



## United Kingdom - 2020 Forecast Highlights

### IP Traffic

- In the United Kingdom, IP traffic will grow 3-fold from 2015 to 2020, a compound annual growth rate of 21%.
- In the United Kingdom, IP traffic will reach 7.6 Exabytes per month in 2020, up from 2.9 Exabytes per month in 2015.
- The United Kingdom's IP networks will carry 248 Petabytes per day in 2020, up from 96 Petabytes per day in 2015.
- In the United Kingdom, IP traffic will reach an annual run rate of 90.7 Exabytes in 2020, up from an annual run rate of 34.9 Exabytes in 2015.
- In the United Kingdom, IP traffic will reach 113 Gigabytes per capita in 2020, up from 45 Gigabytes per capita in 2015.
- In the United Kingdom, average IP traffic will reach 23 Tbps in 2020, and busy hour traffic will reach 132 Tbps.
- In 2020, the gigabyte equivalent of all movies ever made will cross The United Kingdom's IP networks every 46 minutes.

### Internet Traffic

- In the United Kingdom, Internet traffic will grow 2.9-fold from 2015 to 2020, a compound annual growth rate of 24%.
- In the United Kingdom, busy hour Internet traffic will grow 4.6-fold from 2015 to 2020, a compound annual growth rate of 36%.
- In the United Kingdom, Internet traffic will reach 6.7 Exabytes per month in 2020, up from 2.3 Exabytes per month in 2015.

- The United Kingdom's Internet traffic will be 219 Petabytes per day in 2020, up from 80 Petabytes per day in 2015.
- The United Kingdom's Internet traffic in 2020 will be equivalent to 20 billion DVDs per year, 2 billion DVDs per month, or 2 million DVDs per hour.
- In 2020, the gigabyte equivalent of all movies ever made will cross the Internet every 53 minutes.
- U.K. Internet traffic in 2020 will be equivalent to 89x the volume of the entire U.K. Internet in 2005.
- In the United Kingdom, Internet traffic will reach 100 Gigabytes per capita in 2020, up from 35 Gigabytes per capita in 2015.
- In the United Kingdom, average Internet traffic will increase 2.9-fold by 2020 and will reach 20 Tbps.
- In the United Kingdom, busy hour Internet traffic will increase 4.6-fold by 2020 and will reach 117 Tbps.

### Wired Wi-Fi and Mobile Growth

- The United Kingdom's Fixed/Wi-Fi was 48% of total IP traffic in 2015, and will be 59% of total IP traffic in 2020.
- The United Kingdom's Fixed/Wired was 49% of total IP traffic in 2015, and will be 33% of total IP traffic in 2020.
- The United Kingdom's Mobile was 3% of total IP traffic in 2015, and will be 8% of total IP traffic in 2020.
- The United Kingdom's Fixed/Wi-Fi was 59.3% of total Internet traffic in 2015, and will be 66.1% of total Internet traffic in 2020.
- The United Kingdom's Fixed/Wired was 37% of total Internet traffic in 2015, and will be 25% of total Internet traffic in 2020.
- The United Kingdom's Mobile was 3.8% of total Internet traffic in 2015, and will be 9.0% of total Internet traffic in 2020.

### IP Video

- In the United Kingdom, IP video traffic will grow 3-fold from 2015 to 2020, a compound annual growth rate of 25%.
- In the United Kingdom, IP video traffic will reach 6.2 Exabytes per month in 2020, up from 2.0 Exabytes per month in 2015.
- In the United Kingdom, IP video will be 82% of all IP traffic in 2020, up from 70% in 2015.
- In the United Kingdom, Ultra HD will be 18.6% of IP Video traffic in 2020, up from 1.7% in 2015 (101.0% CAGR).
- In the United Kingdom, HD will be 70.3% of IP Video traffic in 2020, up from 58.4% in 2015 (29.7% CAGR).
- In the United Kingdom, SD will be 11.1% of IP Video traffic in 2020, compared to 39.9% in 2015 (-3.2% CAGR).
- In the United Kingdom, consumer IP video traffic will be 85% of consumer IP traffic in 2020, up from 75% in 2015.
- In the United Kingdom, business IP video traffic will be 65% of business IP traffic in 2020, up from 41% in 2015.

