The real threat to the open Internet is zero-rated content

*Written for the World Wide Web Foundation by Antonios Drossos of Rewheel.*

Zero-rating has now become the neuralgic point in the net neutrality debate on both sides of the Atlantic

In Europe, ten small member states put forward a net neutrality proposal that, if adopted, would ban harmful price discrimination practices such as zero-rating. The proposal is fiercely opposed by big EU member states and their dominant telecom groups. The Netherlands and Slovenia, two countries that have already enshrined real net neutrality in their national laws, issued enforcement orders for zero-rating violations. In January, the Dutch Consumer and Markets Authority, ACM, fined Vodafone for zero-rating HBO Go mobile video streaming while the Slovenian regulator ordered Telekom Slovenia and Telekom Austria to stop zero-rating music streaming and cloud storage applications. Chile’s 2014 net neutrality legislation also bans price discrimination practices such as zero-rating. In 2014, the Norwegian, German and Austrian telecom regulators publicly asserted that zero-rating infringes net neutrality.

On the other side of the Atlantic, the Canadian telecom and media regulator (CRTC) has banned zero-rated mobile video streaming services while in the US the Federal Communication Commission (FCC) has released its much anticipated draft net neutrality rules. The FCC has proposed to reclassify broadband internet access service as a telecommunication service under Title II of the US Communication Act and centred its net neutrality proposal on three so called *Bright Line Rules:* 1) no blocking 2) no throttling 3) no paid prioritization commonly referred to as ‘fast lanes’.
In 2014 the net neutrality debate shifted from the narrow definition of no blocking and no throttling to an outright ban of paid prioritization

Back in 2013, Neelie Kroes, an ex Vice President of the European Commission responsible for the EU’s Digital Agenda, submitted her net neutrality version centred on two rules: 1) no blocking 2) no throttling. VP Kroes’s net neutrality ‘lite’ approach had much in common with FCC Chairman Tom Wheeler’s initial net neutrality proposal. While both proposals would have banned blocking and throttling they would have allowed paid prioritization. However, paid prioritization and ‘fast lanes’ were flat out rejected by the American and European consumers, digital start-ups, internet heavyweights and literally everybody else except the telecom and cable operators (ISPs) and their investors aspiring to becoming the de facto gate keepers of the internet.

The European Parliament’s and President Obama’s interventions in April and November 2014 respectively tipped the scales against paid prioritization and internet ‘fast lanes’. So has the open internet been saved and will it remain free from ISP discriminatory gate keeping practices?

No! Zero-rating and other harmful forms of price discrimination are eating away the neutrality of the internet

Zero-rating, the practice of not counting the traffic generated by ISPs’ own or their partners’ services against the end-users’ monthly volume (gigabyte) caps, has spread rapidly in 2014 from the emerging markets to Europe and North America. The Digital Fuel Monitor has tracked and reported 92 vertically price discriminated zero-rated mobile services in OECD countries as of November 2014. By late 2014, non-discriminatory neutral mobile internet access, free from zero-rating, was confined mainly to Scandinavia. Elsewhere in OECD 36 mobile operators were zero-rating their own data-hungry mobile video services while 10 operators were zero-rating their own mobile cloud storage services. Among the handful third party services that got zero-rated were Google’s YouTube & subscription film store, HBO’s GO mobile film store, music streaming apps such as Spotify and Deezer, WhatsApp, Facebook and Twitter.

Back in April 2014 in a GigaOM op-ed, we warned that zero-rated traffic is blunt anti-competitive price discrimination designed to favour mobile operators’ own or their partners’ services while placing competing internet services at a disadvantage. A zero-rated app is an offer consumers can’t refuse, I wrote. The telecom industry dismissed our assertions as fear mongering and was quick to highlight the positive side of zero-rating. Indeed, zero-rating enables poor and disadvantaged communities that do not have access to affordable fixed broadband or cannot afford mobile internet subscriptions,
to gain access to parts of the internet. Or to be more precise, to gain access to Facebook or ISPs’ walled gardens. Zero-rating data-light applications such as Facebook in emerging markets where even the tiniest volume of open mobile internet (e.g. 500MB per month) is unaffordable to the masses causes consumer and competitor harm. In OECD markets, where open mobile internet usage prices are, generally speaking, more affordable for data-light applications such as Facebook and Twitter than in emerging markets, ISPs eye the data-hungry mobile video and cloud markets. As shown in the table below, by zero-rating their own mobile TV & film store services, operators are foreclosing the mobile internet video market by placing all other competitors (e.g. Netflix, Vimeo) at a disadvantage. Zero-rated video offered by mobile operators is an offer consumers cannot refuse. Watching third party internet video over their open mobile internet plans instead of the zero-rated ones would eat up the monthly data allowances in the matter of hours or set them back few hundred EUR per month. That is clear!

