

Comments on the proposed symmetric termination rate  
regulation in the European Commission's  
"Recommendation on the Regulatory Treatment of  
Fixed and Mobile Termination Rates in the EU"

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## Section 1

# Introduction and summary

- 1.1 The new *Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU* [the Recommendation] intends to harmonise cost standards used by different National Regulatory Authorities [NRAs].
- 1.2 The present paper provides comments on one aspect of the approach taken in the Recommendation. The Recommendation states that:<sup>2</sup>

*NRAs have also, in a number of cases, authorised higher termination rates for smaller fixed or mobile operators on the grounds that these operators are new entrants into the market and have not benefited from economies of scale and/or are subject to differing cost conditions. [...] The ERG [European Regulators Group] has recognised in its Common Position that termination rates should normally be symmetric and asymmetry requires an adequate justification.*

- 1.3 In the Annex to the Recommendation, the Commission advises that:<sup>3</sup>

*To determine the efficient scale for the purposes of the cost model, the recommended approach is to set that scale as follows: 1/Number of Mobile Infrastructure Operators. It may be expected that mobile operators, having entered the market, would strive to maximise efficiency and revenues and thus be in a position to achieve a minimum market share of 1/Number of Mobile Network Operators.*

- 1.4 In my response to the consultation, I provide comments on this 'symmetry' part of the Recommendation.

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<sup>2</sup> Par 2

<sup>3</sup> Page 10

## Section 2

# Regulation on an *output* rather than *cost* yardstick

### Regulatory cost models

2.5 It is useful to understand the process of regulation of termination rates as – according to my understanding – it will be carried out under the concept of an ‘efficient’ cost model. In practice, a NRA designs a cost model for the operators in the industry. A cost model for an operator works in the following way.

- First, the demand for different services provided by a network is estimated and converted to a homogeneous measure, such as ‘minute equivalents’ or ‘data throughput’. In an ‘efficient’ cost model, the source of this data is at the core of our discussion and I will elaborate on it below.
- Then a network is ‘designed’ to deliver these services. During this step, network elements are defined and the quantity of each network element is estimated. In an efficient cost model, this is carried out through engineering rules and algorithms from operations research that attempt to approximate a least cost network design.
- Thirdly, additional costs, such as operational expenditures or common costs that might be taken into account are estimated. Efficient operational and overhead expenditure is a difficult area. Often, accounting ratios or cross-company comparisons are used.
- Fourthly, unit prices are determined. This is normally done by asking companies in a market for actual purchase data. That data is then aggregated. Naturally this is a very sensitive area and therefore the regulator often ends up with a limited amount of data. Not only current prices are determined, but also future expected prices.
- Next, an annualisation mechanism is applied to move from the actual costs of network investment to the yearly recovery of these costs.
- Finally, the costs per network element are converted back into costs per minute for the different services.

### Meaning of *efficiency* in a regulatory cost model

2.6 For an ‘efficient’ cost model, there appears to be relatively little argument that a cost model should use *one single efficient network design, efficient operational and overhead costs, lowest achievable (and hence ‘efficient’) market prices* and an economically sensible annualisation mechanism. All of these components are therefore identical for all companies affected by termination rate regulation. All of these items relate to the desire to produce and operate a least cost network.

- 2.7 The item that shall be discussed here however relates to how much traffic a network handles. The Commission essentially postulates that the term 'efficient' also applies to the volume of traffic on a network and not only to the costs for handling that traffic. There is a relationship between traffic and volume, because it usually turns out from the engineering rules used in the design of a network that economies of scale exist. Increased volume does not lead to a proportional increase in costs so that average (and also LRIC) costs decrease as volume increases. Therefore, the only way in which an efficient network cost model (on the basis of the same technology and spectrum allocation) can produce different costs for individual operators is by varying the level of output produced by the network.
- 2.8 The question I deal with in this submission can therefore be rephrased quite simply: *Is it reasonable to postulate an efficient level of traffic volume for an operator?*