## Internet Video

- In the United Kingdom, Internet video traffic will grow 4-fold from 2015 to 2020, a compound annual growth rate of 29%.
- In the United Kingdom, Internet video traffic will reach 5.4 Exabytes per month in 2020, up from 1.5 Exabytes per month in 2015.
- In the United Kingdom, total Internet video traffic (business and consumer, combined) will be 80% of all Internet traffic in 2020, up from 64% in 2015.
- In the United Kingdom, Ultra HD will be 18.4% of Internet video traffic in 2020, up from 1.9% in 2015 (104.4% CAGR).
- In the United Kingdom, HD will be 72.6% of Internet video traffic in 2020, up from 57.1% in 2015 (35.8% CAGR).
- In the United Kingdom, SD will be 9.1% of Internet video traffic in 2020, compared to 41.0% in 2015 (-4.3% CAGR).
- In the United Kingdom, consumer Internet video traffic will be 83% of consumer Internet traffic in 2020, up from 68% in 2015.
- In the United Kingdom, business Internet video traffic will be 67% of business Internet traffic in 2020, up from 43% in 2015.
- In the United Kingdom, Internet-Video-to-TV traffic will be 31% of fixed consumer Internet video traffic in 2020, up from 26% in 2015.
- In the United Kingdom, Internet-Video-to-TV traffic will increase 4-fold between 2015 and 2020 (31.6% CAGR).
- In the United Kingdom, 121 billion minutes (231,122 years) of video content will cross the Internet each month in 2020. That's 46,224 minutes of video streamed or downloaded every second.
- In the United Kingdom, 99% of all Internet video traffic will cross content delivery networks in 2020, up from 80% in 2015.
- In the United Kingdom, 90% of all Internet traffic will cross content delivery networks in 2020, up from 64% in 2015.

## IP VOD

- In the United Kingdom, Ultra HD will be 21.9% of IP VOD traffic in 2020, up from 1.4% in 2015 (85.9% CAGR).
- In the United Kingdom, HD will be 60.8% of IP VOD traffic in 2020, up from 66.0% in 2015 (6.0% CAGR).
- In the United Kingdom, SD will be 17.2% of IP VOD traffic in 2020, compared to 32.6% in 2015 (-5.2% CAGR).

## Gaming

- In the United Kingdom, Internet gaming traffic will grow 7-fold from 2015 to 2020, a compound annual growth rate of 50%.
- In the United Kingdom, Internet gaming traffic will reach 5.4 Exabytes per month in 2020, up from 1.5 Exabytes per month in 2015.
- In the United Kingdom, Internet gaming traffic will be 5% of consumer Internet traffic in 2020, up from 2% in 2015.

## Mobile

- In the United Kingdom, mobile data traffic will grow 7-fold from 2015 to 2020, a compound annual growth rate of 47%.
- In the United Kingdom, mobile data traffic will reach 600 Petabytes per month in 2020, up from 86 Petabytes per month in 2015.
- U.K. mobile data traffic will grow 2 times faster than U.K. fixed IP traffic from 2015 to 2020.
- The United Kingdom's Mobile was 3% of total IP traffic in 2015, and will be 8% of total IP traffic in 2020.
- In the United Kingdom, mobile data traffic in 2020 will be equivalent to 7x the volume of the entire U.K. Internet in 2005.

