Post-og teletilsynet
Norwegian Post and Telecommunications Authority

Annex 2

Results of the consultation of NPT's notification of decision in the markets for voice call termination on individual mobile communication networks (market 7)

Case: 1206565:
1 December 2014

Contents

1 Introduction

This document summarises the responses to the consultation regarding the Norwegian Post and Telecommunications Authority's (NPT) notification of decisions in the market for voice call termination on individual public mobile communications networks (Market 7). The notification was circulated for consultation in the period 11 September to 9 October 2014.
NPT has received consultation responses from TDC AS (TDC), Telenor Norge AS (Telenor) and a joint response from Tele2 Norge AS and Network Norway AS (referred to together as Tele2).

The operators were invited to comment on the submitted consultation responses, but no such comments have been received.

The statements from the various consulted entities pertain primarily to the proposed price controls. Below is a summary of the main comments and NPT's assessment and processing of these comments. The responses to the consultation are available on NPT's website[1].

2 Comments on the impact assessment of use of pure LRIC

In section 7.4 of the notification NPT provided an account of regulatory price controls based on pure LRIC. Section 7.4.3 comprises an assessment of the consequences of introducing pure LRIC as the cost standard for price cap regulation of voice call termination services on mobile networks. Chapter 8 contains notification of the price controls based on the conclusions reached in section 7.4.

2.1 Telenor

Telenor refers to NPT's decisions in Market 7 dated 27 September 2010, where it is stated that before the next regulatory period NPT will perform an impact assessment of the introduction of pure LRIC as the basis for regulatory price controls in Market 7. Telenor believes that an impact assessment must describe which options are being compared and then focus on how lower termination rates will affect profitability. Telenor finds that NPT is unclear with regard to which cost estimates are being assessed as alternatives to pure LRIC and also that NPT is unclear in terms of the alternative to the option that "all coverage costs are excluded from the LRIC calculation". In this connection Telenor points out that LRAIC does not include coverage costs and that a comparison of LRAIC with pure LRIC therefore does not provide an adequate basis for assessing the consequences of the loss of coverage costs. In a footnote Telenor

[1] See: http://www.npt.no/marked/markedsregulering-smp/marked/marked-7/varsel-om-vedtak-2014

refers to the LRIC model, sheet “C11_ComIncr”, row number 651 and below “Proportion of assets that are common”, and claims that one must assess LRIC+ in order to find calculations that include a proportional share of coverage costs. Telenor believes further that NPT's assessment of the effects is summary, does not include sufficient relevant statistical data, and is based on a misguided application of economic theory, and thus does not meet the basic requirements for impact assessments.

Specifically Telenor finds that the erroneous application of economic theory, the lack of empirical evidence and the quantification of price elasticity mean that NPT does not have grounds to draw a conclusion on the allocative efficiency of the introduction of pure LRIC.

In addition, Telenor is critical to NPT's assessments of the investment incentives, partly because of the lack of empirical data used to assess the profitability per base station, and partly because of the Authority's greater emphasis on competition in the retail market over the levels of termination rates as a driver for network investments.

2.2 Tele2

Tele2 refers to the Ministry of Transport and Communications' appeal decision in Market 7 dated 11 May 2011, in which the Ministry, in Tele2's interpretation, requires that NPT conduct an impact assessment before any transition from LRAIC to pure LRIC. Tele2 claims that this has not been followed up by NPT. Tele2 refers to the fact that the new termination rates will result in reduced termination revenues, while the cost of access to the same service remains unchanged. As NPT understands it, Tele2 is calling for an assessment of other operators' opportunity to challenge operators with a nationwide network. Tele2 believes that buyers of access do not have the opportunity to control the underlying production costs or to improve efficiency in this area. Tele2 claims that there is a weakness in the notification in that NPT has assessed the impacts for roll-out of coverage, but has neither analysed nor taken into consideration other negative consequences for competition.

2.3 NPT's assessment of the comments

LRIC has been used as a methodology to set cost-oriented termination rates on mobile networks in Norway since NPT's decision of 8 May 2007. In the above-mentioned and subsequent decisions, all aspects of this method have been assessed and documented, and the consequences of switching from LRIC+++ to LRAIC without a mark-up for common costs were evaluated specifically in NPT's decision of 27 September 2010, including the LRIC model version 7.1.

