BoR (18) 55

BEREC Opinion on Phase II investigation pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC:

Case SI/2018/2050

Market for wholesale high-quality access provided at a fixed location (Market 4) in Slovenia

23 March 2018

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1. Executive summary

On 10 January 2018, the European Commission registered a notification by the Slovenian Regulatory Authority, Agencija za komunikacijska omrežja in storitve (AKOS), concerning the market for wholesale high-quality access provided at a fixed location.

In its notification, AKOS proposed to impose a price-setting mechanism based on LRIC+ methodology to be developed by the SMP operator. The WACC that the SMP operator is going to use for this purpose is calculated by AKOS.

On 9 February 2018 the Commission sent a serious doubts letter opening a phase II investigation pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC. The Commission's doubts concern the inclusion of a mark-up for company size (a 'size premium') in the WACC calculation. The Commission was of the view that such a size premium was not commonly applied by other NRAs in the EU, that AKOS had not sufficiently justified its inclusion and that AKOS did not provide sufficient information on how it reached the value of the size premium or explain why this value was appropriate for use in calculating the WACC of the Slovenian regulated company.

On the basis of the analysis set out in this Opinion, BEREC considers that the Commission's serious doubts are justified.

2. Introduction

Following a notification by the Slovenian national regulatory authority, AKOS, concerning the market for wholesale high-quality access provided at a fixed location on 10 January 2018, the Commission sent a first request for information (RFI) on 18 January 2018. The response to this RFI was received on 23 January 2018. A second RFI was sent to AKOS on 24 January 2018 and the response was received the following day. A third RFI was sent to AKOS on 26 January 2018 and the response was received the same day.

The Commission initiated a phase II investigation, pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC, with a serious doubts letter on 9 February 2018. In accordance with the BEREC rules of procedure the Expert Working Group (EWG) was established immediately after that date with the mandate to prepare an independent BEREC opinion on the justification of the Commission's serious doubts on the case.

On 16 February 2018, the EWG sent a first list of questions to AKOS. Answers were received from AKOS on 19 February 2018. The EWG met on 21 February 2018 in Vienna, Austria and a second list of questions was sent to AKOS on 22 February 2018. Answers were received from AKOS on 26 February 2018. On 28 February 2018 the EWG held a conference call with AKOS to gather further information and clarification in response to the questions submitted. Further information requested from AKOS during this conference call was submitted to the EWG on 1 and 6 March 2018.

On 7 March 2018 the EWG held a conference call with the Commission where the Commission explained the reasons for its serious doubts.

A draft opinion was finalized on 22 March 2018 and a final opinion was presented and adopted by a majority of the BEREC Board of Regulators on 23 March 2018. This opinion is now issued by BEREC in accordance with Article 7a(3) of the Framework Directive.

3. Background

Previous notifications

The last review of the market for wholesale terminating segments of leased lines[1] in Slovenia was previously notified to and assessed by the Commission under case SI/2008/0767[2].

At the time, APEK (now AKOS) defined a nationwide market including both traditional terminating segments of leased lines and Ethernet connections. APEK proposed to designate Telekom Slovenije as having SMP in this market based on an analysis of market shares, barriers to entry, lack of countervailing buyer power, economies of scale and scope and control of infrastructure that is not easy to replicate.

APEK further proposed to impose a full set of remedies on Telekom Slovenije, i.e.: (i) access to certain network elements, equipment and services, including access to Ethernet; (ii) non-discrimination; (iii) transparency; (iv) price control; and (v) accounting separation. As regards the price control, APEK transitionally applied a three-step glide path based on benchmarking until 1 June 2009 and thereafter a price cap based on fully allocated current costs (FAC CCA).

The Commission had no comments on this case.

Current notification and the Commission's serious doubts

Summary of current notification

On 10 January 2018 the Slovenian national regulatory authority, AKOS, notified a decision concerning the market for wholesale high-quality access provided at a fixed location[3] in Slovenia to the Commission.

AKOS proposed to define the market for wholesale high-quality access provided at a fixed location in Slovenia as comprising: (a) leased lines based on traditional technologies (PDH, SDH); (b) leased lines based on alternative technologies (Ethernet); and (c) high-quality bitstream provided over non-dedicated copper (ADSL/VDSL) or FttH lines, all including self-

[1] Corresponding to market 6 in in Commission Recommendation 2007/879/EC of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (2007 Recommendation on Relevant Markets), OJ L 344, 28.12.2007, p. 65.
[2] (2008) D/203270.
[3] Corresponding to market 4 in Commission Recommendation 2014/710/EU of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (Recommendation on Relevant Markets), OJ L 295, 11.10.2014, p. 79.

supply. AKOS proposed not to segment the relevant market according to bandwidth since it did not find that different conditions of competition exist across bandwidth segments.

