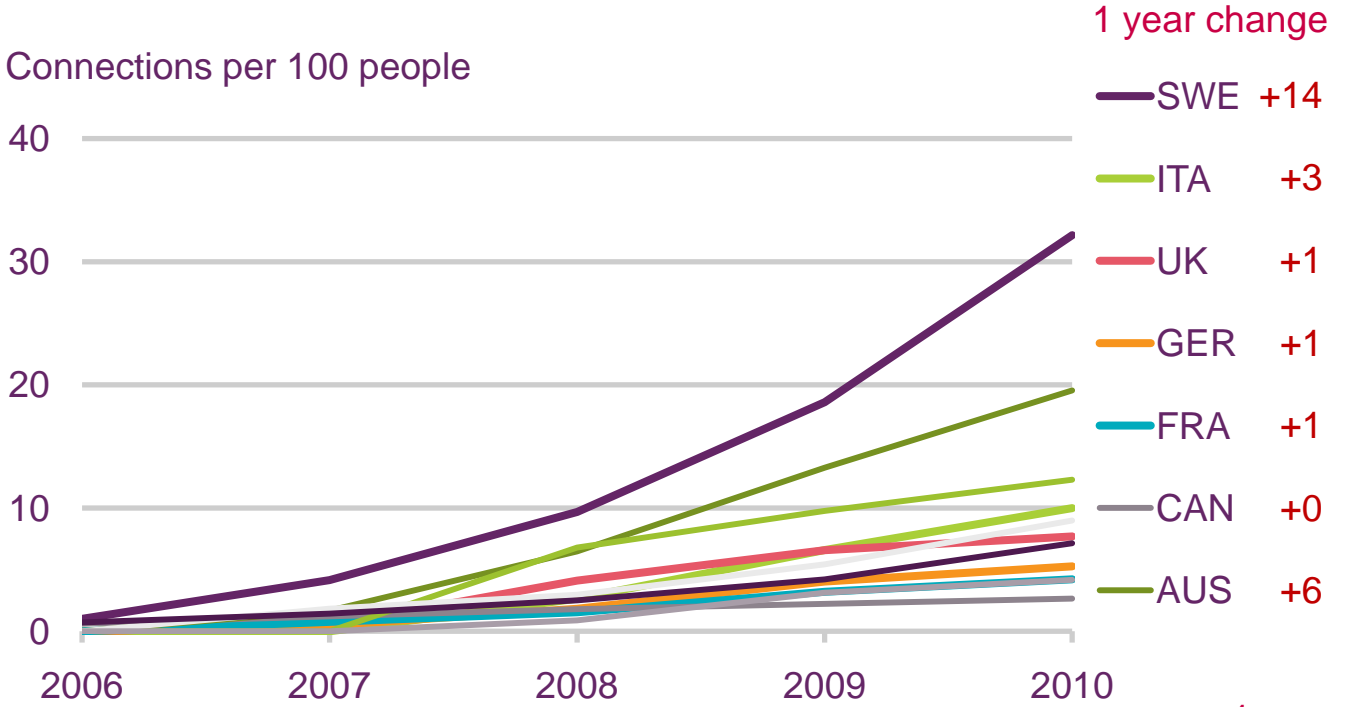
Proportion with broadband



Source: Ofcom consumer research, October 2011. Base: UK=940, France=977, Germany=833, Italy=872, USA=905, Australia=794.  
Question: Do you receive any of the following from the same supplier as your broadband as part of a package (ie you receive one bill for all services)? (multiple choice containing the commonly found double-play, triple-play and quad-play service bundles).