<table>
<thead>
<tr>
<th>Operator group</th>
<th>EU market</th>
<th>Price &amp; Gigabytes</th>
<th>Price additional Gigabyte</th>
<th>Telco zero-rated video (TV/films)</th>
<th>Open internet video (max allowed time to watch HD video in open internet plans)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TeliaSonera</td>
<td>Finland</td>
<td>€25 (50 Gigabytes)</td>
<td>€0.2</td>
<td>No</td>
<td>Practically unlimited</td>
</tr>
<tr>
<td>Hutchison 3</td>
<td>Austria</td>
<td>€36 (14 Gigabytes)</td>
<td>---</td>
<td>Yes (Unlimited 24/7)</td>
<td>5 hours per month</td>
</tr>
<tr>
<td>Orange</td>
<td>Spain</td>
<td>€40 (5 Gigabytes)</td>
<td>€10</td>
<td>Yes (Unlimited 24/7)</td>
<td>2 hours per month (€50 per additional hour)</td>
</tr>
<tr>
<td>Deutsche Telekom</td>
<td>Hungary</td>
<td>€45 (5 Gigabytes)</td>
<td>---</td>
<td>Yes (Unlimited 24/7)</td>
<td>2 hours per month</td>
</tr>
<tr>
<td>Telekom Austria B1</td>
<td>Bulgaria</td>
<td>€55 (10 Gigabytes)</td>
<td>---</td>
<td>Yes (Unlimited 24/7)</td>
<td>3 hours per month (Not allowed to buy more!)</td>
</tr>
<tr>
<td>Vodafone</td>
<td>Romania</td>
<td>€59 (6 Gigabytes)</td>
<td>€10</td>
<td>Yes (Unlimited 24/7)</td>
<td>2 hours per month (€10 per additional hour)</td>
</tr>
<tr>
<td>Telecom Italia</td>
<td>Italy</td>
<td>€86 (13 Gigabytes)</td>
<td>---</td>
<td>Yes (Unlimited 24/7)</td>
<td>5 hours per month (Not allowed to buy more!)</td>
</tr>
</tbody>
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Telecom groups are foreclosing the internet video market by overpricing mobile internet Gigabytes while prioritizing (zero-rating) their TV/film services!

Digital Fuel Monitor has shown in November 2014 that in many OECD markets where mobile operators launched zero-rated film stores and TV services, consumers are either not allowed to buy more than a few (5-10) gigabytes at all or most likely, they cannot afford to buy more because the price of additional gigabytes is prohibitively expensive (e.g. €10 per gigabyte). Consumers are harmed because their choice of internet video services is severely restricted.

Zero-rating is particularly harmful in mobile internet access markets where ISPs collectively set low volume caps. In most fixed internet access markets where gigabyte volumes are unlimited and as well in few mobile internet access markets where gigabyte volumes are very accommodative (e.g.
Finland) zero-rating poses a benign threat. However, this could soon change. In 2013, Deutsche Telekom announced a plan that will cap the volume of fixed internet access connections but it will exempt its own IPTV (zero-rated) video service. The reaction from German authorities was swift. A German court blocked Deutsche Telekom’s plan on the basis of consumer protection law while the German telecom regulator Bundesnetzagentur carried and investigation and warned Deutsche Telekom that zero-rating could infringe net neutrality.

The core issue in the net neutrality debate is the price of open Internet access

Mobile operators have a fundamental conflict of interest in selling both open internet access and as well their own or their selected partners’ online video and cloud services. If price discrimination such as zero-rating is not banned, mobile operators have an incentive to favour their own services by zero-rating the usage (selling gigabytes at zero cost) while collectively overpricing the gigabyte usage of all other internet services.

However, there are exceptions. In competitive markets such as Finland, mobile operators have already fully embraced a non-discriminatory open internet access model. Finland is ranked no.2 behind Denmark by the Web Index compiled by the Web Foundation. The Web Index measures the Web’s contribution to social, economic and political progress in countries across the world. According to Digital Fuel Monitor research, Finland has the lowest mobile internet usage (gigabyte) prices, the highest mobile broadband penetration, the highest mobile data consumption per capita and the second highest average mobile network speeds behind South Korea among the OECD countries. It is important to note that while Finland is free of zero-rating, the practice is widely used in Denmark.