### **The Recommendation defines an output yardstick, not just a cost yardstick**

- 2.9 As I have illustrated, the Recommendation focuses not only on 'efficient cost' regulation, but moreover on regulation which depends on the level of output.
- 2.10 In my opinion the motivation of the Recommendation can be interpreted as a misreading of the regulatory concept of 'Yardstick competition'. The seminal paper on yardstick competition is by Shleifer.<sup>4</sup> The central insights of the concept of Yardstick competition are that regulating firms at their own cost levels
- i. is difficult due to asymmetric information about those costs between the regulator and firms, and
  - ii. does not give firms sufficient incentives to become cost efficient.
- 2.11 In his paper, Shleifer defines the essence of yardstick competition as to use data from all regulated firms in the industry to define the regulatory mechanism of the regime for a particular firm, where
- ...the price the regulated firm receives depends on the costs of identical firms.*<sup>5</sup>
- 2.12 Under Yardstick competition one regulated price is set for all identical regulated firms. If the firm is efficient and its actual costs might be below the yardstick price, it is therefore rewarded. If its actual costs are above the yardstick price, then it has incentives to become more efficient. Yardstick competition is used in industries in which individual cost modelling is too cumbersome and costly, and also as a mechanism to reveal efficient costs and give incentives to firms to reach these costs.
- 2.13 It can clearly be seen that the Recommendation has a Yardstick element.<sup>6</sup> By postulating that the volume at which costs are measured is equal to 1/number of mobile network operators, the Recommendation sets costs higher than the actual efficient costs of large operators and lower than the actual efficient costs of smaller operators.
- 2.14 However, the Yardstick element is markedly different from the traditional definition in one essential respect. The Recommendation recognises that long-run incremental costs

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<sup>4</sup> A. Shleifer (1985): A theory of Yardstick Competition. Rand Journal of Economics, 16, 319-327

<sup>5</sup> Ibid, p. 319

<sup>6</sup> The use of an efficient cost model is not a yardstick in the sense that that definition of efficiency is not derived from actual firms in the market.

depend on market shares and market shares are not identical. Therefore long-run incremental costs are not identical. The yardstick mechanism is hence not used to elicit efficient costs (and an efficient cost model is used in any case) and it is not within the cost minimisation concept for an existing network (such as e.g. in electricity or gas transmission networks). Instead the yardstick is what might be called an 'output' or a 'volume' yardstick. In order to recover its own costs, an operator needs to have a certain minimum output, namely equal to  $1 / \text{number of mobile network operators} \times \text{total industry output}$ .

## The symmetry requirement introduces a new level of regulation

- 2.15 The yardstick is therefore not targeted at the reduction of cost, but rather at the acquisition of volume.
- 2.16 In my view this raises one quite general and a number of more specific, but equally important, questions.
- 2.17 My general question is whether this new type of regulation to an output yardstick is *proportional, not excessive and required* to address the identified competitive problem in termination. This is particularly the case for a regulatory regime which is supposed to relax regulation rather than intensify it.<sup>7</sup> One should also not lose sight of the wider picture: is additional and stricter regulation really necessary in an industry which has seen perhaps the fastest and most widespread take-up of its service in human history?

## Detailed aspects of our submission

- 2.18 While our finding of new and novel output yardstick regulation raises the general issue discussed in the paragraphs above, I have analysed in more detail three aspects that I regard fundamental:
- I analyse in more depth the competition policy context in which the Recommendation operates. The Recommendation, while aimed at the wholesale market for call termination, requires remedial action in the markets of retail call origination and subscriber acquisition. I find a contradiction in imposing a penalty for insufficient call origination and subscriber acquisition given that these markets are either deemed competitive or *a fortiori* there exists a larger operator which has been defined as dominant or might even be under investigation for abuse of dominance.
  - I analyse what the economic basis is for the view that in the long term, operators should have a market share of  $1/n$ . I find little support for this notion. The basis of the symmetry recommendation is that costs are higher for smaller operators. In such a situation it is not clear why market shares should converge. I provide insights from economic theory to understand what market structures can be expected to evolve.

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<sup>7</sup> See the intention of the 'three criteria test', in, for example 2003/311/EC.

### Section 3

## 'Output yardstick competition' in a competition policy context

- 3.19 Regulating against a cost standard or yardstick that can only be reached if output is at a certain level compared to competitors' output appears to me to be a novel element of regulation for European telecommunication services.

### **The output yardstick concerns a different market from the regulated market**

- 3.20 For an operator below the output yardstick, the only way in which it can recover the cost of its termination service is by increasing volume.
- 3.21 The lowering of its termination costs is likely to increase incoming call volume, but this effect is highly unlikely to lift an operator with a very low market share to the yardstick output.
- 3.22 Instead, in order to reach the yardstick output level, a small operator will need to increase its share of customers and call volumes. This is explicitly recognised in the Recommendation, when it states that:

*It may be expected that mobile operators, having entered the market, would strive to maximise efficiency and revenues and thus be in a position to achieve a minimum market share of 1/Number of Mobile Network Operators.*

- 3.23 The market / or markets targeted by the remedy are therefore the market(s) for subscriber acquisition and retail call origination.