# Figure 6.76

## Mobile broadband connections per 100 people: 2006 to 2010

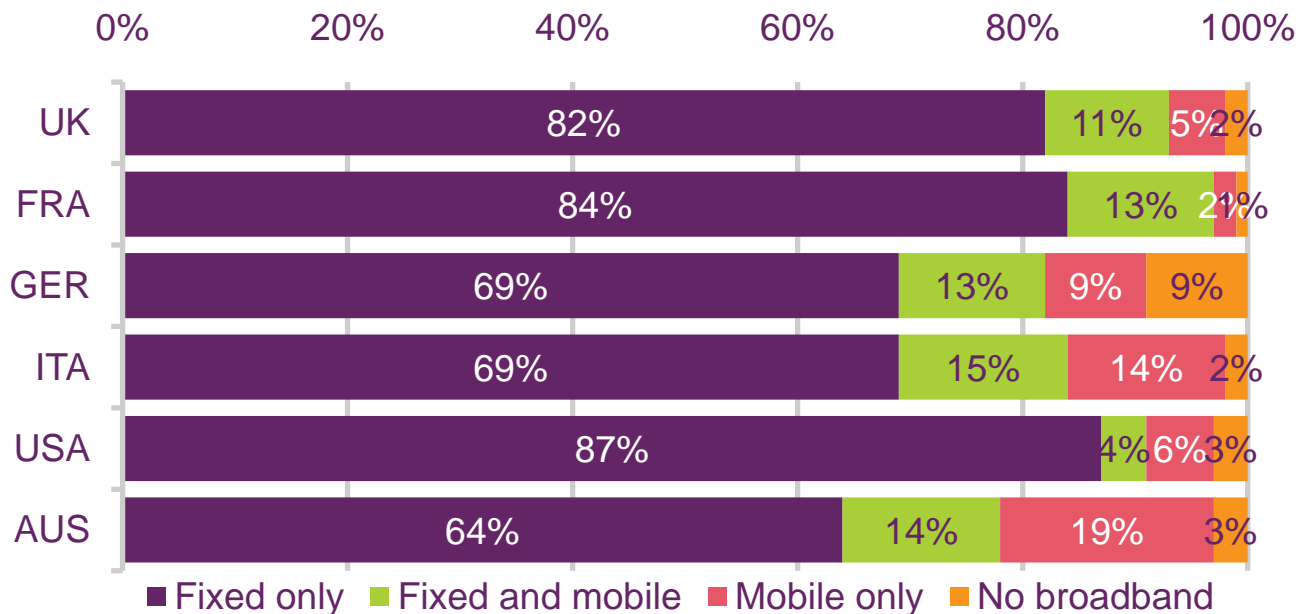


Source: IDATE / industry data / Ofcom

# Figure 6.77

## Household penetration of fixed and mobile broadband: 2011

Proportion of respondents

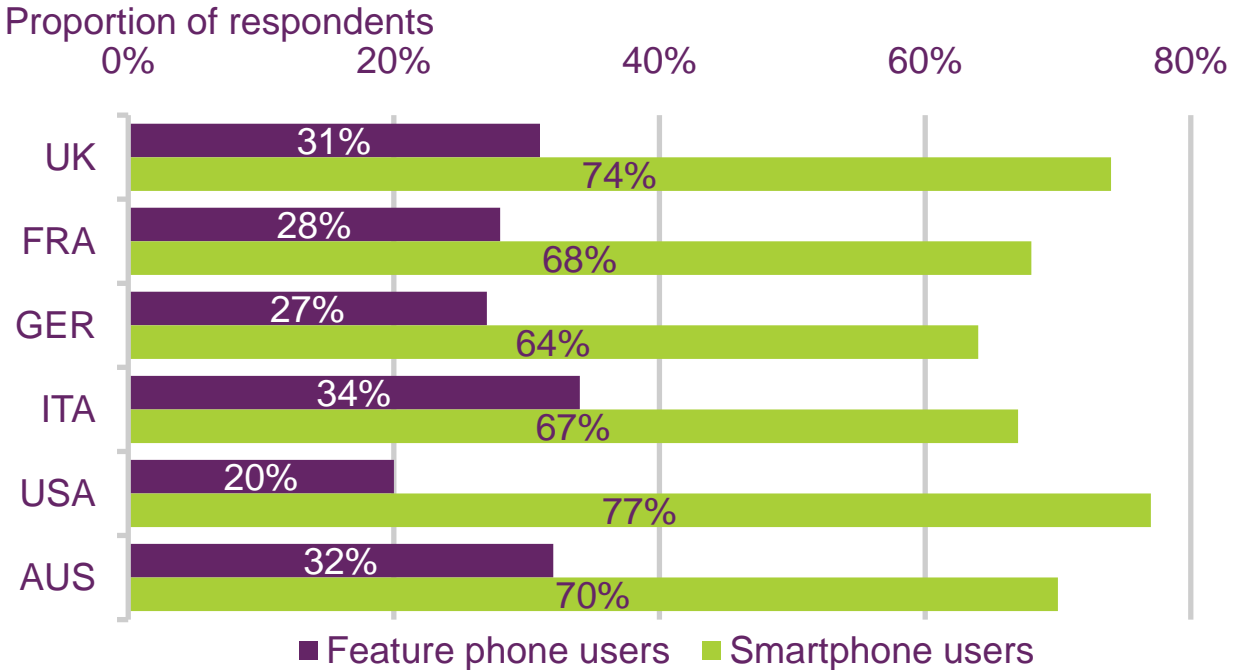


Source: Ofcom consumer research, October 2011.

Base: UK=1015, France=1014, Germany=1014, Italy=1045, USA=1002, Australia=1012.

# Figure 6.78

Proportion of feature phone and smartphone users that access the mobile internet via their mobile device: 2011



