

Net neutrality is about the price of open internet access, more and more EU governments realize

Banning vertical price discrimination (e.g. zero-rating) will commercially incentivize telecom operators that venture into the content business to drive down the price of open internet access

Rewheel/Digital Fuel Monitor research note, 1st December 2014

On the 27th November 2014, last Thursday, on the European Council¹ the representatives of the 28 EU Member States discussed, among other topics, the proposed Europe-wide regulation of net neutrality. The **Dutch** representative stressed that the regulation should **explicitly ban vertical price discrimination** of specific internet services, content and applications. **Slovenia, Hungary** and several other Member States have endorsed the Dutch proposal and asked for the explicit ban of price discrimination in the context of the net neutrality regulation.

- ⇒ **Premium content:** The transcript of the relevant statements made by those Member States that endorsed the explicit ban of price discrimination is available for premium Digital Fuel Monitor subscribers at http://dfmonitor.eu/insights/2014_dec_premium_EU_price_discrimination

The most widely used vertical price discrimination of mobile services, content or application is so called 'zero-rating'. Zero-rating refers to the practice of not counting the gigabyte consumption of selected mobile services, content or applications against the monthly internet-access volume cap. So the selected services, content or applications are offered with unlimited volume while all other internet services, content and applications are throttled after the end-user has reached its monthly internet-access volume cap.

¹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/trans/145957.pdf

Net neutrality and vertical price discrimination: history

Below we briefly outline how during 2014 the issue of price discrimination (in particular zero-rating) has shifted into the centre of the public debate on net neutrality:

- ⇒ April 2014, **Digital Fuel Monitor** report: *“List of potentially anti-competitive zero-rated apps launched by EU’s incumbent telcos”*²
- ⇒ April 2014, **Digital Fuel Monitor** article: *“Forget fast lanes. The real threat for net-neutrality is zero-rated content”*³
- ⇒ April 2014, **Rewheel** letter in the **Financial Times** *“Stakes couldn’t be higher for single telecom market”*⁴
- ⇒ April 2014, **Rewheel** letter in the **Wall Street Journal** *“Enshrining zero-rated mobile specialized services in EU law could suffocate the democratization of open mobile-Internet access”*⁵
- ⇒ June 2014 **Digital Fuel Monitor** report *“Still not convinced that some EU telcos are trying to foreclose the mobile cloud storage market?”*⁶
- ⇒ In August the **German telecom regulator** concluded⁷ that vertical price discrimination of different internet services violates net neutrality
- ⇒ In October **Digital Fuel Monitor** reported⁸ that vertical price discrimination had started to become wide spread in Europe *„List of 75 zero-rated, potentially anti-competitive mobile applications/services, violating net neutrality, in EU28”*
- ⇒ In October the **EU Commission**, following an inquiry by **Rewheel**, has taken a public position that price discrimination does NOT per se violate net neutrality⁹
- ⇒ In October **BEUC**, the European Consumer Organisation has asked **BEREC** (Body of European Regulators for Electronic Communications) to address zero-rating in its work programme.¹⁰
- ⇒ In November the **Washington Post** quoted **Rewheel** and cited **Digital Fuel Monitor** data in the article titled *„Hungary’s crazy-expensive Internet is driving people to throw their computers into the street”*¹¹
- ⇒ In November the **Norwegian telecom regulator** (NPT) has unambiguously stated that zero-rating (a form of vertical price discrimination) violates net neutrality¹²
- ⇒ Last week (November) **EDRi**, A civil organisation protecting European digital rights, citing **Digital Fuel Monitor** research, warned that *“The European Commission is energetically defending the ‘right’ of telecoms operators to use price discrimination, arguing that this is not a breach of net neutrality”*¹³
- ⇒ Last week (November) **BEUC**, the European Consumer Organisation in a press statement called for *“detailed [EU net neutrality regulation] parameters preventing malpractice such as price discrimination”*¹⁴, referencing **Rewheel**