### **Large operators have at times been found to be dominant in the retail origination market**

- 3.24 In some member states, the larger operators have been found to be dominant in the retail origination markets [over a specific period], or there are investigations that analyse these questions.

- Proximus has been found to be dominant by the Brussels Commercial Court regarding an investigation into its on-net / off-net pricing practices for the period 2001 to 2004.<sup>8</sup>
- According to press statements, an investigation into a possible case of abuse of dominance has also recently been launched in Germany.<sup>9</sup> A prerequisite of abuse would be a finding of dominance.

3.25 One should recall *United Brands v Commission*<sup>10</sup> which defines dominance as

*'38...The dominance position thus referred to by Article [82] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.'*

3.26 *Hoffmann-La Roche v. Commission*<sup>11</sup> states that

*An undertaking which has a very large market share and holds it for some time ... is by virtue of that share in a position of strength...*

3.27 Lastly, one should recall that in *Akzo v. Commission*<sup>12</sup> the ECJ considered that a 50% share could be regarded as 'very large' in the sense of the Hoffmann-La Roche decision. In practice these precedences have established that with a 50% market share there is a presumption of dominance.<sup>13</sup> Many European late entrants have had to win market share against companies with such a presumption of dominance. If this process is slow, then the reason might not be that the entrants put insufficient efforts into growing volumes, but also that winning market share against established incumbents with high shares and a presumption of dominance can be exceedingly difficult.

3.28 Small operators are therefore potentially confronted with a situation in which the remedy of the Recommendation requires that smaller operators gain market share against larger operators that have been found dominant, or are under investigation for an abuse of dominance, and therefore that *behave to an appreciable extent independently* of them. Moreover, the dominant operators are awarded the additional benefit of above cost termination charges.

3.29 If at the point of introduction of symmetric termination rates some mobile operators were still found to be dominant, then this would appear to be a direct contradiction to the remedy of the Recommendation.

3.30 One should note that the retail markets for subscriber acquisition and dominance are not on the original list of relevant markets for ex ante regulation.<sup>14</sup> Therefore dominance in those markets would only be defined if a case were brought against a firm for abusing it. For this reason the extent of dominance in retail markets is not known very well.

<sup>8</sup> Brussels Commercial Court, case R.G. A/03/06791, interim judgement of 29.05.2007.

<sup>9</sup> For Germany, see <http://www.pressebox.com/pressemeldungen/e-plus-mobilfunk-gmbh-co-kg/boxid-168937.html>, for France, see

<sup>10</sup> ECJ, Case 27/76[1978] ECR 207

<sup>11</sup> ECJ, Case 85/76 [1979] ECR 461

<sup>12</sup> ECJ, Case C-62/86 [1991] ECR I-3359

<sup>13</sup> See Richard Whish, *Competition Law*, Fourth Edition, 2001, Chapter 5

<sup>14</sup> Appendix of 2003/311/EC

- 3.31 That would suggest that a dominance assessment in the retail markets for subscriber acquisition and call origination should be carried out before introducing the symmetry regulation.

**When the retail markets are found to be competitive then why should a remedy be applied to those markets?**

- 3.32 At the time foreseen for implementing the symmetry remedy, there are likely to be member states in which no company is found to be dominant in the retail markets for subscriber acquisition and call origination. One might still think that imposing a punishment for insufficient retail volume, when there is no finding of anti-competitive behaviour by the small operator might appear to be a contradiction. At least it would require a review if such a remedy is appropriate when the company has not been found guilty of any wrongdoing and if the market is competitive (or the company even faces a dominant competitor).

