

## **BEREC Analysis of Wholesale Roaming Costs**

**23 February 2012**

BEREC has now updated its analysis of wholesale roaming costs, based on further work by NRAs subsequent to the work reported in BoR (10) 58 in December 2010. BEREC considers that wholesale roaming caps should not be set at a level below the costs of provision of an efficient network operator.

In its 2010 Report, mentioned above, BEREC put forward what it believed to be cautious estimates of costs, based on the best information available at the time. In the light of the update, BEREC confirms its earlier view that the cost figures set out in the 2010 paper are cautious. BEREC now proposes revised (and reduced) cautious estimates as set out below.

BEREC considers that there is material uncertainty about estimation of costs, even only a few years ahead. The main factors giving rise to that uncertainty are summarised below. In the light of that uncertainty, BEREC's approach has not been to propose "best estimates" because there is too high a risk that such estimates will be below the costs of provision of some efficient networks. On the contrary, BEREC believes its estimates are realistic but, nevertheless, prepared on a basis which gives confidence that the risks of actual costs exceeding these estimates are very low. The figures BEREC quotes below concentrate on 2014 since there is no material risk that costs in earlier years will come close to exceeding the caps that have been proposed, either by the Commission or in the ITRE Committee discussions. For the years after 2014, BEREC is confident that costs will fall further. Any small residual uncertainty about the degree of caution built into these figures is principally therefore about timing.

#### Outgoing Voice

For outgoing voice calls, BEREC notes that the Commission has proposed a cap of 6c/min in 2014 and that the EP ITRE Compromise Amendments propose 5c/min. BEREC considers that the Commission's cap will be above a cautious estimate of the maximum costs faced by an efficient MNO. BEREC also believes that there is a reasonably high probability that the maximum costs will be below 5c/min.

#### SMS

For SMS, BEREC's analysis shows that the costs are very small. BEREC considers that 1c/SMS is a cautious estimate of the maximum cost of an efficient operator.

#### Data

For data, BEREC considers that the 10c/Mb cap proposed by the Commission (also in line with the EP ITRE Compromise Amendments) is comfortably above costs. There is a reasonably high probability that costs will in fact be below 5c/Mb.

#### Uncertainties in cost estimation

In the case of voice, the principal uncertainty concerns the prevailing level of termination charges which account for a significant portion of wholesale roaming costs. If in practice termination rates in most Member States are set in 2014 in a manner broadly consistent with a "pure LRIC" assessment of costs (in line with the Commission Recommendation on termination rate methodology), then there is high confidence that the maximum level of wholesale voice roaming costs will be below 5c/minute. BEREC cannot be absolutely certain that there will be such a level of conformity with the Commission Recommendation at that time. A number of national decisions remain to be taken. MNOs have challenged before national courts the validity of the use of the "pure LRIC" basis. Moreover, national market conditions in some Member States may in any case dictate a glidepath to conformity with the Commission Recommendation which goes beyond 2014. Finally, international termination rates (most relevant for calculation of wholesale roaming costs) are not regulated in all

Member States and are sometimes significantly higher than corresponding regulated domestic rates.

Nevertheless, BEREC already observes very sharp reductions in termination rates in a number of Member States where decisions about future termination rates have already been taken. This provides the basis of the confidence of sufficient general reductions to justify the figures quoted above. For the years 2015 and beyond, there may well be a further reduction in unit costs, consistent with past trends.

In the case of data roaming, the principal source of uncertainty is different in nature. As for voice and SMS, BEREC figures have been based on cost modelling exercises carried out by a number of NRAs. In the case of data, only a small number of NRAs have so far completed cost modelling exercises which deliver reliable results. There will undoubtedly be differences in costs across Europe, due to factors such as geography, demographics, intensity of use and so on. While the effect of these differences should not be exaggerated, they do give rise to the need for caution in cost estimation until such time as a more comprehensive set of cost modelling results is available.

However, other independent measures support the results obtained from cost modelling and therefore increases the confidence in such estimates. Examination of prevailing domestic retail data tariffs (where the underlying costs are very broadly comparable) provides such supporting evidence. A broad relationship between the relative costs of providing voice and data services also suggests that wholesale data roaming costs per Mb will be numerically below the wholesale voice roaming costs per minute.

Finally, BEREC notes that cost estimates are rather sensitive to data volumes. NRAs tend to use rather cautious assumptions about traffic volume growth in their cost modelling work. Moreover, on the basis of current trends, volumes will undoubtedly grow further after 2014. In addition, the introduction of LTE networks will in principle reduce data transmission costs below what has been estimated so far. Therefore, for all these reasons, whether or not costs of certain networks might exceed 5c/Mb in 2014, BEREC considers that they can confidently be assumed to be below this level in 2015 or 2016.

#### Overall assessment

While recognising that this assessment is not absolutely "black and white", BEREC expects that it will provide a sufficient basis for Parliament and Council to set wholesale price caps which can be assessed with confidence to be above the maximum costs faced by any efficient MNO.