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## **COMMISSION RECOMMENDATION**

**of 8.6.2018**

**in accordance with Article 7a of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services ("Framework Directive") in Case SI/2018/2050: Wholesale high-quality access provided at a fixed location in Slovenia – market review**

Only the Slovenian version is authentic

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**in accordance with Article 7a of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services ("Framework Directive") in Case SI/2018/2050: Wholesale high-quality access provided at a fixed location in Slovenia – market review**

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services as amended by Directive 2009/140/EC of 25 November 2009 and Regulation (EC) No 544/2009 of 18 June 2009 (Framework Directive)<sup>1</sup> and in particular Article 7a (5) thereof,

Having regard to the opening of the second phase of investigation pursuant to Article 7a(1) of the Framework Directive on 9 February 2018,

Having regard to the additional information provided by the Slovenian national regulatory authority, Agencija za komunikacijska omrežja in storitve Republike Slovenije (AKOS),

Having regard to the notice<sup>2</sup> posted on the Commission's website on 14 February 2018 inviting third parties to submit observations on the Commission's serious doubts letter (the Notice),

Having regard to the opinion of the Body of European Regulators for Electronic Communication (BEREC)<sup>3</sup>,

Whereas:

## 1. PROCEDURE

- (1) On 10 January 2018, the Commission registered a notification from the Slovenian national regulatory authority, AKOS, concerning the market for wholesale high-quality access provided at a fixed location in Slovenia (the notified draft measure).
- (2) On 18 January 2018, a first request for information<sup>4</sup> (RFI) was sent to AKOS and the response was received on 23 January 2018. A second RFI was sent to AKOS on 24

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<sup>1</sup> Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), OJ L 108, 24.4.2002, p. 33, as amended by Directive 2009/140/EC, OJ L 337, 18.12.2009, p. 37, and Regulation (EC) No 544/2009, OJ L 167, 29.6.2009, p. 12.

<sup>2</sup> Notice published at: [https://circabc.europa.eu/sd/a/47157aad-2823-4b30-999b-38fc9e5e9081/SI-2018-2050%20Notice%20to%203rd%20parties%20Art%207a.\(I\).pdf](https://circabc.europa.eu/sd/a/47157aad-2823-4b30-999b-38fc9e5e9081/SI-2018-2050%20Notice%20to%203rd%20parties%20Art%207a.(I).pdf).

<sup>3</sup> Opinion of BEREC of 23 March 2018, BoR (18) 55.

<sup>4</sup> In accordance with Article 5(2) of the Framework Directive.

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 on the same day.

- (3) On 9 February 2018, the Commission, pursuant to Article 7a(1) of the Framework Directive, initiated a Phase II investigation and subsequently notified AKOS and BEREC of the reasons for its serious doubts as to the compatibility of the notified draft measure with EU law (the serious doubts letter).
- (4) On 14 February 2018, the Commission posted a notice on its website inviting third parties to submit observations on the Commission's serious doubts letter. By the deadline foreseen for such observations (28 February 2018), one observation had been submitted to the Commission.
- (5) On 23 March 2018, BEREC delivered its opinion to the Commission<sup>5</sup> and fully supported the Commission's serious doubts.

## **2. DESCRIPTION OF THE NOTIFIED DRAFT MEASURE**

### **2.1 Previous notifications**

- (6) The last review of the market for wholesale terminating segments of leased lines<sup>6</sup> in Slovenia was previously notified to and assessed by the Commission under case SI/2008/0767<sup>7</sup>.
- (7) 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 on such a market based on 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.
- (8) 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 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).
- (9) The Commission had no comments on the case.

### **2.2 Market definition**

- (10) AKOS finds that the retail market for high-quality products in Slovenia includes leased lines based on traditional technologies (PDH, SDH), leased lines based on alternative technologies (Ethernet) and high-quality bitstream provided over non-dedicated copper (ADSL/VDSL) or FttH lines. AKOS considers that the above products are linked by a chain of substitution having Ethernet products at its core, PDH/SDH at one end and high-quality bitstream over non-dedicated lines at the other

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<sup>5</sup> In accordance with Article 7a(3) of the Framework Directive.

<sup>6</sup> Corresponding to market 6 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.

<sup>7</sup> (2008) D/203270.

end<sup>8</sup>. According to AKOS, 80.16% of the retail high-quality broadband market is controlled by Telekom Slovenije, whereas no alternative operator has an individual market share of more than 10%.

