



## Rest of Western Europe - 2020 Forecast Highlights

### IP Traffic

- In the rest of Western Europe, IP traffic will grow 2-fold from 2015 to 2020, a compound annual growth rate of 18%.
- In the rest of Western Europe, IP traffic will reach 6.3 Exabytes per month in 2020, up from 2.7 Exabytes per month in 2015.
- The rest of Western Europe's IP networks will carry 208 Petabytes per day in 2020, up from 89 Petabytes per day in 2015.
- In the rest of Western Europe, IP traffic will reach an annual run rate of 75.8 Exabytes in 2020, up from an annual run rate of 32.5 Exabytes in 2015.
- In the rest of Western Europe, IP traffic will reach 69 Gigabytes per capita in 2020, up from 30 Gigabytes per capita in 2015.
- In the rest of Western Europe, average IP traffic will reach 19 Tbps in 2020, and busy hour traffic will reach 109 Tbps.
- In 2020, the gigabyte equivalent of all movies ever made will cross The rest of Western Europe's IP networks every 56 minutes.

### Internet Traffic

- In the rest of Western Europe, Internet traffic will grow 2.7-fold from 2015 to 2020, a compound annual growth rate of 22%.
- In the rest of Western Europe, busy hour Internet traffic will grow 4.4-fold from 2015 to 2020, a compound annual growth rate of 34%.

- In the rest of Western Europe, Internet traffic will reach 5.1 Exabytes per month in 2020, up from 1.9 Exabytes per month in 2015.
- The rest of Western Europe's Internet traffic will be 168 Petabytes per day in 2020, up from 60 Petabytes per day in 2015.
- The rest of Western Europe's Internet traffic in 2020 will be equivalent to 15 billion DVDs per year, 1 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 1 hours.
- the rest of Western European Internet traffic in 2020 will be equivalent to 32x the volume of the entire the rest of Western European Internet in 2005.
- In the rest of Western Europe, Internet traffic will reach 56 Gigabytes per capita in 2020, up from 21 Gigabytes per capita in 2015.
- In the rest of Western Europe, average Internet traffic will increase 2.7-fold by 2020 and will reach 16 Tbps.
- In the rest of Western Europe, busy hour Internet traffic will increase 4.4-fold by 2020 and will reach 88 Tbps.

### Wired Wi-Fi and Mobile Growth

- The rest of Western Europe's Fixed/Wi-Fi was 44% of total IP traffic in 2015, and will be 52% of total IP traffic in 2020.
- The rest of Western Europe's Fixed/Wired was 52% of total IP traffic in 2015, and will be 36% of total IP traffic in 2020.
- The rest of Western Europe's Mobile was 4% of total IP traffic in 2015, and will be 12% of total IP traffic in 2020.
- The rest of Western Europe's Fixed/Wi-Fi was 56.5% of total Internet traffic in 2015, and will be 61.2% of total Internet traffic in 2020.
- The rest of Western Europe's Fixed/Wired was 38% of total Internet traffic in 2015, and will be 24% of total Internet traffic in 2020.
- The rest of Western Europe's Mobile was 6.0% of total Internet traffic in 2015, and will be 14.8% of total Internet traffic in 2020.

### IP Video

- In the rest of Western Europe, IP video traffic will grow 3-fold from 2015 to 2020, a compound annual growth rate of 25%.
- In the rest of Western Europe, IP video traffic will reach 5.1 Exabytes per month in 2020, up from 1.7 Exabytes per month in 2015.
- In the rest of Western Europe, IP video will be 80% of all IP traffic in 2020, up from 62% in 2015.
- In the rest of Western Europe, Ultra HD will be 15.7% of IP Video traffic in 2020, up from 1.4% in 2015 (103.3% CAGR).
- In the rest of Western Europe, HD will be 68.8% of IP Video traffic in 2020, up from 55.5% in 2015 (30.2% CAGR).
- In the rest of Western Europe, SD will be 15.5% of IP Video traffic in 2020, compared to 43.2% in 2015 (1.5% CAGR).

- In the rest of Western Europe, consumer IP video traffic will be 86% of consumer IP traffic in 2020, up from 74% in 2015.
- In the rest of Western Europe, business IP video traffic will be 61% of business IP traffic in 2020, up from 34% in 2015.