² http://dfmonitor.eu/insights/2014_apr_premium_zerorate/

³ <https://gigaom.com/2014/04/26/forget-fast-lanes-the-real-threat-for-net-neutrality-is-zero-rated-mobile-traffic/>

⁴ <http://www.ft.com/intl/cms/s/0/d4cd0d8e-b8e2-11e3-835e-00144feabdc0.html> (FT subscription required)

⁵ <http://online.wsj.com/articles/SB10001424052702303978304579475220392710580> (WSJ subscription required)

⁶ http://dfmonitor.eu/insights/2014_june_premium_cloud/

⁷ http://dfmonitor.eu/insights/2014_sept_premium_germany_zerorating/

⁸ http://dfmonitor.eu/insights/2014_oct_zerorate/

⁹ <https://gigaom.com/2014/10/20/is-zero-rating-a-net-neutrality-issue-europes-outgoing-digital-chief-doesnt-think-so/>

¹⁰ http://berec.europa.eu/files/document_register_store/2014/10/BoR_%2814%29_161_Outcome_stakeholder_forum_2014-10-28.pdf

¹¹ <http://www.washingtonpost.com/blogs/the-switch/wp/2014/10/28/hungarys-crazy-expensive-internet-is-driving-people-to-throw-their-computers-into-the-street/>

¹² http://dfmonitor.eu/insights/2014_nov_net_neutrality_tide/

¹³ <https://edri.org/price-discrimination/>

¹⁴ <http://www.beuc.eu/publications/eu-telecoms-council-roaming-and-net-neutrality-stake/html>

Conflict of interest in selling both open internet access and as well own competing internet or specialized access services/content/applications

Telecom operators that actively seek to sell beside open internet access their own competing internet or specialized access services/content/applications, if allowed to price discriminate, are commercially incentivised to favour their own services by keeping open internet access relatively expensive.

Widespread practices to keep open internet access relatively expensive:

- ⇒ Some low-end smartphone tariff plans come with restricted internet access, explicitly blocking specific application types such as 'OTT' voice over IP and/or messaging applications (e.g. Viber, Skype). These 'OTT' applications are negatively price discriminated because the user has to pay a higher price for the internet-access service in order to be able to use them, while other internet applications and content are not blocked on affordable tariffs.
- ⇒ Some low-end smartphone tariff plans explicitly ban and block so called tethering (connecting external devices, such as Laptop to the internet via the smartphone's internet connection). This practice negatively price discriminates not a specific content or application but the way the user accesses the internet. On cheaper tariff plans the user can access the internet only from its smartphone, if it pays more, it can access it from other connected devices too.
- ⇒ Some affordable smartphone tariff plans come with very restricted internet access gigabyte volume (e.g. 500 MByte or 1 or 2 Gigabytes). Using an internet-based video service depletes such a low monthly gigabyte cap in a few hours. At the same time, to specific content and applications, such as the telco's own video service (or **YouTube**¹⁵) or mobile cloud storage application, the user gets either unlimited access, or there is a many times higher monthly volume cap than for the general internet access.

Banning vertical price discrimination: turns around telcos' commercial interests

If telcos would be banned from selling internet access for their own or their commercial/strategic partners' internet content and services with different volume allowances or gigabyte price than for general open internet access, then they would be commercially incentivized in pushing down the price of open internet gigabytes as low as possible (or conversely push the monthly volume caps as high as possible). Otherwise, the low monthly volume caps would inhibit their customers from using the services of not only their internet based competitors, but also from using the telcos' own services.

¹⁵ http://dfmonitor.eu/insights/2014_nov_premium_google/

The Nordic-Baltic model: telco online services without vertical price discrimination

As of December 2014 the Nordic and Baltic countries are the only ones in Europe where none of the mobile operators have started practicing vertical price discrimination (zero-rating). Digital Fuel Monitor data also shows that open mobile internet access tends to be the most affordable, volume caps the most accommodative in these countries (e.g. in Finland two out of the three mobile operators sell unlimited volume for all of its data tariff plans, while the third sells a 50 Gigabyte smartphone plan for €20). In the Nordics and Baltics, just like in other countries, mobile operators are heavily venturing into selling music, video and cloud based internet applications – however, they do it on a neutral basis, they do not use price discrimination to favour their own or their partner's services.