Furthermore, compared to the last market review, AKOS proposed to extend the definition of terminating segment of a leased line to include the backhaul portion of the network (in addition to the access part). In AKOS' view, this will ensure the appropriate scope of the remedies, which will in turn enable access seekers to effectively compete on the retail high-quality broadband market.

AKOS excluded DOCSIS, FWBA (fixed wireless broadband access) and dark fibre both from the retail and wholesale high-quality access market, as it found that none of these technologies met the high-quality access characteristics distinguishing the products included in the market definition.

The proposed relevant market is national in scope.

Telekom Slovenije was designated as having significant market power in the relevant market based on wholesale market shares (76.5%, including self-supply), control of infrastructure not easy to duplicate, and no or low countervailing buying power by access seekers.

AKOS proposed to impose on Telekom Slovenije a full set of regulatory obligations, including a price-setting mechanism based on a LRIC+ methodology (current costs) to be developed by the SMP operator. AKOS emphasised that had the power to review Telekom Slovenije's model and request price adjustments through a number of independent verification methods, including AKOS' own BULRIC+ model, a comparison with the prices of other related services, benchmarking against prices in comparable competitive markets applied by network operators in or outside Slovenia, and other methods.

The text of the notified draft measure referred to WACC (Weighted Average Cost of Capital) values calculated by AKOS in 2014, i.e. 10.15% for legacy networks and 10.76% for NGA networks. However, in its reply to the RFIs AKOS informed the Commission that it calculated new WACCs in 2017 of 9.02% for legacy networks and 11.52% for NGA networks[4].

AKOS calculated the WACC by weighting the cost of equity and the cost of debt by the gearing in the standard way.[5] The cost of equity was calculated using the CAPM model, but AKOS added a size premium of 3.67% to the cost of equity.[6]

[4] These are nominal, pre-tax values.

[5] i.e. using the pre-tax formula WACC = $[re*(E/(D+E))+rd*(1-t)*(D/(D+E))]/(1-t)$ where re stands for the required rate of return on equity, E the market value of equity, rd the required rate of return on debt capital, D the market value of financial liabilities and t the tax rate.

[6] Using CAPM the cost of equity would equal the risk free rate + (equity risk premium x equity beta). AKOS adds a size premium to this formula.

Summary of serious doubts

The Commission expressed serious doubts in relation to the size premium included in the WACC calculations.

The Commission noted that the inclusion of a size premium of 3.67% in the cost of equity increases the pre-tax WACC by 53%, from 5.9% (without the size premium) to 9.02% (with the size premium).

The Commission considered that the inclusion of a size premium in the WACC calculations was not in compliance with Article 8(2)a and 8(5)d of the Framework Directive in conjunction with Articles 13(1) and (2) of the Access Directive, for the reasons below.

First, as already stated in case SK/2017/2010[7], the Commission reiterated its view that a size premium is not commonly applied by other NRAs in the EU.

Second, the Commission did not consider the justification for the size premium provided by AKOS to be sufficient. The Commission considered that the traditional parameters of the WACC formula (using CAPM to estimate the cost of equity, which does not include a size premium parameter) should be able to fully account for the non-diversifiable risk of the companies, including the non-diversifiable risk of Slovenian companies.

Third, even though AKOS indicated in its response to the RFIs that the size premium used is derived from the 2017 study by Duff & Phelps, the Commission did not consider that AKOS provided sufficient information on how it reached the value of the size premium of 3.67% or explain why this value was appropriate for use in calculating the WACC of the Slovenian regulated company.

The Commission considered that the inclusion of the size premium in the WACC would lead to an overestimation of the cost of equity which is likely to have a significant impact on the final value of the WACC, and correspondingly, the prices of the relevant products. The Commission concluded that it has serious doubts that the WACC proposed by AKOS promotes efficient investment and innovation, whilst ensuring that competition in the market is preserved and that consumers may have the maximum benefit in terms of choice, price, and quality.

4. Assessment of the serious doubts

On 9 February 2018, the Commission sent a serious doubts letter opening a phase II investigation pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC. Commission's doubts concern the compatibility with EU laws of AKOS´ draft measure, in particular with the requirements referred to in Article 8(2)(a) and 8(5)(d) of the Framework Directive, in conjunction with Articles 13(1) and (2) of the Access Directive. The Commission expresses serious doubts on the application of a size premium in AKOS´ WACC calculation.