In the Ministry of Transport and Communications' appeal decision of 11 May 2011 (page 38) it is stated that: "*As a matter of principle the LRAIC model does not include costs relating to coverage, but there are nevertheless costs that can be linked to in-fill coverage. The model shows that 14 per cent of the termination charge is attributable to coverage, while the remaining 86 per cent is traffic-driven costs.*"

On behalf of NPT Analysys Mason has taken a closer look at the coverage costs in version 8 of the LRIC model. Their analyses are quoted as follows[2]:

> *"In the v8.1 model, the calculation on row 397-521 of the C11_ComIncr worksheet is important, since common costs do not include 2G and 3G infill coverage. Therefore, some 'coverage' costs are part of the LRAIC result precisely since they are for infill coverage.*
> *NPT and Analysys Mason have taken the view (set out in all the modelling going back to 2006) that in-fill coverage provides improved population and area coverage (black spots, indoor signal strength, etc.) but is traffic-related in the long run.*
>
> *Analysys Mason has tested a slight modification to the v8.1 model for the generic operator, by assuming that in-fill-related assets are included in the network common costs (and therefore are excluded from the LRAIC).*
>
> *Making these changes in the v8.1 model, this leads to a 26% (1.9 øre) reduction in the blended LRAIC in 2017 i.e. a material 26% of the final LRAIC result for the generic operator comes from this in-fill coverage.*
>
> *Similarly, turning off the assumptions that lead to in-fill coverage being avoided (i.e. setting cells A6_NtwDesSlct!I24, A6_NtwDesSlct!I25 and A6_NtwDesSlct!I165 to 13) leads to a 51% (3.3 øre) reduction in the 2017 pure LRIC. This can also be seen if one calculates the sites avoided with mobile termination in the v8.1 model. A comparison of this for the v8.1 model and the v8.1 model with the infill coverage assumptions turned off is shown below in Figure 8.*

[2] Note that Analysys Mason refers to the LRIC model as "v8.1", while NPT in the notified decision has used the term "v8" for the same model.

[3] The values used in the v8.1 model for these inputs lead to larger radii assumed for infill coverage sites in the case when mobile termination is excluded. By setting their values to 1, the infill coverage radii assumed are the same when mobile termination is both included and excluded.

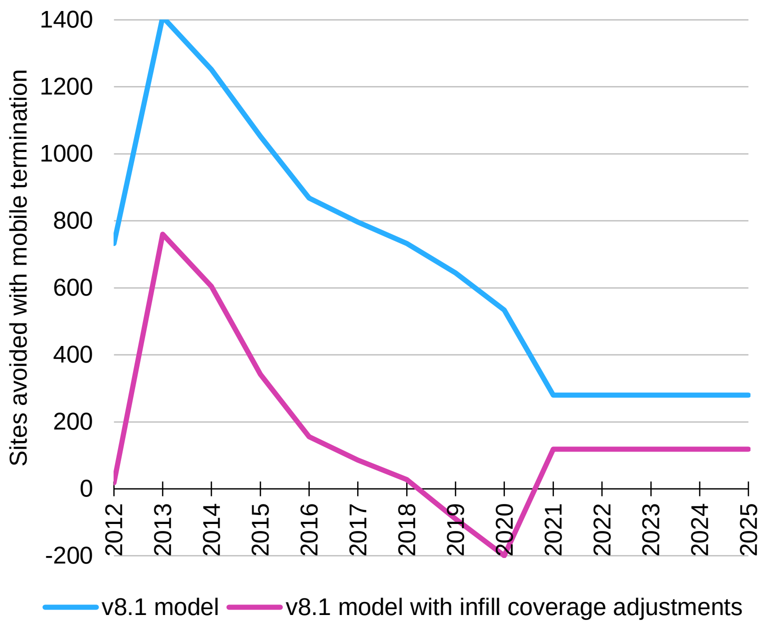

Figure 1: Proportion of sites avoided with mobile voice termination in the v8.1 model, compared to the case where the infill coverage assumptions area the same with and without mobile termination [Source: Analysys Mason, 2014]

The difference between the two lines is the number of sites avoided due to the 2G/3G in-fill coverage assumptions. The difference is approximately 700 sites whilst the 2G network is active and approximately 150 sites in the long-term (when the 2G network has been shut down.

Therefore, we can conclude that the v8.1 model includes approximately 150 3G infill coverage sites in the pure LRIC and approximately 550 2G infill coverage sites.
Therefore, we can conclude that the costs of (infill) coverage are in fact material contributors to both the LRAIC and the pure LRIC calculated in the v8.1 model."