Exhibit 1: Map of European countries affected by zero-rating

Map of European countries affected by zero-rating

■ Open mobile internet: none of the mobile operators apply discriminatory pricing by zero-rating* their own or selected 3rd party content

■ Vertically price-discriminated mobile internet: at least one mobile operator applies discriminatory pricing by zero-rating* their own or selected 3rd party content

Included zero-rated application categories:

- Cloud storage (e.g. Orange cloud, Vodafone cloud)
- TV or movie streaming (e.g. T-MobileTV, 3Videothek, HBO, YouTube)
- Music streaming (e.g. TIMmusic, Spotify)
- Socialmedia or messaging (e.g. Joyn, Facebook)

Banning vertical price discrimination would enforce the Nordic-Baltic neutral, nondiscriminatory business model on all EU telcos



* zero-rating: exempting data consumption of telco's own or selected 3rd party applications from the monthly internet gigabyte volume cap. A form of vertical price discrimination, 'paid prioritization', the violation of net neutrality.

Source: Digital Fuel Monitor http://dfmonitor.eu/insights/2014_oct_zerorate/

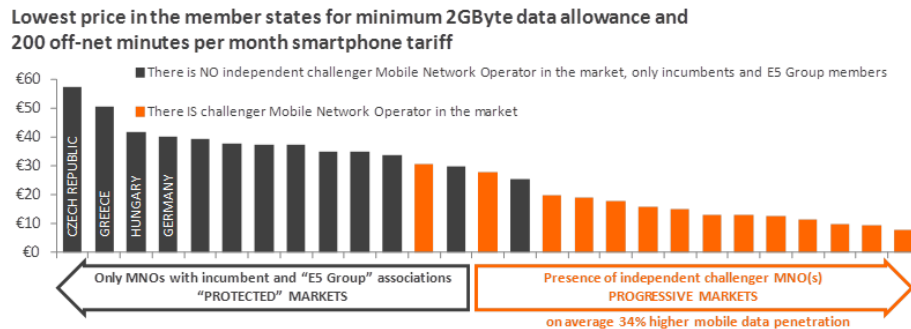
Imposing an EU-wide regulatory ban on vertical price discrimination would enforce the Nordic-Baltic business model template on all mobile and fixed-line operators (internet access providers) in the European Union. We are convinced that this would be without a doubt the simplest, most effective regulatory tool to make mobile operators truly incentivised in competing on the price, volume caps and speed of open internet access.

By actively promoting net neutrality and the ban of vertical discrimination European telcos could mitigate a much bigger long term regulatory risk: the mandatory structural separation of their internet access and content/services businesses.

Price of open mobile internet access in Europe and OECD countries: history, alarming disparities

Rewheel and Digital Fuel Monitor have been systematically tracking and analysing the price of mobile internet access in Europe (and since Q1 2014 also in all OECD countries). Our research has shown that there are alarming differences in the price levels.

- ⇒ December 2012: **Rewheel EU27 smartphone tariff competitiveness report** – Telco groups' protective pricing widens digital divide between poor and wealth member states (available for Digital Fuel Monitor premium subscribers)¹⁶



Source: Rewheel EU27 smartphone tariff competitiveness report, December 2012

- ⇒ “Research shows that users pay up to ten times more to use their smartphones in those Member States where there is no challenger to the big European operators”, **Joaquín Almunia** citing Rewheel research¹⁷
- ⇒ “Mobile users pay up to 10 times more to use smartphones in EU countries that lack an independent “challenger” telecoms group outside the large, dominant pan-European operators, according to research” **Financial Times** article reporting on the Rewheel research, 9 January 2013¹⁸
- ⇒ **Rewheel EU27 mobile data cost competitiveness report - May 2013**¹⁹
- ⇒ “European smartphone users face huge price disparities – study”²⁰, **Reuters** article reporting Rewheel research, 22 May 2013

Vertical price discrimination threatens not only mobile but also fixed-line internet access services

Today most of the fixed-line internet offers (DSL, cable and fibre) come with unlimited volume allowance, therefore vertical price discrimination (at least in the volume dimension, that is: zero-rating) is currently not a relevant issue. However in Germany Deutsche Telekom has already announced²¹ and later reiterated²² its plan to migrate its customers from unlimited to volume-tiered internet-access plans and to exempt some of its own services from the volume caps.

