

NETFLIX

Netflix is one of the world's leading entertainment services with 270 million paid members in over 190 countries enjoying TV series, films and games across a wide variety of genres and languages. Members can play, pause and resume watching as much as they want, anytime, anywhere. We know that our business would not be possible without partnerships with creators or a well-functioning, Open Internet. There is a symbiotic relationship between a thriving creative industry and a thriving internet ecosystem. Consumers want great films, TV series and games — and they are willing to pay for high-quality internet to reach the content they love.

Netflix is an audiovisual media service provider established in the Netherlands pursuant to Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive (AVMSD)). End users need an Internet connection provided by an Electronic Communications Services provider in order to access Netflix.

Netflix offers a subscription service that provides access to a variety of video on demand content over the internet. Netflix is delivered through multiple means; some built by Netflix, and some offered by providers of cloud infrastructure. The vast majority of traffic requested by Netflix users is delivered by Netflix's CDN - Open Connect¹. The primary means of delivering Netflix to end users are: 1) Direct egress from Amazon Web Services (AWS), who hosts all of Netflix' front and back end processes; 2) Third party CDNs such as Akamai; and 3) Open Connect. Open Connect interconnects with ISPs via (by order of preference/efficiency) Open Connect Appliances (OCAs) embedded inside the user's ISP network; direct peering, private or public, when Open Connect AS2906 and the ISP network interconnect in a mutually acceptable location; and indirect transit or peering, when there is no direct interconnection between Open Connect and the ISP network. **While Netflix partners with Electronic Communications Networks, we do not offer Electronic Communications Services.**

The vibrant CDN market

The EU regulatory framework has enabled a vibrant, diverse and competitive Content Delivery Network (CDN) market. As the digital ecosystem continues to expand and diversify, businesses across Europe are increasingly relying on CDN services to optimize the delivery of online content and enhance the user-experience over the Open Internet. The growth can be attributed to convergence of several key factors, reflecting the interplay between technology, market dynamics, and changing consumer behaviors.

The CDN landscape includes:

- **Purely private CDNs** like Netflix Open Connect. Many other Content and Application Providers (CAPs) run their own private CDNs too, including Playstation, Disney, Apple, Meta or DAZN.²
- **Commercial CDNs**, where CDN service is also part of a broader range of cloud services. Some are pure players, such as Cloudflare, Fastly, Akamai, CDN77, while others are CAPs of all sizes, such as Google, AWS, Microsoft, Alibaba or Ubisoft's i-3D.net. Telecommunications companies also offer commercial CDN services, such as Qwilt, Orange, Deutsche Telekom³.

¹ Netflix Open Connect - https://openconnect.netflix.com/en_gb/

² PeeringDB's page for [Playstation](#), [Disney](#), [Apple](#), [Meta](#)

³ [Telefonica](#), [Orange](#), [Deutsche Telekom](#)

Trusted industry sources reference over 30 commercial CDNs in operations today, resulting in competitive pricing.⁴ The choice is so vast that there is even an entire industry of “CDN brokers”, helping companies figure out how to run a multi-CDN environment⁵. Large CAPs have added to the diversity and choice in the CDN market. We can see that in Video-on-Demand (VOD), the vibrant CDN market has allowed market entry by a wide range of competitors in the past few years and the so-called ‘streaming wars’. An Open Internet, and a competitive CDN market allow continued innovation and competition in streaming, for the benefit of Europeans.

The current draft report focuses on the effect of CDNs provided by the “largest CAPs”. The conclusion from BEREC that the CDN market is “concentrated around a few providers”⁶ is misleading and does not accurately reflect the vibrant market that exists for CDNs.

Conclusion: relationships between all actors of the Open Internet

Netflix, like CAPs of all sizes, relies on a mix of Cloud and CDN infrastructure to deliver our service over the Open Internet. These infrastructure components can be self-built, like Netflix’ Open Connect, or acquired from third parties on a competitive market. As noted above, the CDN market in particular is vibrant and competitive, and BEREC’s report should reflect this. A competitive infrastructure market enables the launch and development of new services, as seen on the VOD market, for the benefit of all Europeans, and also ISPs that benefit from the demand for online services to sell internet access. Netflix partners with ISPs all over Europe to make content delivery more efficient, but does not offer electronic communications services.

However, as BEREC has noted in the past⁷, and Netflix’ experience has shown, large ISPs (with large retail market share and/or vertical integration with Tier 1 global transit networks) have the means and incentives to distort competition and restrict user choice, through the imposition of disproportionate or discriminatory interconnection fees. Such fees give ISPs the ability to exploit their termination monopoly and “*could be of significant harm to the internet ecosystem*”. In comparison, most well-known CAPs and CDNs advertise open peering policies, or no contractual requirements (consistent with the ‘bill & keep’ principle)⁸, as acknowledged most recently by the German monopoly commission⁹.

We recommend that BEREC’s report emphasizes the healthy competition dynamics of the CAP and CDN infrastructure markets first, and then acknowledge that enforcement of Open Internet Regulations, including documenting large ISPs’ interconnection practices, remains critical to the preservation of competition and user choice.

⁴ Streaming Media Blog, [2023](#), [2024](#)

⁵ [Lumen](#), [GlobalDots](#), [iORiver](#), [StackPath](#)

⁶ Draft BEREC Report on the entry of large content and application providers into the markets for electronic communications networks and services, page 54.

⁷ [BEREC](#), [2022](#)

⁸ [Google](#), [2023](#); [Apple](#), [2023](#); [Meta](#), [2023](#); [Amazon](#), [2023](#); [Microsoft](#), [2023](#)

⁹ [Deutsche Monopolkommission](#), [2023](#) ; “it is not apparent that OTT providers are abusing their increased bargaining power in a harmful way” (translated from German)