[7] This is in line with the Commission Opinion C(2017) 7251 and is confirmed by the Commission Recommendation C(2018) 1035 final.

This section sets out the concerns of the Commission, the view of AKOS and the EWG's assessment of the Commission's serious doubts concerning the inclusion by AKOS of a size premium when calculating the WACC.

Whether a mark-up for size is commonly applied by other NRAs in the EU

Concerns of the Commission

The Commission said that a mark-up for size is not commonly applied by other NRAs in the EU. The Commission noted that BEREC agreed with this position in BoR (17) 251 where it said that neither BEREC's annual 'Regulatory Accounting in Practice' reports nor the 2016 report by the consultancy Brattle Group for the Commission ("2016 Brattle report") discuss the inclusion of a size premium when calculating the WACC using CAPM to derive the cost of equity.[8]

Views of AKOS

AKOS said that its WACC calculation was based on the CAPM.[9] AKOS added that, while it followed the guidelines of the 2016 Brattle report as much as possible, the 2016 Brattle report was not binding on NRAs and the size premium adjustment reflected national circumstances.[10]

BEREC's Assessment

BEREC agrees with AKOS that the recommendations of the Brattle report are not binding on NRAs.[11] Indeed, as noted in the disclaimer note of the Brattle report: "the information and views set out in this publication are those of the authors [i.e. Brattle Group] and do not necessarily reflect the official opinion of the Commission". Therefore, although the report was commissioned by the Commission, it does not have any legal status.

The 2017 BEREC report 'Regulatory Accounting in Practice' says that the most common approach used by NRAs to estimate the cost of equity is CAPM and it does not discuss the inclusion of a size premium when using CAPM.[12] The 2017 BEREC report summarises the methodologies used by European NRAs when setting the cost of capital following the completion of a questionnaire, but this questionnaire does not include specific questions about the use of size premiums. Moreover, the issue of size premium is not discussed in the 2016 Brattle report and while the 2017 BEREC report says that some NRAs include a country risk premium in the cost of equity, it does not explicitly mention the use of a size premium by

[8] BoR (17) 251 in case SK/2017/2010

[9] AKOS response dated 23 January 2018 to question 15.2 of the RFI.

[10] AKOS response dated 25 January 2018 to question 8b of the RFI and response dated 19 February to question 7 of the EWG's information request.

[11] We note that, since the Commission's consultation on the WACC has not been published yet, has not formalised its final position on the recommendations of the 2016 Brattle report.

[12] See page 4, 2017 Regulatory Accounting in Practice – WACC (BoR (17) 169), available here: http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/7316-berec-report-regulatory-accounting-in-practice-2017

NRAs[13], although it is possible that where NRAs have indicated that they include a country risk premium this could also include the use of size premiums.

On this basis, BEREC agrees with the Commission that the use of a size premium is not commonly applied by NRAs in the EU.

Justification of size premium

Concerns of the Commission

The Commission did not consider the justification for the size premium provided by AKOS to be sufficient. The Commission considered that the traditional parameters of the WACC formula (using CAPM to estimate the cost of equity, which does not include a size premium parameter) should be able to fully account for the non-diversifiable risk of the companies, including the non-diversifiable risk of Slovenian companies. Any diversifiable risk associated with investing in Slovenian companies could in theory be “diversified away” by investing in companies in other countries or other industries.

While the Commission recognised that the size premium is discussed in the academic literature, it emphasised that the vast majority of NRAs favoured the use of CAPM to estimate the cost of equity. The Commission added that BEREC recognised this in case BoR (17) 251 SK/2017/2010, where BEREC said “the conventional application of the CAPM should be able to appropriately capture the cost of capital of the regulated Slovakian company, and as a result agree with the Commission that the inclusion of a size premium is not sufficiently justified”.[14]

The Commission said that AKOS seems to have captured the non-diversifiable risk of the Slovenian operators already through the use of Slovenian government bonds to determine the risk-free rate. It also considered that “it would appear more appropriate for AKOS to have calculated the equity beta, the gearing and the cost of debt of the Slovenian regulated firm, rather than using a peer group, in order to capture company specific risks”.