**Fundamental issue is that the remedy explicitly links a separate market without requiring a competition analysis of that link or that market**

- 3.33 It would seem to us that imposing a symmetry remedy would require more analysis of the affected retail market. In some sense the explicit link that the remedy makes between the termination markets and the retail markets does highlight what the economic literature on interconnection has been arguing since its inception in 1997.<sup>15</sup> The various communications markets are linked, namely through the bilateral relationship of interconnection and the complementary nature of the services, and competition in these markets must be assessed by understanding the links between them. The interconnection literature might not argue with market definition on the basis of the substitutability criterion, but it would clearly contest that a definition of single network termination markets automatically implies a dominant position on these markets.
- 3.34 One would hope that the proposed symmetry remedy, which affects retail output and customer acquisition as a remedy for wholesale termination, would provide a reassessment of the rather quick step that had been taken from market definition of a termination market to the automatic finding of dominance in that market. Indeed, as I have already remarked above, I would argue that such a remedy should not be imposed without first analysing competition in the retail markets that are affected by that remedy.
- 3.35 While I only provide an economic view in this submission, one would hope that a legal review would be made whether imposing a remedy that affects a market in which a competition analysis has not been carried out, or in which there exists sufficient competition or even a dominant company which benefits from the regulation, is consistent with the constraints imposed on regulatory bodies by the Framework Directive.

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<sup>15</sup> The literature began with the seminal contributions by Laffont Jean-Jacques, Rey, Patrick and Tirole, Jean, *Network Competition*. RAND Journal of Economics, Vol. 29, No. 1, Winter 1997, and Armstrong, Mark, *Network Interconnection in Telecommunications*, The Economic Journal, 1998

## Punishment for 'insufficient' subscriber / volume acquisition?

- 3.36 The motivation given for the symmetry condition is that
- ..rewarding an operator for its smaller size can give inappropriate investment signals and risks promoting inefficient entry...<sup>16</sup>*
- 3.37 Above I have argued that one should first understand whether the smaller size means that there is competitive problem in the retail markets of subscriber acquisition and call origination. Here I would like to go a step further. Since the symmetry remedy of the Recommendation punishes operators for insufficient subscriber / volume acquisition, one might ask if the other changes imposed in the Recommendation would not already provide additional incentives for operators to intensify their customer acquisition efforts.
- 3.38 I find that this is indeed the case. The Recommendation would reduce both fixed and mobile termination rates. Since fixed termination rates are already substantially lower than mobile rates, there will be a degree of absolute (although not necessarily relative) convergence of rates. This will reduce revenues from termination for mobile operators. A business model which might allow a mobile operator to be small and rely on termination revenues (if indeed such a model exists), would be significantly less attractive under the Recommendation even without the symmetry remedy.
- 3.39 Regarding mobile-to-mobile termination payments, the interconnection literature takes a more differentiated approach than the Recommendation would suggest. There certainly is not an immediate relationship between termination rates and retail prices. The literature suggests that such a relationship might exist for pre-pay contracts which are essentially linear tariffs. For these tariffs I would again come to the same conclusion as for fixed-mobile interconnection. The reduction in termination rates would, in the case of prepay contracts, make it less beneficial to rely on termination revenue and one might expect, for these contracts, a greater emphasis on origination. Again I would expect such a development also in the absence of the symmetry clause.
- 3.40 Some literature suggests that competition might potentially be stronger with asymmetric rates, even if these rates would exceed cost for the smaller operator.<sup>17</sup> The reason is that the asymmetry, in a way, overcomes the negative network effect. With higher termination rates, the smaller network can compete more aggressively against the larger operator who itself needs to respond with stronger competition. According to this literature, the view that small operators would be 'rewarded' for their size is incorrect.

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<sup>16</sup> Explanatory note, p 16

<sup>17</sup> M. Peitz, *Asymmetric access price regulation in telecommunications markets*, *European Economic Review*, Volume 49, Issue 2, February 2005, Pages 341-358

## Section 4

# Is a symmetric market structure natural?

4.41 The Recommendation takes the view that there should be symmetry of output. In this section I ask *why* indeed there should be such a symmetry of market shares.

4.42 The Recommendation states that<sup>18</sup>

*It may be expected that mobile operators, having entered the market, would strive to maximise efficiency and revenues and thus be in a position to achieve a minimum market share of 1/Number of Mobile Network Operators.*

It therefore believes that ‘maximising efficiency and revenues’ would lead to symmetric market shares, and it also believes that this ‘can be expected’.

4.43 I should preambule my analysis by stating that, in the first instance, operators maximise profits rather than revenues. Also, while it may be a goal to maximise ‘efficiency’ (which I understand to be least-cost production) in isolation, if those production costs depend on the competitive process, and in particular on the scale of output, then the profit maximisation problem of the firm cannot be simplified to that ‘efficiency’ criterion.

## Is a symmetric market structure a natural outcome?

4.44 The Recommendation realises that

- actual LRIC costs depend on market shares of the operators, and that
- fixed costs are high.