NPT and Analysys Mason have taken the view (set out in all modelling going back to 2006) that in-fill coverage provides improved population and area coverage, but is traffic related in the long run. NPT therefore believes that it is sufficient to limit the impact assessment in connection with this decision to the transition from LRAIC to pure LRIC.

With regard to Telenor's statements on the application of theory and allocative efficiency, NPT believes that it is generally the case that if an offering is comprised of several services, the markets as a whole can achieve greater allocative efficiency by allocating a relatively higher proportion of overhead costs to services with lower price elasticity, i.e. services where customers are less sensitive to price increases.

NPT cannot see that economic theory has been applied erroneously in this part of the notification, but has modified the text in the decision in order to avoid any confusion. NPT does not disagree with Telenor in respect of the claim that it would have been possible to make more extensive observations related to allocative efficiency if there had been robust information about relevant price elasticities. This type of information is often not available. This is also true in other European countries that have based their regulation of Market 7 on pure LRIC. Nevertheless NPT believes that it is reasonable to assume that transition from LRAIC to pure LRIC will not have a significant impact on allocative efficiency, given that the termination rates are symmetric and the traffic flows are relatively balanced.

Telenor has commented on NPT's assessments of the investment incentives, and NPT finds it necessary to underline that the notification of decisions was issued in a situation with two nationwide networks and one network with approximately 75 per cent population coverage. In the past asymmetric termination rates have been used as an important tool to stimulate investment in a third network. In a situation with three networks and symmetric termination rates, NPT maintains that competition in the retail market will have a greater impact on the operators' investment decisions than the termination rates.

NPT's decision to propose a price cap based on avoidable costs, as calculated on the basis of pure LRIC means that the prices will be close to a real marginal cost and thus reflect an efficient operator. NPT upholds its view that this approach to pricing will send the right investment signals to the operators. An extension of the impact assessment, for example, to calculate operator-specific margins per base station, is deemed to go far beyond what is necessary and appropriate, given the regulatory regime within which NPT works, where one of the objectives is harmonisation based on pure LRIC within the EEA.

In NPT's opinion Tele2's comments primarily focus on the competition situation for buyers of access and thus largely concern regulation of the access market – Market 15. In this context reference is made to NPT's assessments in chapter 5 below. NPT does not agree with Tele2 that the notification does not consider the consequences for operators that are not involved in rolling out coverage. The notification assesses both the general consequences of the introduction of pure LRIC, and the particular consequences for all the providers that will be directly affected by the notified decisions.

NPT recognises the validity of Tele2's arguments that not all parts of the production costs can be controlled by Tele2 itself as long as the retail offering is partly based on input factors procured from external operators outside its own production. Nevertheless NPT holds that the described effects, including incentives to improve the efficiency of production costs, also apply to that part of the value chain that a buyer of access produces itself. NPT cannot see that there are aspects of the regulation of voice call termination on mobile networks that are directly affected by the fact that the ratio of own production to purchase of services varies among the different providers.

In NPT's opinion, the notified decision contains an impact assessment that casts adequate light on the issue and provides a basis for informed decisions on the future price cap regulation.

3 Comments on the phasing in of new rates

NPT has decided that there is no need for a glide path for the new termination rates. Section 7.4.6 of the notification provides an account of the updated estimated termination costs and states that the operators were informed about the new, lower costs in early 2013. Section 7.4.8 contains a review of the consequences of the price reduction.

3.1 Telenor

Telenor believes that the absence of a glide path is inconsistent with the information previously provided by NPT and past practice. Telenor claims that not using a glide path will not provide sufficient regulatory predictability or the expected time to adapt.

3.2 NPT's assessment of the comments

The Authority assumes that by "information previously provided" Telenor means the presentation of the LRIC model at the meeting with the operators on 22 May 2013.

At this meeting the findings from the LRIC model were presented. It was also stated that the operators would be given sufficient time to adapt and that a glide path would be considered in this context. The schedule presented at the meeting suggested that a new decision would be made in November 2013. The process has taken longer than expected, resulting in the notification of decisions not being published until September 2014 meaning that in reality the operators have already had a considerable amount of time to adapt.

In respect of Telenor's remarks regarding past practice, NPT would like to point out that for each market decision a separate assessment is performed of the impacts and the need for a transitional period. This was also done for the current notification. NPT cannot see that the Authority in its previous processes has established a norm that dictates use of a glide path for each change in the termination rates.