The Commission also considered that the WACC calculated by AKOS was particularly high relative to the nominal pre-tax WACC values in other EU countries as reported in the 2017 BEREC report. The Commission considered it was very likely that, in view of the general downward trend of WACC values following model updates in various Member States (most of which do not include a size premium in their WACC calculations), the gap between prices in the market for wholesale high-quality access in Slovenia and in the rest of the Union was going to increase over the coming years.

[13] See pages 5 and 15ff, 2017 Regulatory Accounting in Practice – WACC (BoR (17) 169)
[14] See page 5, BEREC opinion in BoR (17) 251

Views of AKOS

AKOS said that, with the exception of the risk free rate, the data it used for the WACC calculation was based on European telecoms comparator companies.[15] AKOS said that Slovenian telecom companies are smaller than these European telecoms comparators (for example, in terms of revenue and market capitalization) and have a lower credit rating.[16] AKOS decided to reflect this smaller scale by including a size premium, thereby adjusting the WACC calculation to 'national circumstances'. AKOS quoted several sources of financial literature which it claimed justify the inclusion of a size premium when calculating the WACC[17] and also provided information indicating that including a size premium may be obligatory under Slovenian auditing rules.[18]

AKOS said that without a size premium the WACC would be 5.35% for a legacy network and 7.85% for an NGA network (compared to 9.02% and 11.52% respectively, including a size premium). AKOS said that, based on the 2017 BEREC report, the WACCs for companies with comparable country credit ratings to Slovenia (BA1) were 7.98% (Hungary), 8.73% (Croatia) and 9.07% (Portugal).[19]

AKOS said that calculating certain WACC parameters using a European telecoms peer group rather than information related to the Slovenian regulated firm was consistent with the recommendations in the Brattle report.[20] AKOS added that Telekom Slovenjie did not meet one of Brattle's criteria for a peer group firm since it does not have an investment grade credit rating and the asset beta for Telekom Slovenije shows signs of illiquidity (i.e. it may not represent a reliable estimate of the asset beta facing Slovenian telecoms companies).[21]

AKOS confirmed that it calculated a WACC in 2014 including a size premium and this WACC was used in its decisions relating to market 3a and market 3b notified to the Commission in 2017. The Commission did not raise any of serious doubts regarding the WACC at this time.

BEREC's Assessment

In considering the appropriateness, in principle, of including a size premium in the calculation of the cost of equity (for the purposes of setting the WACC) we recognise that consideration of company size is discussed in academic literature. While AKOS referenced some literature that supports a size premium adjustment, other literature indicates that evidence for the existence and magnitude of a size premium has weakened or disappeared since earlier research.[22]

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[15] AKOS' response dated 25 January 2018 to question 8b of the RFI and response to question 4 of the EWG's information request.
[16] AKOS' response to question 8 of the EWG's information request. AKOS' response to questions 4 and 15 of the EWG's information request shows that Slovenian telecoms operators are relatively small, with the largest, Telekom Slovenije being smaller than each of the European telecoms comparators.
[17] AKOS' response dated 25 January 2018 to question 8c of the RFI.
[18] AKOS' response to question 13b of the EWG's information request.
[19] AKOS' response to question 8 of the EWG's information request.
[20] AKOS' response to question 5 of the EWG's information request.
[21] AKOS' response to question 6 of the EWG's information request.
[22] For an accessible discussion see http://aswathdamodaran.blogspot.co.at/2015/04/the-small-cap-premium-fact-fiction-and.html. For a recent review of the literature see 'A literature review of the size effect'; Michael A. Crain; Manchester Business School, University of Manchester, UK; Florida Atlantic University, Boca Raton,

This is also recognised in the 2017 BEREC report when discussing company size as an input to the Fama-French three-factor model (an alternative model to CAPM used to calculate the cost of equity), saying that 'there has been a considerable debate on whether the risk premium associated with…company size…[is] statistically significant".[23]

On this basis BEREC agrees with the Commission that the conventional application of the CAPM should be able to appropriately capture the non-diversifiable risk associated with Slovenian companies and as a result BEREC agrees with the Commission that the inclusion of a size premium has not been sufficiently justified by AKOS.

While AKOS says that Slovenian telecoms companies are small relative to European telecoms peers, it has not explained why this means they would face higher non-diversifiable risks than those companies, or, where it could be demonstrated that they face higher non-diversifiable risks, why these could not be accounted for by the conventional application of the CAPM (for example by applying a suitable beta), which AKOS says is the model it has used to estimate the cost of equity.