Source: Ofcom consumer research, October 2011.

Base (smartphone users): UK=506, France=445, Germany=502,

Italy=498, USA=416, Australia=490 Base (feature phone users):

UK=423, France=469, Germany=443, Italy=491, USA=486,

Australia=467. For the purposes of these results, we have classified

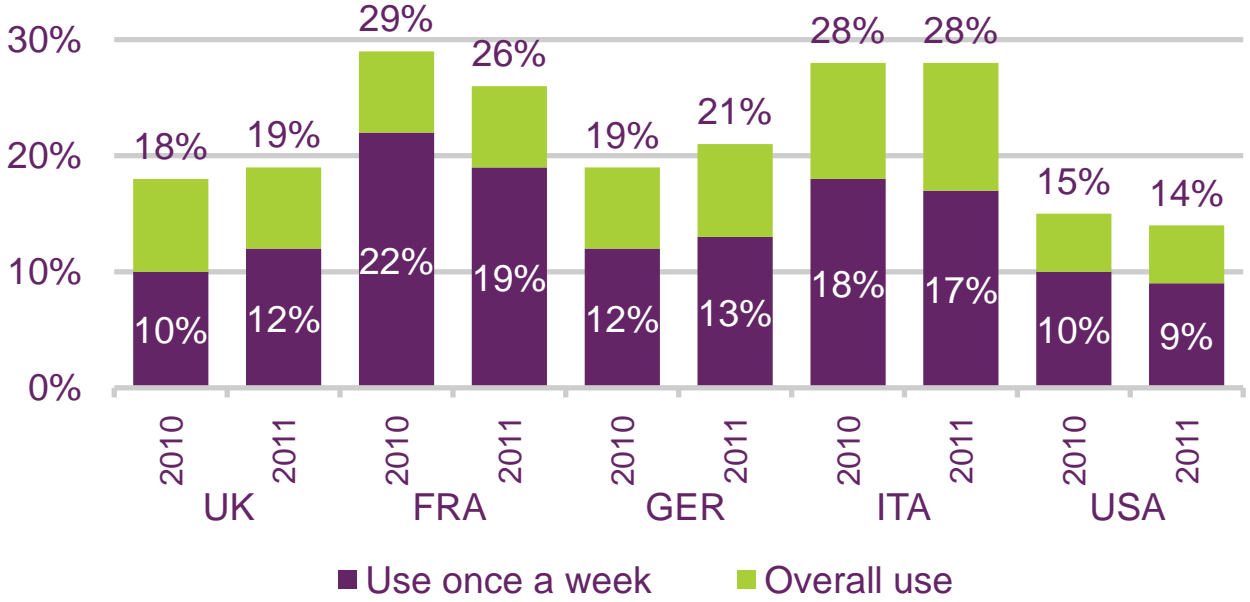
feature phone users as those survey respondents who said they owned a mobile phone but not a smartphone.