In Finland’s three-player mobile market, two operators sell competitively priced, truly unlimited volume mobile internet plans while the third, TeliaSonera, sells plans with very large volume caps. TeliaSonera, currently sells a 50 gigabyte 150Mbps 4G smartphone plan with unlimited minutes and SMS for as low as €25. If TeliaSonera customers deplete their 50 gigabyte allowance they can buy more data for as low as €0.2 per gigabyte. On the other side of the Atlantic, AT&T, sells a 50 gigabyte 4G smartphone plan with unlimited minutes and SMS for as much as $390. That is roughly 15 times more than TeliaSonera’s Finnish price! Furthermore, AT&T sells additional allowances for as much as $15 per gigabyte or roughly 75 times more expensive than TeliaSonera’s gigabyte prices. Moreover, €25 that buys consumers 50 gigabytes of open mobile internet access in Finland would not even buy AT&T customers 0.3 Gigabytes. In competitive markets like Finland, where mobile internet access prices are very affordable and volumes are practically unlimited, zero-rating could do no harm!
If zero-rating is not banned, mobile operators are incentivized to set low volume caps in order to enhance the appeal of their own zero-rated services

This point was recently reiterated by 36 leading US scholars. In their letter, addressed to FCC, the scholars called for a ban on all forms of paid prioritization (including zero-rating) and highlighted the inadequacy of competition law in addressing all net neutrality violations. The scholars wrote “Antitrust cannot practically prevent the other two competition problems associated with paid prioritization: excessive access charges imposed by terminating monopolists and their incentive to degrade non-priority traffic or set low monthly bandwidth caps”.

Empirical Digital Fuel Monitor research shows that the scholars have every reason to be concerned. During the fourth quarter of 2014, several OECD mobile operators that have launched zero-rated video services have at the same time hiked the price of open mobile internet usage. Price hikes of mobile internet usage by operators that have launched zero-rated video services were particularly pronounced in recently consolidated mobile markets. In the Austrian market, where the number of mobile operators went down from four to three, post-merger mobile internet usage prices have almost doubled. At the same time, all three mobile operators, which post-merger collectively control over 90% of the mobile internet access market, have launched potentially anti-competitive zero-rated mobile TV and film streaming apps for flat fees of few Euros per month.

Banning zero-rating leads to lower mobile internet access prices, evidence shows

If price discrimination such as zero-rating is banned, mobile operators are commercially incentivized in pushing down the price of open internet (or conversely push the monthly volume caps as high as possible) in order to encourage the carefree usage of, first and foremost, their own video and cloud services.

In the Netherlands, where zero-rating is banned, KPN just doubled (free of charge) the mobile internet volume caps to encourage a carefree usage of its online videos. KPN’s action is the first empirical evidence of the pro-competitive benefits of real net neutrality rules that ban zero-rating and all other forms of price discrimination.
Net neutrality rules that do not ban zero-rating practices will prove toothless

The FCC does not intend to ban outright price discrimination: zero-rating is not included in FCC’s Bright Line Rules. The FCC plans to deal with zero-rating under the General Conduct Rule if complaints are filed. Bloomberg reported that FCC’s senior officials weren’t convinced zero-rating is necessarily a bad thing and see less urgency to act on an issue that largely happens overseas. These comments are rather odd.

According to Digital Fuel Monitor, while there are 92 zero-rating reported discriminations in OECD, we did not find a single case of ‘fast lanes’ discrimination. Why did the FCC propose to ban a discriminatory practice like ‘fast lanes’ with no real market examples while it ignored the most common discrimination form which is also present in the US? Note that President Obama, in his intervention, asked for an explicit ban “on paid prioritization and any other restriction that has a similar effect”.

The FCC’s senior officials, quoted by Bloomberg, did draw a line in the sand: a) zero-rating own or affiliate content and b) zero-rating 3rd party apps for a fee will cross the line while c) zero-rating 3rd party applications or applications classes (e.g. T-Mobile US music streaming service) without a fee could be found acceptable. However, Gigi Sohn, an FCC Special Counsel, stated that “any internet service provider practice that harms user choice or edge providers ability to make their content, application and services available to users will be looked at for whether it is discriminatory or not”. Zero-rating does not per-se restrict the availability of all other non zero-rated services. However, the flip-side of zero-rating severely restricts the usability of all other non zero-rated services which get throttled as soon as end-users deplete their artificially low volume caps.

Net neutrality is more, much more, than protecting consumers or competitors from economic harm. Net neutrality is also about media plurality and freedom of speech. Andurs Anip, Vice President of the European Commission responsible for the Digital Single Market, stated when I asked him about zero-rating and price discrimination: “No company has the right to act as a gatekeeper of the internet”. Quite right! As The Economist recently put it, telco consolidation and zero-rating could lead to asymmetrical influence over what customers read, see, hear and even think while they are online.

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