Further, while AKOS indicated that including a size premium may be obligatory under Slovenian auditing rules, the translation it provided suggests these are more akin to recommendations.[24] In any case, AKOS has not explained why auditing rules would be relevant to its regulatory decision in this case.

While the Commission considered that the WACC calculated by AKOS including the size premium was particularly high relative to WACCs in other EU countries, AKOS said the WACC without the size premium would be low relative to EU countries with a comparable credit rating. In our view, having a relatively low WACC is not sufficient justification for including a size premium, but at the same time it should be noted that the overall WACC calculated by AKOS is not particularly high compared to other EU countries. The 2017 BEREC report shows that the mean average legacy WACC across European NRAs was 7.98%, while the WACC for the three countries with the same country credit rating as Slovenia ranged from 7.98% to 9.07%.

Overall, BEREC agrees with the Commission that the inclusion of a size premium has not been sufficiently justified by AKOS.

BEREC notes that AKOS also included a size premium when estimating the cost of equityin its 2014 WACC decision. However, we understand this is the first time that serious doubts have been expressed on the issue. From our discussion with the Commission, we understand that it only discovered the use of a size premium in this notification from AKOS' responses to the RFI. In our view, the absence of serious doubts on the 2014 WACC decision does not justify by itself the inclusion of a size premium in this notification.

Value of the size premium

Concerns of the Commission

Florida, USA; The Financial Valuation Group, Fort Lauderdale, Florida, USA; October 29, 2011, see https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1710076

[23] See pages 4 and 5 of the 2017 BEREC report.

[24] AKOS' response to question 16 of the EWG's information request.

The Commission said that the size premium corresponds to a mark-up of 3.67% in the cost of equity used for the WACC calculation and increases the nominal pre-tax WACC by approximately 53% (the WACC without the size premium is 5.9%, while the WACC including the size premium is 9.02%).

The Commission states that AKOS did not provide sufficient information on how it reaches the value of the size premium of 3.67% or explain why this value is appropriate for use in calculating the WACC of the Slovenian regulated company.

Views of AKOS

AKOS explained that the size premium was calculated based on the Duff & Phelps 2017 Valuation Handbook (Guide to cost of Capital) using "micro-cap" deciles 9-10 for companies with market capitalisations between $567.843m and $2,516m ("micro-cap range").[25] According to AKOS, Duff & Phelps is the most widely used source in valuation practice, its methodology for calculating the size premium is consistent, uniform and comparable over time, and AKOS is not aware of other available databases.[26]

AKOS said it used the size premium of 3.67%, because the majority of Slovenian companies have market capitalisations in the micro-cap range. AKOS provided a list of the 17 biggest Slovenian companies (including Telekom Slovenije) that are listed on the stock exchange, which shows that each of their market capitalisations was below the top end of the micro-cap range.[27] AKOS confirmed that other Slovenian telecom operators are much smaller than the SMP operator (Telekom Slovenije) and are not listed on the stock exchange.

AKOS also noted that the calculated WACC is going to be used by all infrastructure operators in Slovenia which are going to build their network in the next year and therefore will not only be used by the SMP operator.[28]

BEREC's Assessment

AKOS has presented the source of the size premium to the EWG. According to this, the value of the size premium of 3.67% is taken directly from a table published in the Duff & Phelps 2017 Valuation Handbook.

Even if the use of a size premium was justified, AKOS has not explained why it is appropriate to use information on US companies to derive the value of the size premium applicable in Slovenia.

Consequently while AKOS has explained how it reached the value of the size premium of 3.67%, BEREC agrees with the Commission that AKOS has not explained why this value is appropriate for use in calculating the WACC of the Slovenian regulated company.

[25] AKOS response dated 25 January 2018 to question 8c of the RFI.
[26] AKOS response to question 17 of the EWG's information request.
[27] AKOS response to question 13a of the EWG's information request.
[28] AKOS response to question 13a of the EWG's information request.

5. Conclusions

On the basis of the analysis set out in section 4 above, BEREC considers that the Commission's serious doubts regarding the draft decision of the Slovenian Regulatory Authority on the market for wholesale high-quality access provided at a fixed location – as expressed in the Commission's letter to AKOS of 9 February 2018 – are justified.

BEREC is of the opinion that:

- The use of a size premium in WACC calculations is not commonly applied by NRAs in the EU.
- The inclusion of a size premium in the WACC calculation has not been sufficiently justified by AKOS.
- While AKOS has explained how it reached the value of the size premium of 3.67%, it has not explained why this value is appropriate for use in calculating the WACC of the Slovenian regulated company.