Question: Which, if any, of the following activities do you use your smartphone / mobile phone for? Multiple answers allowed, including 'access the internet'.

# Figure 6.79

## Take-up of voice-over-IP services among fixed broadband users

Proportion of respondents



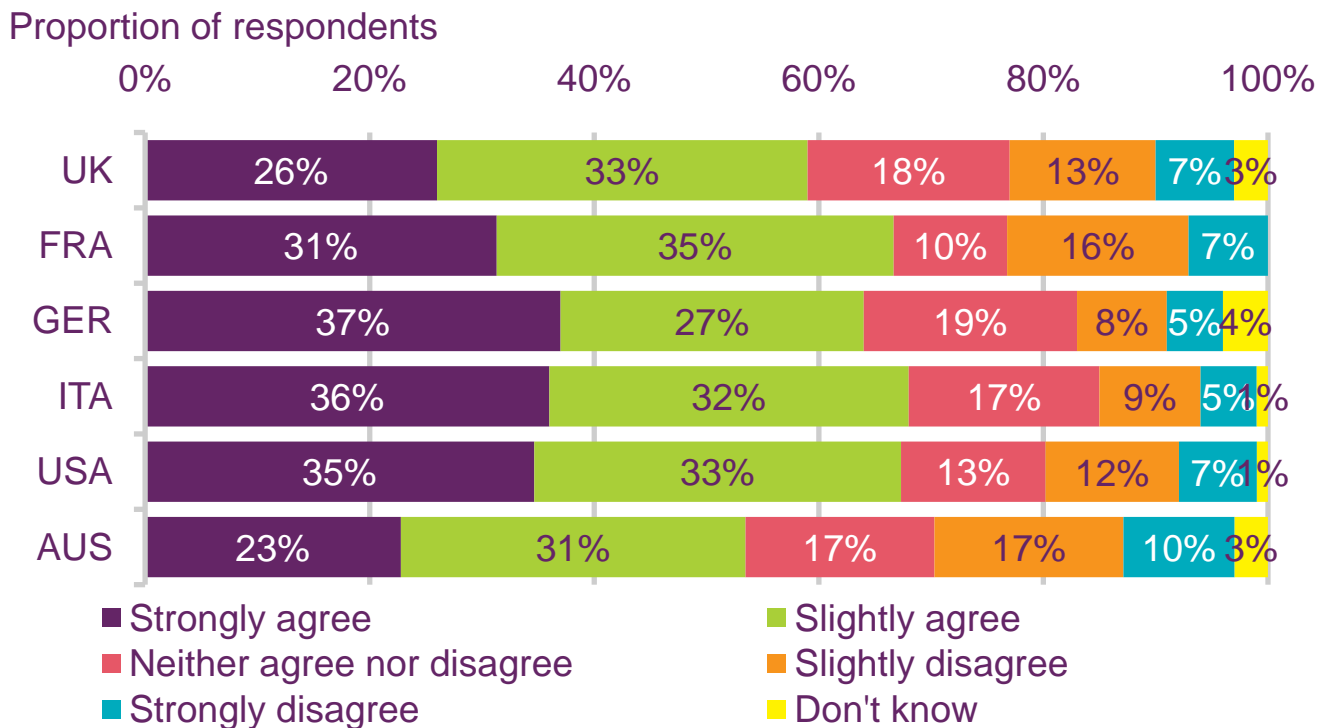
Source: Ofcom consumer research, October 2011.