## Devices

- In the United Kingdom, there will be 660.3 million networked devices in 2020, up from 368.3 million in 2015.
- In the United Kingdom, there will be 9.9 networked devices per capita in 2020, up from 5.7 per capita in 2015.
- In the United Kingdom, 31% of all networked devices will be mobile-connected in 2020.
- In the United Kingdom, M2M modules will account for 53% (348.1 million) of all networked devices in 2020, compared to 34% (125.2 million) in 2015, (22.7% CAGR).
- In the United Kingdom, PCs will account for 7% (46.9 million) of all networked devices in 2020, compared to 13% (48.2 million) in 2015, (-0.5% CAGR).
- In the United Kingdom, Tablets will account for 4% (29.6 million) of all networked devices in 2020, compared to 7% (26.3 million) in 2015, (2.4% CAGR).
- In the United Kingdom, Smartphones will account for 11% (69.9 million) of all networked devices in 2020, compared to 14% (50.7 million) in 2015, (6.6% CAGR).
- In the United Kingdom, Connected TVs will account for 16% (108.0 million) of all networked devices in 2020, compared to 16% (59.9 million) in 2015, (12.5% CAGR).
- In the United Kingdom, Non-Smartphones will account for 1.4% (9.1 million) of all networked devices in 2020, compared to 7% (25.5 million) in 2015, (-18.6% CAGR).
- In the United Kingdom, Other Portables will account for 7% (48.7 million) of all networked devices in 2020, compared to 9% (32.5 million) in 2015, (8.4% CAGR).
- In the United Kingdom, 4K TVs will account for 43% (17.9 million) of all flat panel TVs in 2020, compared to 8.3% (1.2 million) in 2015, (71.3% CAGR).
- The United Kingdom's IP traffic from non-PC devices was 43% of total IP traffic in 2015, and will be 67% of total IP traffic in 2020.
- In the United Kingdom, PCs accounted for 57% of IP traffic in 2015, and will be 33% of IP traffic in 2020.
- In the United Kingdom, TVs accounted for 28% of IP traffic in 2015, and will be 26% of IP traffic in 2020.
- In the United Kingdom, Smartphones accounted for 6% of IP traffic in 2015, and will be 19% of IP traffic in 2020.
- In the United Kingdom, Tablets accounted for 8% of IP traffic in 2015, and will be 19% of IP traffic in 2020.
- In the United Kingdom, M2M modules accounted for 1.1% of IP traffic in 2015, and will be 2.6% of IP traffic in 2020.
- In the United Kingdom, PCs accounted for 66% of consumer Internet traffic in 2015, and will be 35% of consumer Internet traffic in 2020.

- In the United Kingdom, TVs accounted for 16% of consumer Internet traffic in 2015, and will be 21% of consumer Internet traffic in 2020.
- In the United Kingdom, TVs accounted for 13% of total Internet traffic in 2015, and will be 18% of total Internet traffic in 2020.

### Speed Evolution

- In the United Kingdom, the average fixed broadband speed will grow 2.1-fold from 2015 to 2020, from 24.7 Mbps to 51.3 Mbps.
- In the United Kingdom, 94% of fixed broadband connections will be faster than 5 Mbps in 2020, up from 76% today.
- In the United Kingdom, 81% of fixed broadband connections will be faster than 10 Mbps in 2020, up from 62% today.
- In the United Kingdom, 47.4% of fixed broadband connections will be faster than 25 Mbps in 2020, up from 39.7% today.
- In the United Kingdom, 35.4% of fixed broadband connections will be faster than 50 Mbps in 2020, up from 19.2% today.
- In the United Kingdom, the average Wi-Fi speeds from mobile devices will grow 2.0-fold from 2015 to 2020, from 17.4 Mbps to 35 Mbps.
- In the United Kingdom, the average mobile connection speed will grow 3-fold from 2015 to 2020, reaching 18 Mbps in 2020.

### Traffic per User and Household

- In the United Kingdom, the average Internet user will generate 93.9 gigabytes of Internet traffic per month in 2020, up 135% from 40.0 gigabytes per month in 2015, a CAGR of 19%.
- In the United Kingdom, the average Internet household will generate 202.1 gigabytes of Internet traffic per month in 2020, up 139% from 84.5 gigabytes per month in 2015, a CAGR of 19%.
- In the United Kingdom, the average FTTx Internet household will generate 608.5 gigabytes of Internet traffic per month in 2020, 203.2% more than other broadband households.
- In the United Kingdom, the average FTTx Internet household generated 339.2 gigabytes of Internet traffic per month in 2015, 290.3% more than other broadband households.
- In the United Kingdom, there will be 5 million Internet households (22.0% of all Internet households) generating more than 250 gigabytes per month in 2020.
- In the United Kingdom, there will be 3 million households (13.0% of all Internet households) generating more than 500 gigabytes per month in 2020.
- In the United Kingdom, there will be 748,483 households (3.0% of all Internet households) generating more than a terabyte per month in 2020.
- In the United Kingdom, the average mobile connection will generate 5,600 megabytes of mobile data traffic per month in 2020, up from 964 megabytes in 2015.