¹⁶ http://dfmonitor.eu/insights/2013_jan_premium_EU27_benchmark/

¹⁷ http://europa.eu/rapid/press-release_SPEECH-13-168_en.htm

¹⁸ <http://www.ft.com/intl/cms/s/0/b6636c90-5a55-11e2-a02e-00144feab49a.html> (FT subscription required)

¹⁹ http://dfmonitor.eu/insights/2013_may_EU27_benchmark/

²⁰ <http://www.reuters.com/article/2013/05/22/eu-mobile-pricing-idUSL6N0E34FM20130522>

²¹ <https://gigaom.com/2013/04/25/deutsche-telekoms-anti-net-neutrality-plans-alarm-german-government/>

²² <http://www.reuters.com/article/2013/12/02/us-deutschetelekom-flatrate-idUSBRE9B10BT20131202>

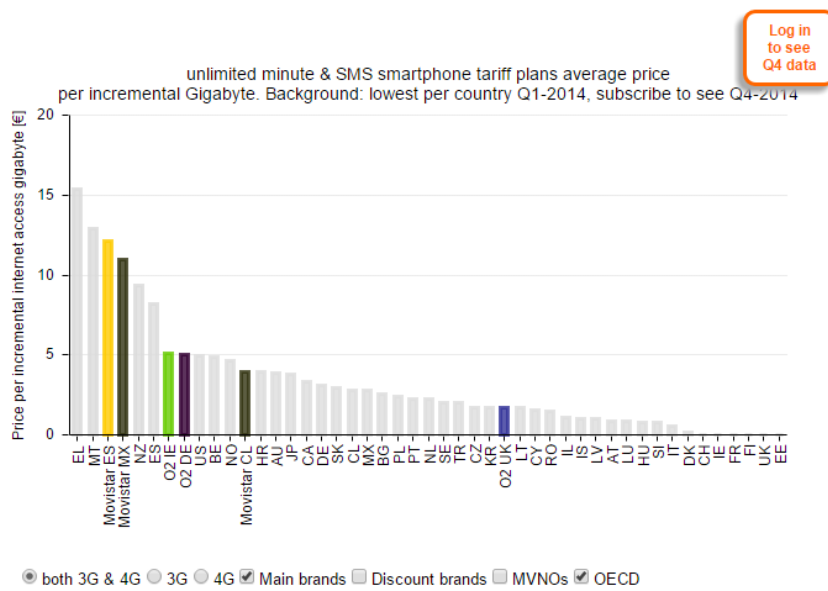
Digital Fuel Monitor: a unique service monitoring open mobile internet access prices and other key competitiveness indicators in all EU & OECD countries

At **dfmonitor.eu** Digital Fuel Monitor tracks and analyses smartphone and dedicated data-only internet-access prices, user perceived speed as well as adoption metrics such as penetration and gigabyte consumption per capita, in all EU and OECD countries. The time-delayed metrics (in December 2014 the Q1 2014 data) is available for free. In addition to the benchmarks, Digital Fuel Monitor regularly (approximately on a weekly, bi-weekly basis) releases research notes too. Most of them are available for premium subscribers only. Time to time free research notes (like this one) are released too.

