

Net neutrality: zero rating vs. paid prioritization

A. Gautier and R. Somogyi

Abstract: Internet Service Providers (ISPs) are platform that connect content providers with users. The neutrality principle prohibits discrimination on the internet and imposes to the ISPs the duty of treating all data packets equally. This means that the principle of net neutrality prohibits both content-based discrimination and financial discrimination of content. With content-based discrimination, the ISP gives priority to some privileged content over the others. Priority is given either according the type of data, their origin (privileged content) or their destination (privileged users). In a context of data congestion, the prioritized content has a better quality --faster delivery-- while the non-prioritized content types experience congestion in the form of jitters and/or delays. Giving priority to one content over the others is a way for the platform to differentiate further the different content providers (CPs) by adding another dimension of differentiation, the delivery speed. Obviously, as this can provide an advantage to the prioritized content or, alternatively, a disadvantage to the non-prioritized ones, the content providers are ready to compensate the ISP for having the priority. With financial discrimination, the ISP charges different rates for different contents on the internet. A typical example of financial discrimination is mobile data plans with zero-rated content. With such a contract, users subscribe for a package with a monthly data cap but the usage of some content (e.g. Facebook or Netflix) does not count against this data cap. Zero-rating is another way to create differentiation between content types, financial in this case.

Regulators both in the US and in the EU have a contrasted attitude towards paid prioritization and zero-rated content. While paid prioritization is currently prohibited, zero-rating is generally tolerated (see FCC's Open Internet Order and BEREC's Guidelines for net neutrality). The objective of this paper is to evaluate this differentiated policy towards the two types of discrimination. More specifically, we construct a model to compare three regulatory regimes that could be applied to the mobile internet market: net neutrality, paid prioritization and zero rating.