NPT cannot see that Telenor has provided any new information that necessitates amendment of the notified price decision and upholds its conclusion that there is no need for a glide path for the new termination rates in order to provide more time for operators to adapt to the new price cap.

In the notified decision the first date of reduced prices was set to 1 April 2015. Of practical reasons the date for first price reduction will be 1 July 2015. This will give the operators additional three months to adapt to new prices.

4 Comments on the LRIC model

NPT has notified that price caps will be determined on the basis of the LRIC model version 8. The LRIC model and model documentation were subject to a national consultation from 4 March to 8 April 2013. The model documentation is annexed to the notification of decisions and includes all the consultative input on the LRIC model and the appurtenant responses.

4.1 Telenor

Telenor claims that NPT has not taken their comments in the consultation on the LRIC model into sufficient account in the notification of decisions.

Telenor holds that the LRIC model contains a number of weaknesses and that it fails to measure the incremental or avoidable costs as claimed. Telenor claims that NPT's choice of model framework makes it necessary to calculate the inter-temporal average costs as NPT has done, and that the cost estimate from the LRIC model thus cannot be regarded as an estimate of pure LRIC.

As part of Telenor's input on the assumptions in the model regarding GSM infill and the effects of Norwegian topography, the company claims that NPT appears to believe that the operators have a number of unprofitable sites and that it is unclear what evidence NPT has for such an assertion. Telenor believes that the assumptions in the LRIC model about infill sites and topography / geographic coverage reflect an underestimation of the cost-benefit analyses for marginal sites. Telenor points out that even if some sites can be regarded as unprofitable when seen in isolation, they may nevertheless still contribute to income generation elsewhere in the network.

Telenor also holds that the assumptions used in model about the shut-down of the 2G network in 2020 does not reflect the operators' actual plans and points out that the decision will affect the estimated cost of termination. Telenor believes that the chosen useful economic life of the 2G network represents an inconsistency in NPT's handling of "other" mobile services, and in this context mentions M2M and data services. According to Telenor, it appears that effects that favour lower termination costs are taken into account, while effects that favour higher termination rates are not included in the assumptions.

5 Comments on the relationship between Market 7 and Market 15

In assessing the estimated impacts and consequences NPT has referred to Telenor's obligations in the market for access and call origination on public mobile communications networks (Market 15). Telenor is required to provide access on non-discriminatory terms and to report accounting separation for the regulated forms of access on a half-yearly basis. It is proposed that these obligations are continued in the new regulation, cf. the notification of decisions dated 16 January 2014[4]. NPT has shown that one effect of lower termination rates could be a reduction of the relevant access charges, cf. the effect that a reduction in termination revenues has on the profit in accounting separation.

5.1 TDC

TDC claims that a reduction in the termination rates will exacerbate the margin squeeze situation for TDC. TDC stresses the need to see Market 7 in context with Market 15 and refers to the Ministry of Transport and Communications' statement in its appeal decision of 11 May 2011, where it is stated: "*The use of instruments in Market 15 is, in the Ministry's view, appropriate to address the price squeeze issue.*" TDC holds that NPT has not enforced this effectively in the current regulatory period and requests that the price for MVNO access is regulated in parallel with the termination rates to ensure that the margin squeeze situation is not further exacerbated.

5.2 Tele2

Tele2 refers to paragraph 215 of NPT's notification of decisions and previous statements about the relationship between Market 7 and Market 15. Tele2 points out that NPT and the Ministry of Transport and Communications have previously stated that it is appropriate to regulate the market in the place where the problem occurs, and this has been in Market 15. Tele2 claims that accounting separation has not been an appropriate tool to detect or prevent price squeezes and that NPT has itself admitted this in the process of developing a new margin squeeze test and the new notification of decisions in Market 15.

5.3 NPT's assessment of the comments

It is NPT's interpretation that the consultative input from TDC and Tele2 pertains to competition issues in Market 15 and the operators are hereby expressing a wish for further market intervention in this market.

[4] Notification of decisions on the designation of a provider with significant market power and the imposition of specific obligations in the market for access and call origination on public mobile communications networks, dated 16 January 2014.

In this connection NPT refers to the notification of decisions in Market 15 where NPT designates Telenor as an operator with significant market power and imposes an obligation to provide MVNO access and access to national roaming at prices that do not subject buyers of access to a margin squeeze.

NPT cannot see that TDC and Tele2 have presented arguments that render it necessary to modify the notified regulation of Market 7.