Base: UK=940, France=977, Germany=833, Italy=872, USA=905.



# Figure 6.81

## Satisfaction with the speed of mobile broadband: 2011



Source: Ofcom consumer research, October 2011.

Base: smartphone users. UK=506, France=445; Germany=502;

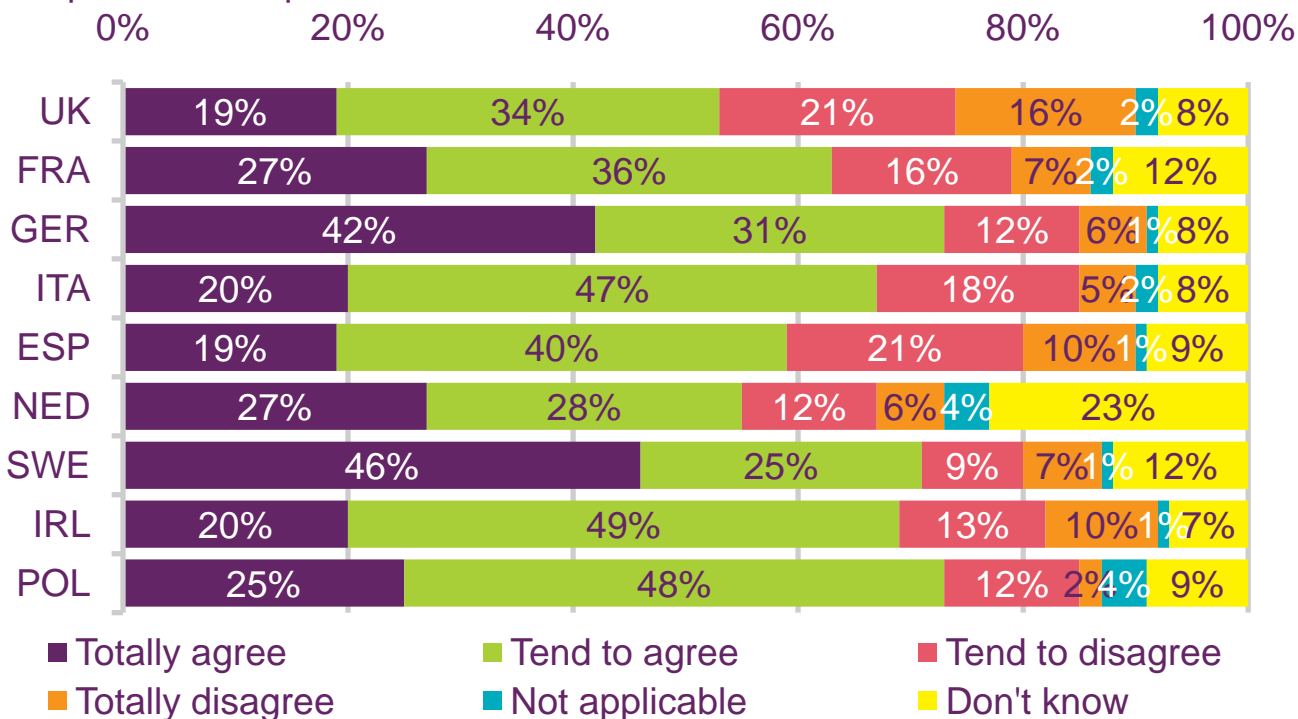
Italy=498, USA=416, Australia=490

Statement: My internet connection is always fast enough for what I do online.