The structured database and the interactive charts of Digital Fuel Monitor allow for easy benchmarking drill-downs, e.g:

- ⇒ **dfmonitor.eu** – benchmarking average prices and speeds across all EU member states
- ⇒ **dfmonitor.eu/DE** – benchmarking all operators (prices, speeds) in Germany
- ⇒ **dfmonitor.eu/UK** – benchmarking all operators (prices, speeds) in the United Kingdom
- ⇒ **dfmonitor.eu/US** – benchmarking all operators (prices, speeds) in the United States
- ⇒ **dfmonitor.eu/Vodafone** – benchmarking prices and smartphone user experienced speeds of Vodafone in all EU & OECD countries
- ⇒ **dfmonitor.eu/DeutscheTelekom** – benchmarking prices and smartphone user experienced of Deutsche Telekom in all EU & OECD countries
- ⇒ **dfmonitor.eu/Telefonica** – benchmarking prices and smartphone user experienced of Telefonica in all EU & OECD countries

Example: **Telefonica** prices across different countries

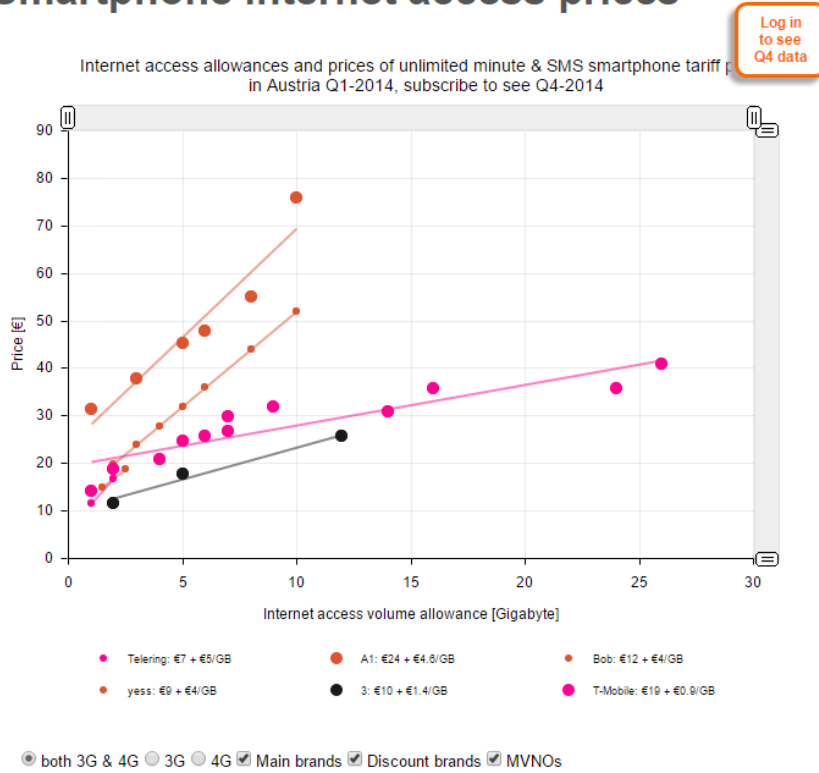


Source: snapshot taken from dfmonitor.eu/Telefonica

Digital Fuel Monitor tracks prices not only along different usage baskets (e.g. 2 GByte/month basket) but also in terms of the **price of incremental gigabyte usage**. This aspect is becoming increasingly significant in the context of net neutrality and impact analysis of vertical price discriminations. As of December 2014 the feature of analysing and benchmarking price per incremental gigabytes is **unique** to Digital Fuel Monitor.

Exhibit 2: Approximate price of incremental gigabyte usage is the slope of the linear trend lines (dots depict individual tariff points) – example: Austria

Smartphone internet access prices



Source: example snapshot taken from <http://dfmonitor.eu/AT>

Digital Fuel Monitor: an invaluable resource for telecom groups, regulators, analysts and internet services companies

Digital Fuel Monitor’s premium subscribers include Nordic, European and global telecom groups and several EU telecom & media regulators and competition authorities. The EU Commission’s Directorate General Competition also has (royalty free) privileged access to Digital Fuel Monitor’s premium contents. Some of the world’s leading global internet services companies, whose strategy relies on mass-affordable open mobile internet access, are also among the premium subscribers.

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