



Centre on Regulation in Europe
Improving network and digital industries regulation

A fresh look at zero-rating

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Zero-rating as a tariff option

- **Usually exercised in mobile networks**
- **Tariff with a certain data allowance**
 - zero-rated content then does not count against that allowance.
- **Possibly includes throttling**
 - an ISP's enforcement of a speed limit for some or all types of service

How to deal with zero-rating offers?

- **ISP's and society's interests not necessarily aligned**
- **Case-by-case analysis necessary**
- **An economic assessment of first-order importance**
- **A prohibition must be based on a convincing theory of (consumer) harm**

Crucial questions to assess zero-rating

1. Does becoming a partner require monetary or non-monetary payments (e.g. payments in data) from the content partner to the ISP?

2. Is zero-rating part of a vertically integrated offer by the ISP?

3. Is there non-discriminatory access to becoming a zero-rated content partner?

4. Which implied or explicit costs have to be borne by CPs to become a content partner?

5. Do there exist contract offers to consumers without zero-rating that correspond to those with zero-rating?

6. Can zero-rating be easily switched on and off by consumers (e.g. on an hourly or daily basis)?

7. Does (and if so, under which circumstances) zero rating lead to a different transmission quality of content by zero-rated partners?

8. Does (and if so, under which circumstances) zero rating lead to a different transmission quality of content by non-partners?

9. With respect to transmission quality, are different types of content treated differently under zero-rating?

Consumer flexibility

- **Prohibition of certain contractual forms strong interventions in the market**
 - have to be based on a sound theory of harm
- **Crucial to evaluate the extent to which users are able to activate and deactivate a (throttled) zero-rated tariff option**
- **If activation/deactivation is easy and instantaneous, a sound economic theory of harm for consumers will in many cases be hard to establish**

Non-discriminatory, low-cost access

- **Condition 1: access to zero-rated partner programs non-discriminatory**
- **Condition 2: becoming a zero-rated partner entails low barriers to entry**
- **Then a sound theory of harm for content providers will usually not be given.**

Throttling

- **Mitigates congestion problems during peak times**
- **Can be in the interest of consumers if reduction in quality of experience is tolerable**
- **Can be in the interest of content providers, because consumers may spend more time under data allowance**
- **Also likely to contribute to a reduction of illegal content**

Throttling and network capacity

- **Throttling pragmatic means to achieve more efficient utilisation of network capacity through load shifting and peak clipping**
- **Installing more network capacity just to handle avoidable peak load traffic would lead to significant social costs in itself, e.g.:**
 - because more cell towers need to be installed in somebody's neighbourhood (often appealed by citizen's initiatives)
 - higher energy consumption
 - more electromagnetic interference

Throttling and MVNOs

- **Throttled zero-rating tariffs affect competition between mobile network operators (MNOs) and MVNOs**
- **MVNOs may not be able to compete on equal footing with MNOs when wholesale contracts are based on traffic volume**
 - traffic volume likely to rise under zero-rating
 - MVNOs do not benefit (as much) from peak-clipping
- **This issue has been neglected in the debate so far**

Competing (infrastructure-based) ISPs

- **Likely a safeguard against severe rent extraction**
- **Renders zero-rating and throttling as an exploitative device unlikely**
- ***Paradox 1:***
 - Net neutrality debate originated in the USA due to consumers' concerns of monopoly power
 - Despite higher market power of ISPs in the USA, now more contractual freedom in the USA
- ***Paradox 2:***
 - In the USA, mobile networks were explicitly exempt from most of the net neutrality regulation in FCC's 2010 "Open Internet Order"
 - It is specifically in the competitive mobile environment in Europe where strict neutrality rules are exercised in the context of zero-rating

Category-based throttling

- **Existing EU regulation requires all content belonging to the same content category to be treated equally with respect to throttling**
 - In particular, independent of whether a content provider opted for zero-rating or not
- **a negative externality on those content providers that do not wish to be zero-rated for some reason.**
- **possibly negative incentive on content providers to offer innovative services**

Category-based throttling: Inconsistency

- **Existing EU regulation: IAS that allow access only to certain (categories of) content and block or throttle all other content are per se illegal**
- ***Inconsistency 1:***
Throttling in end-users' devices (e.g. through mobile operating system), not illegal per se, because this is not covered by the regulation.
- ***Inconsistency 2:***
 - Offering tariff with low speed (i.e. throttling all content) is legal.
 - Offering tariff with high speed (i.e. no throttling) is legal.
 - But combination of legal tariffs (unthrottled, throttled) is illegal.

Category-based throttling: Economics

- ***Economics*: Consumers should be allowed to voluntarily opt for throttling of certain traffic categories, say video streaming service, in order to economise on their data allowance, even without consideration of zero-rating**
 - if a comparable plan where all content is unthrottled or not blocked available
 - if market environment competitive
- **Throttling of certain categories rather than universal throttling should be seen in a favourable light**
 - allows for experimentation in new services (not throttled)
 - at the same time reduces traffic volumes at peak time in well-established categories (e.g. video streaming)

Conclusions

- **Regulatory interventions that rule out certain contractual agreements are strong interventions, requiring a solid theory of harm**
- **In competitive mobile telephony market environments, theory of harm hard to establish**
- **From an economic point of view, throttling should be seen more favourably**
- **Regulatory attention is warranted with respect to**
 - impact of throttling on competition between MNO and MVNOs
 - user's ability to activate/deactivate zero-rating
 - discriminatory access to partner programs and exclusive partners/vertical integration
- **Need for case-by-case analysis**
- **Application of ex-ante regulation or ex-post competition law?**