4.45 With these two basic characteristics of the market, is it likely that market shares would converge? The answer to this depends on how competition in the market works, and possibly also on the behaviour of the individual companies. Importantly, in contrast to what the Recommendation states, there may not be a single and simple answer to this question. It is possible that there is not only one single best rational profit maximising strategy and not only one equilibrium situation for the market.

4.46 Instead of developing a complete model of mobile competition, I highlight a number of different mechanisms and insights that economic theory provides to these questions. I derive these insights from a standard Bertrand model of competition and its derivation, the capacity-pricing model along the lines of Bertrand-Edgeworth.

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<sup>18</sup> Annex, last paragraph.

## **Bertrand (price) competition with symmetric costs and a homogeneous good**

- 4.47 It might be the case that the Recommendation has in mind that telephony is a homogeneous good. When there are no fixed costs, costs are symmetric and a competition is Bertrand, then in equilibrium prices equal marginal costs and there is therefore an outcome akin to a Walrasian (competitive) equilibrium. The market shares of competitors are indeterminate; however the equal market shares situation is indeed an equilibrium.
- 4.48 This model does obviously violate the two market characteristics that the Recommendation recognises itself, namely fixed costs and cost asymmetries.

## **Price competition with asymmetric costs**

- 4.49 If cost asymmetries are introduced in a standard Bertrand model, the lower cost firm just undercuts the higher cost firm and takes all the market. There is no symmetric equilibrium.
- 4.50 One might argue that this conclusion is not realistic, since I do not observe that higher cost companies leave the market. However, the model points precisely to the question as to what small firms are required to do in a situation in which they are faced with having asymmetrically high costs.
- 4.51 One possible reason why they survive is that they differentiate their products. The helpful tool for visualising product differentiation is the Hotelling line.<sup>19</sup> Consumers are all spaced on a line between two points A and B. It 'costs more' for consumers to buy a product from a company which is located further from them. Suppose there are two firms. Would they want to locate in the centre, at points A and B or somewhere in between?
- 4.52 The decision as to where firms locate is driven by two opposing incentives. By locating in the centre of the line, they can potentially reach the maximum number of customers. However if both firms locate in the centre, then they both compete equally for the same customers and competition is most intense. In contrast, by locating at the endpoints of the line, companies avoid competition for the same customers, but they also address a smaller market.
- 4.53 In much the same way, an entrant has the choice of matching existing operators' products and services, or of differentiating his offers. If small entrants had just offered the same tariffs, phones and similar branding as the larger companies, then they might indeed not have been able to survive. However, smaller firms were very innovative. For example, later entrants established the pre-pay market. Subsequently, it was often later entrants who became hosts of MVNOs or who introduced different brands.<sup>20</sup>

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<sup>19</sup> Hotelling H., *Stability in competition*, Economic Journal, 1929

<sup>20</sup> I note that the fact that these types of product differentiation arose is also testimony to the fact that consumers have heterogeneous preferences.

- 4.54 The insight from economics is that such differentiation is not necessarily an attempt to avoid competition, but by differentiating small operators addressed heterogeneous preferences, and only through doing so they had a chance to stay in the market against rivals who had a larger customer base and therefore lower cost.
- 4.55 With this insight, the premise that *rational operators* would attempt to achieve 1/n market shares is overly simplified. Also, branding product differentiation as tacit collusion would be oversimplified since it might be the only way for smaller companies to stay in the market. The question is rather whether product differentiation is too excessive for welfare. The Recommendation does not address that question.

**In Bertrand-Edgeware models with cost asymmetries, the larger company has an incentive to price the smaller company out of the market**

- 4.56 A second insight into the industry comes from Bertrand-Edgeware models. In these models, first capacities are chosen and then companies compete on price. If there is a lower cost and a higher cost company, then one needs an exogenous rule for allocating sales of the company that sets lower prices but cannot serve the whole market due to its (chosen) capacity constraint. These rules are called ‘rationing rules’. Under ‘efficient rationing’ the lower price operator serves his capacity, while the higher price operator serves the residual demand.
- 4.57 Naturally, there are many possible strategic interactions in such a game. I provide references to two papers. In this setting, Denecker and Kovenock<sup>21</sup> show that if there is a lower cost operator, there might be equilibria in which the lower cost operator chooses capacity so high as to price the higher cost operator out of the market. Other equilibria include Cournot type equilibria in which the lower cost firm continues to have a larger market share. Reynolds and Wilson<sup>22</sup> show that introducing uncertainty to demand also generates asymmetric outcomes.
- 4.58 As is typical in these models, different equilibria can arise depending on the nature of demand, the degree of cost asymmetries and so on. This lack of predictive power over a wide parameter space is not surprising, yet seems in contradiction to the broad brush of the Recommendation.