### Internet Video

- In the rest of Western Europe, Internet video traffic will grow 4-fold from 2015 to 2020, a compound annual growth rate of 31%.
- In the rest of Western Europe, Internet video traffic will reach 4.0 Exabytes per month in 2020, up from 1.0 Exabytes per month in 2015.
- In the rest of Western Europe, total Internet video traffic (business and consumer, combined) will be 78% of all Internet traffic in 2020, up from 55% in 2015.
- In the rest of Western Europe, Ultra HD will be 16.2% of Internet video traffic in 2020, up from 1.7% in 2015 (105.7% CAGR).
- In the rest of Western Europe, HD will be 73.0% of Internet video traffic in 2020, up from 55.1% in 2015 (38.3% CAGR).
- In the rest of Western Europe, SD will be 10.8% of Internet video traffic in 2020, compared to 43.2% in 2015 (-1.0% CAGR).
- In the rest of Western Europe, consumer Internet video traffic will be 82% of consumer Internet traffic in 2020, up from 62% in 2015.
- In the rest of Western Europe, business Internet video traffic will be 63% of business Internet traffic in 2020, up from 36% in 2015.
- In the rest of Western Europe, Internet-Video-to-TV traffic will be 33% of fixed consumer Internet video traffic in 2020, up from 30% in 2015.
- In the rest of Western Europe, Internet-Video-to-TV traffic will increase 4-fold between 2015 and 2020 (31.4% CAGR).
- In the rest of Western Europe, 77 billion minutes (146,269 years) of video content will cross the Internet each month in 2020. That's 29,254 minutes of video streamed or downloaded every second.
- In the rest of Western Europe, 98% of all Internet video traffic will cross content delivery networks in 2020, up from 85% in 2015.
- In the rest of Western Europe, 84% of all Internet traffic will cross content delivery networks in 2020, up from 57% in 2015.

### IP VOD

- In the rest of Western Europe, Ultra HD will be 16.0% of IP VOD traffic in 2020, up from 0.9% in 2015 (94.7% CAGR).
- In the rest of Western Europe, HD will be 61.5% of IP VOD traffic in 2020, up from 62.3% in 2015 (10.1% CAGR).
- In the rest of Western Europe, SD will be 22.5% of IP VOD traffic in 2020, compared to 36.8% in 2015 (0.1% CAGR).

## Gaming

- In the rest of Western Europe, Internet gaming traffic will grow 6-fold from 2015 to 2020, a compound annual growth rate of 41%.
- In the rest of Western Europe, Internet gaming traffic will reach 4.0 Exabytes per month in 2020, up from 1.0 Exabytes per month in 2015.
- In the rest of Western Europe, Internet gaming traffic will be 4% of consumer Internet traffic in 2020, up from 2% in 2015.

## Mobile

- In the rest of Western Europe, mobile data traffic will grow 7-fold from 2015 to 2020, a compound annual growth rate of 46%.
- In the rest of Western Europe, mobile data traffic will reach 755 Petabytes per month in 2020, up from 114 Petabytes per month in 2015.
- the rest of Western European mobile data traffic will grow 3 times faster than the rest of Western European fixed IP traffic from 2015 to 2020.
- The rest of Western Europe's Mobile was 4% of total IP traffic in 2015, and will be 12% of total IP traffic in 2020.
- In the rest of Western Europe, mobile data traffic in 2020 will be equivalent to 4x the volume of the entire the rest of Western European Internet in 2005.

## Devices

- In the rest of Western Europe, there will be 803.1 million networked devices in 2020, up from 471.1 million in 2015.
- In the rest of Western Europe, there will be 8.8 networked devices per capita in 2020, up from 5.2 per capita in 2015.
- In the rest of Western Europe, 29% of all networked devices will be mobile-connected in 2020.
- In the rest of Western Europe, M2M modules will account for 59% (473.1 million) of all networked devices in 2020, compared to 40% (189.9 million) in 2015, (20% CAGR).
- In the rest of Western Europe, PCs will account for 6% (48.9 million) of all networked devices in 2020, compared to 12% (56.3 million) in 2015, (-2.8% CAGR).
- In the rest of Western Europe, Tablets will account for 3% (27.5 million) of all networked devices in 2020, compared to 5% (24.9 million) in 2015, (2% CAGR).
- In the rest of Western Europe, Smartphones will account for 12% (98.3 million) of all networked devices in 2020, compared to 15% (69.4 million) in 2015, (7.2% CAGR).
- In the rest of Western Europe, Connected TVs will account for 14% (112.1 million) of all networked devices in 2020, compared to 15% (72.0 million) in 2015, (9.2% CAGR).
- In the rest of Western Europe, Non-Smartphones will account for 1.1% (9.0 million) of all networked devices in 2020, compared to 7% (34.1 million) in 2015, (-23.5% CAGR).
- In the rest of Western Europe, Other Portables will account for 4% (34.3 million) of all networked devices in 2020, compared to 5% (24.4 million) in 2015, (7% CAGR).
- In the rest of Western Europe, 4K TVs will account for 34% (17.5 million) of all flat panel TVs in 2020, compared to 5.4% (1.1 million) in 2015, (72.7% CAGR).