# Figure 6.82

## Perception of the difference between contract and actual broadband speeds: 2011

Proportion of respondents



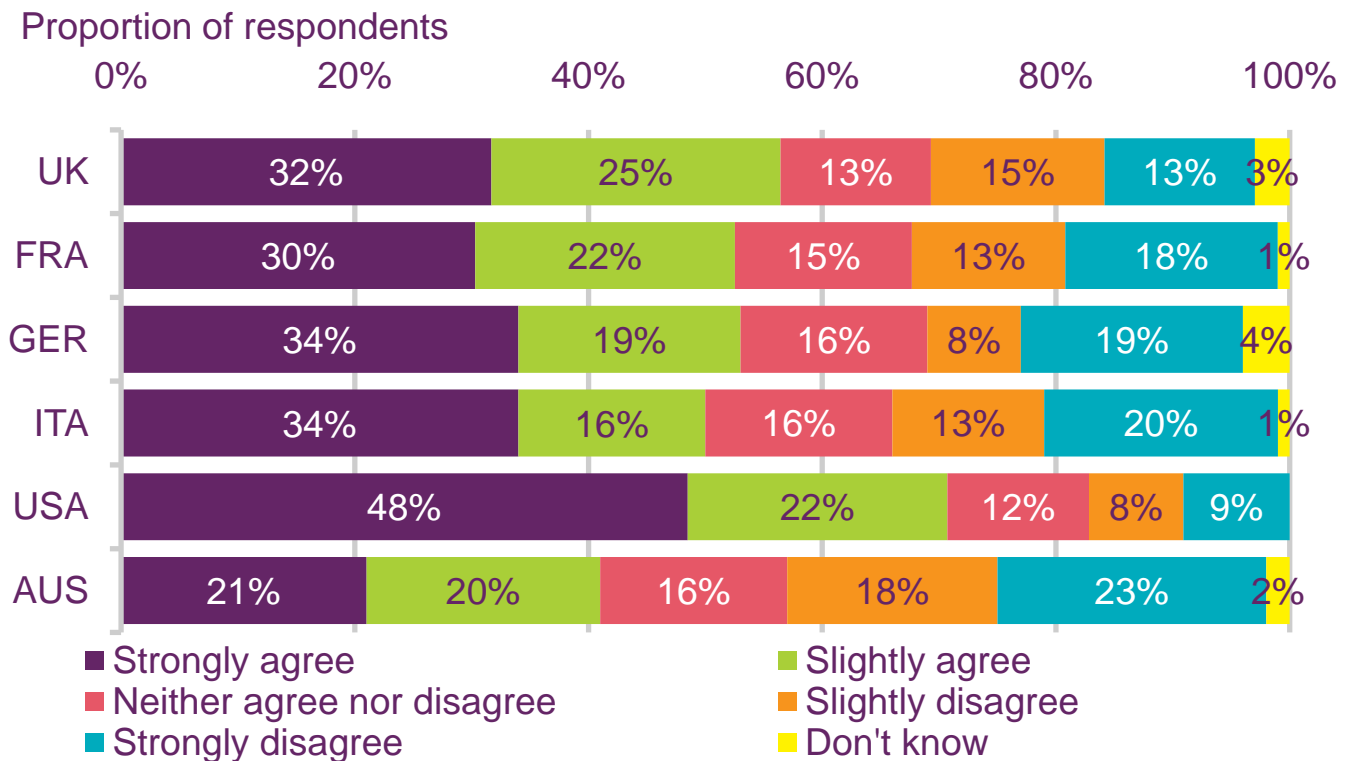
Source: European Commission consumer research, July 2011.

Base: UK=1322, Germany=1622, Spain 1004, France=1035, Ireland=1007, Italy 1027, Netherlands=1012, Poland=1000, Sweden=1024.

Statement: The download/upload speed and capacity matches your contract conditions.

# Figure 6.83

## Ability to consume mobile broadband data without worrying about cost: 2011



Source: Ofcom consumer research, October 2011.

Base: Smartphone users: UK=506, France=445; Germany=502; Italy=498, USA=416, Australia=490

Base: Fixed broadband users: UK=940, France=977, Germany=833, Italy=872, USA=905, Australia=794.

Statement: I use as much data as I like without worrying about cost.

