Mobile Broadband prices

Prices as of February 2015

Executive Summary

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van DIJK
MANAGEMENT CONSULTANTS

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The completion of the Digital Single market being one of the 10 priorities of the Juncker Commission, the developments in the electronic communications market continue to be closely monitored by the EC. In recent years, elements like coverage and take-up of mobile broadband have been added to fixed broadband indicators, and as of 2015, the Commission wishes to monitor and analyse the prices of mobile broadband.

The "Mobile Broadband prices" study aims at analysing and comparing what residential customers actually pay for mobile broadband in the EU28, three other European countries (i.e. Norway, Iceland and Turkey) and some non-EU countries (i.e. the USA, South Korea and Japan).

This report presents the results of the analysis of mobile broadband offers that were collected in February 2015. The approach used is that of the 2012 OECD methodology for mobile broadband\(^1\) which aims at calculating the total price (including the monthly fee, non-recurring charges and usage charges) of a set of offers in order to identify the least expensive offers for three different types of mobile devices (i.e. laptop, tablet and handset) and five different levels of usage (i.e. monthly volume consumed), in other words for 15 different combinations or “baskets”.

<table>
<thead>
<tr>
<th>Laptop use (data volumes)</th>
<th>Tablet use (data volumes)</th>
<th>Handset use (data volumes + voice/SMS basket)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basket 1</td>
<td>500 MB</td>
<td>250 MB</td>
</tr>
<tr>
<td>Basket 2</td>
<td>1 GB</td>
<td>500 MB</td>
</tr>
<tr>
<td>Basket 3</td>
<td>2 GB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Basket 4</td>
<td>5 GB</td>
<td>2 GB</td>
</tr>
<tr>
<td>Basket 5</td>
<td>10 GB</td>
<td>5 GB</td>
</tr>
</tbody>
</table>

Table 1: Mobile broadband baskets, proposed by OECD

Per operator, only offers that could potentially be the least expensive one for a given OECD basket have been collected. After a calculation of their average total monthly cost (on a 36 months basis), the least expensive offer per operator, and subsequently per country, was identified for each usage profile. These least expensive offer prices per country and per usage profile (subsequently called 'price’) are used as the key indicator for all analyses.

In view of the large number of usage profiles, distinguishing between good and bad performers is not always straightforward, as differences can occur between devices and usage volumes:

\(^1\) Methodology for constructing wireless broadband price baskets, OECD (2012): http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/ICCP/CISP%282011%295/FINAL&docLanguage=E
Figure 1: Clustering of countries based on prices for the least expensive offer available on handset (left) and laptop/tablet (right)\(^2\)

2 The least expensive offer available per basket is the lowest value of the least expensive laptop and least expensive tablet offer.
Within the **handset baskets**, Denmark, Estonia, Italy, Lithuania and the UK frequently perform very well, as do France and Latvia. On the other side of the ranking, the Czech Republic, Hungary, Malta and Portugal are expensive for all user profiles. In the higher baskets, the same goes for Cyprus, Slovakia and Greece.

For **laptop/tablet offers**, which are presented above in a grouped way (as in many cases identical or rather comparable offers are available for both - see below), results are somewhat different. Denmark, Italy (for higher baskets) and Lithuania (for lower baskets) again score very well, but other top rankers for these devices are Poland, and for several baskets also Austria, Finland and Sweden. In the high price range, Cyprus, Czech Republic, Portugal and Slovakia appear again, but this time they are accompanied by the Netherlands and (for the lower baskets) Romania.

When expressing these monthly prices as a **percentage of income**, especially Czech Republic, Greece, Hungary and Romania come out as bad performers, as on average more than 3% of income per capita is spent on mobile broadband, which is more than double the EU average of 1.45%. The good performance of Austria, Denmark, Finland and Italy is confirmed, as in these countries on average less than 0.8% of income per capita is spent on mobile broadband. Lithuania however loses its top rank when expressing monthly prices as a percentage of income, as it is situated just as high as the EU average.

From the ‘clustering’ analysis, some further observations can be drawn, that have given rise to more detailed analyses:

- The clustering graphs show (both for handset and for laptop/tablet offers) a clear and continuous rise in EU average prices for higher volumes, thus confirming the existence of a **positive data volume-price relationship**. Higher usage profiles however appear to give more value for money. Indeed, when expressing prices in unitary terms as a ‘cost per GB’, the latter at EU28 level in all cases drops between 30 and 50% between two adjacent usage profiles. Exceptions to the general rule arise most often when the basic data allowance included in the offer does not fit the basket usage profile (but no cheaper alternative exists at the operator or other operators of the same country);

- Prices for **handset offers** at first sight seem much higher than those of laptop/tablet offers, but it should be kept in mind that these offers, next to a data allowance, also include **voice minutes and SMS**. Moreover, to allow for meaningful comparisons, all handset offer prices also include **hardware** (smartphone): a basic smartphone (i.e. Nokia Lumia 530/630/635, Galaxy Young, HTC Desire 310) for Baskets 1 to 3 and an advanced smartphone (i.e. most often the Samsung Galaxy S5) for Baskets 4 and 5. As mentioned, **prices for laptop and tablet offers are much more comparable**. First of all, the equipment cost (e.g. USB stick, dongle or MiFi-modem) that in more than half of the countries is part of the laptop offer prices, is highest for the lowest baskets, but even then does not pass 2-3 EUR per month. Secondly, when abstraction is made of this equipment cost, in around half of the EU Member States prices for laptop and tablet offers of the same usage profiles are identical, most often implying that on the operators’ websites offers are proposed that can be used by choice either with tablet or laptop;

- While a **basic smartphone** represents on average around 3 to 3,5 EUR or 10 to 20% of the total monthly price, the **advanced smartphone** that is part of the two highest handset baskets has a monthly cost of around 15 EUR on average, in some cases even surpassing 20 EUR. Only the advanced smartphone therefore truly impacts on the relative performance of some countries. For instance if the Polish smartphone cost to be added to the monthly price would only be as high as
the EU average, they would end up in the top 5 of least expensive countries instead of around the 10th to 15th position.

When crossing the results of the mobile broadband prices study with mobile broadband take-up figures, it becomes apparent that a certain amount of **correlation appears to exist between prices and take-up**. Good illustrations of this are e.g. Denmark, Finland and Sweden, where low prices go hand in hand with high take-up figures; and Greece, Hungary and Portugal, where high prices and low take-up can be observed. However, this trend is not ubiquitous: for instance, Spain is situated in the upper price range, but scores very well in terms of take-up, and low prices in France, Italy, Latvia and Lithuania do not go hand in hand with high ranking broadband penetration.

Finally, **EU mobile broadband prices score relatively well compared to those in a selection of other countries worldwide**. Both in the handset and laptop/tablet based offers with lower usage volumes, the EU comes out cheaper than Japan, South Korea and the USA. In the highest baskets, it loses its first position to the USA (for handset) and South Korea (for laptop/tablet). This is because in these countries no low allowance offers exist on the market, and (relatively more expensive) offers with higher data allowances are thus the only solution to fulfil the lower basket requirements. This observation brings us to a final note: during the data collection exercise it has become clear that the **OECD usage profiles are not fully appropriate for many countries in the scope of the study** (e.g. because available offers exceed requirements for the highest usage baskets and/or countries do not offer products adapted to the lowest usage profiles). Results should thus be interpreted with caution, as the mobile broadband prices study does not give a fully representative picture for several countries.