**Consumer benefits under equal market shares**

- 4.59 Contrary to what the Commission states<sup>23</sup>, with economies of scale, total industry production costs of firms producing at equal market shares can actually be higher than total production costs of asymmetric firms. Suppose that there are three firms and total demand is 9. Suppose that total costs are 2 for the first unit, 3 for 3 units and 4 for seven units. Then production with three firms producing 3 units each costs 9, while production of one company producing 7 and the others producing 1 unit each is 8. In the case in which prices were just a function of production costs, then industry prices for the asymmetric case would be lower and consumer benefit higher.

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<sup>21</sup> Deneckere, R. and Kovenock, D. 1994, *Capacity-constrained price competition when unit costs differ*, working paper

<sup>22</sup> Reynolds, SS and Wilson, BJ, 2000, *Bertrand–Edgeworth Competition, Demand Uncertainty, and Asymmetric Outcomes*, *S Journal of Economic Theory*

<sup>23</sup> In its remarks on productive efficiency on page 18 of its explanatory note.

- 4.60 It might be argued that the larger firm would in the example of the paragraph above not charge at cost and just undercut its smaller competitors. This is precisely our point. From a competition point of view, what is at least as important as production efficiency is how companies behave strategically when they are faced with these asymmetric cost. I have argued above that when considering such strategic interaction there need not be a natural tendency to convergence and an incentive for all small operators to try to gain scale. Indeed, they might not be able to survive if they did since replicating the larger firm's strategy would lead them to a competitive situation that they could not win.

**Multiplicity of market outcomes are likely**

- 4.61 In a context in which economies of scale exist, companies enter at different times and therefore start with different market shares and thus different unit costs, the Commission's view that rational behaviour by operators would lead the market to become symmetric does not generally appear to be supported by standard arguments in the economic literature.
- 4.62 In addition to this negative finding, I have another particular concern. When one studies the industrial organisation literature, it becomes evident that most economic models have limitations and their authors always recognise them. Different market structures arise depending on the specific timing of decisions, cost differences, size of fixed cost components, consumer behaviour and so on. Multiple possible outcomes are not unusual.
- 4.63 In contrast, the Recommendation appears to have quite a simple view of the world, where all companies end up with equal market shares. The simplicity itself of such a prediction is unlikely to be a reflection of economic realities.

## Section 5

# Conclusion

- 5.64 In my submission, I raise three main issues with the view expressed in the Recommendation that regulation of termination rates should be carried out on a symmetric basis.
- 5.65 Firstly, I argue that the Recommendation itself recognises that cost symmetry in telecommunications networks depends on the level of scale. Therefore the Recommendation imposes what I term an 'output yardstick': only if an operator produces a certain level of output, namely one corresponding to a market share of 1/number of operators, will it be allowed to recover its termination costs. If the operator has smaller scale, it will incur a loss on its termination service.
- 5.66 This type of 'output yardstick' regulation is to my knowledge novel in the case of communications. Rather than a relaxation of regulation it represents an increase in its intensity. One should ask whether intensifying regulation in an industry with very fast adoption and penetration rates in excess of 100% is proportionate.
- 5.67 Secondly the output yardstick means that the operator needs to gain additional subscribers or call volumes. It is for this reason a remedy that affects the retail market(s) for subscriber acquisition and call origination. One should therefore analyse whether these markets are competitive. If the larger company is found to be dominant, then it would seem that imposing a remedy that requires the smaller company to gain customers against a dominant firm is contradictory. If the retail markets are found to be competitive, one might ask why firms should be punished when competition in those markets is deemed to be working.
- 5.68 Thirdly, I look at what market structures economics predicts. I find that, even in a homogeneous goods market, when costs are different (as recognised by the Recommendation), symmetric market structures do not necessarily arise. In contrast, when an incumbent firm has a cost advantage (here through scale), smaller firms might only be able to survive if they differentiate their product from the larger firm. The fact that their market share remains smaller might therefore be only an expression of their survival strategy of differentiation.