- The rest of Western Europe's IP traffic from non-PC devices was 43% of total IP traffic in 2015, and will be 69% of total IP traffic in 2020.
- In the rest of Western Europe, PCs accounted for 57% of IP traffic in 2015, and will be 31% of IP traffic in 2020.
- In the rest of Western Europe, TVs accounted for 29% of IP traffic in 2015, and will be 27% of IP traffic in 2020.
- In the rest of Western Europe, Smartphones accounted for 7% of IP traffic in 2015, and will be 25% of IP traffic in 2020.
- In the rest of Western Europe, Tablets accounted for 5% of IP traffic in 2015, and will be 13% of IP traffic in 2020.
- In the rest of Western Europe, M2M modules accounted for 1.7% of IP traffic in 2015, and will be 4.0% of IP traffic in 2020.
- In the rest of Western Europe, PCs accounted for 62% of consumer Internet traffic in 2015, and will be 27% of consumer Internet traffic in 2020.
- In the rest of Western Europe, TVs accounted for 15% of consumer Internet traffic in 2015, and will be 20% of consumer Internet traffic in 2020.
- In the rest of Western Europe, TVs accounted for 11% of total Internet traffic in 2015, and will be 15% of total Internet traffic in 2020.

### Speed Evolution

- In the rest of Western Europe, the average fixed broadband speed will grow 2.0-fold from 2015 to 2020, from 26.4 Mbps to 52.2 Mbps.
- In the rest of Western Europe, 91% of fixed broadband connections will be faster than 5 Mbps in 2020, up from 75% today.
- In the rest of Western Europe, 77% of fixed broadband connections will be faster than 10 Mbps in 2020, up from 58% today.
- In the rest of Western Europe, 38.7% of fixed broadband connections will be faster than 25 Mbps in 2020, up from 33.4% today.
- In the rest of Western Europe, 33.2% of fixed broadband connections will be faster than 50 Mbps in 2020, up from 17.9% today.
- In the rest of Western Europe, the average Wi-Fi speeds from mobile devices will grow 2.0-fold from 2015 to 2020, from 15.6 Mbps to 31 Mbps.
- In the rest of Western Europe, the average mobile connection speed will grow 3-fold from 2015 to 2020, reaching 15 Mbps in 2020.

### Traffic per User and Household

- In the rest of Western Europe, the average Internet user will generate 49.6 gigabytes of Internet traffic per month in 2020, up 147% from 20.1 gigabytes per month in 2015, a CAGR of 20%.
- In the rest of Western Europe, the average Internet household will generate 104.1 gigabytes of Internet traffic per month in 2020, up 145% from 42.4 gigabytes per month in 2015, a CAGR of 20%.
- In the rest of Western Europe, the average FTTx Internet household will generate 182.2 gigabytes of Internet traffic per month in 2020, 114.2% more than other broadband households.
- In the rest of Western Europe, the average FTTx Internet household generated 86.7 gigabytes of Internet traffic per month in 2015, 126.5% more than other broadband households.

- In the rest of Western Europe, there will be 4 million Internet households (14.0% of all Internet households) generating more than 250 gigabytes per month in 2020.
- In the rest of Western Europe, there will be 949,696 households (3.0% of all Internet households) generating more than 500 gigabytes per month in 2020.
- In the rest of Western Europe, there will be 316,565 households (1.0% of all Internet households) generating more than a terabyte per month in 2020.
- In the rest of Western Europe, the average mobile connection will generate 5,596 megabytes of mobile data traffic per month in 2020, up from 970 megabytes in 2015.