- (11) AKOS proposes 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-supply. AKOS proposes not to segment the relevant market according to bandwidth since it did not find that different conditions of competition exist across bandwidth segments<sup>9</sup>.
- (12) Furthermore, compared to the last market review, AKOS proposes 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)<sup>10</sup>. 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<sup>11</sup>.
- (13) AKOS excludes DOCSIS, FWBA (fixed wireless broadband access) and dark fibre both from the retail and wholesale high-quality access market as it finds that none of these technologies meet the high-quality access characteristics distinguishing the products included in the market definition<sup>12</sup>.
- (14) The proposed relevant market is national in scope<sup>13</sup>.

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<sup>8</sup> In other words, AKOS finds that substitutability clearly exists between traditional leased lines and Ethernet, on the one side, and between Ethernet and high-quality bitstream over non-dedicated lines, on the other side. Thus, while not being directly substitutable, the products at the ends of the chain are both constrained by Ethernet and are therefore considered to be part of the same market.

<sup>9</sup> In particular, AKOS indicates that Telekom Slovenije has a high market share, both at retail and wholesale (including self-supply) level, in all bandwidth segments.

<sup>10</sup> The access part of the network is defined as the portion between the end user's premises and the access node with active equipment at which individual access lines are concentrated or aggregated (via the MDF/ODF or directly through the active equipment). The backhaul part of the network is defined as the portion between the access node and the nearest IP/MPLS backbone network edge node.

<sup>11</sup> AKOS explains in the reply to the RFIs that in most cases access seekers need access at the edge nodes because they do not have an economically viable alternative to reach the access nodes (i.e. the MDFs/ODFs).

<sup>12</sup> AKOS does not include broadband access provided over coaxial cable (DOCSIS) in the retail high-quality access market, essentially because it does not guarantee the high-quality characteristics demanded by business users, as is demonstrated by the fact that there is no offer of high-quality products over cable in Slovenia. AKOS excludes fixed wireless network broadband access (FWBA) for similar reasons. With regard to dark fibre, AKOS submits that this is merely one of the inputs necessary to develop high-quality broadband offers (additional inputs are required, e.g. active equipment); AKOS thus concludes that dark fibre does not belong to the relevant market, but to the upstream wholesale local access market.

<sup>13</sup> AKOS reaches this conclusion following a complex analysis of options for a potential geographic segmentation of the market. Among the reasons justifying the definition of a nationwide market, AKOS indicates the quasi-ubiquity and primary importance of Telekom Slovenije's network across the country, the homogenous distribution of Telekom Slovenije's market shares and no significant geographic differences in the retail offer of high-quality products in terms of functionality, conditions of supply and prices.

### 2.3 Finding of significant market power

- (15) Telekom Slovenije is designated as having significant market power on the relevant market based on wholesale market shares (76.5%, including self-supply)<sup>14</sup>, control of infrastructure not easy to duplicate<sup>15</sup>, and no or low countervailing buying power by access seekers.

### 2.4 Regulatory remedies

- (16) AKOS proposes to impose on Telekom Slovenije a full set of regulatory obligations, namely: (i) access to the terminating segment (including backhaul) of Telekom Slovenije's copper and fibre leased lines using either traditional or alternative technologies as well as to high-quality bitstream provided over non-dedicated lines<sup>16</sup>; (ii) non-discrimination; (iii) transparency; (iv) price control and cost accounting; and (v) accounting separation.
- (17) The proposed non-discrimination remedy is based on EoI conditions and includes, in particular, the use of a single information system for orders originating from either Telekom Slovenije's retail arm or any other access seeker, non-discriminatory access to information about network failures, planned network upgrades and other network-related data, the implementation of KPIs, SLAs, SLGs (including penalties), and a technical replicability test applied to Telekom Slovenije's new and modified retail offers.
- (18) With regard to price control, AKOS proposes to replace the current top down FAC CCA-based price caps with a price-setting mechanism based on a LRIC+ methodology (current costs) to be developed by the SMP operator<sup>17</sup>. AKOS emphasises that it shall have 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<sup>18</sup>.

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<sup>14</sup> This figure was provided by AKOS in the reply to the RFIs. Excluding self-supply, Telekom Slovenije has a wholesale market share of 38.4%, which AKOS explains by reference to the fact that, due to the outdated regulation currently in force, alternative operators mostly rely on dark fibre in order to compete on the retail market.

<sup>15</sup> AKOS explains in the notification that Telekom Slovenije's infrastructure covers 98.8% of areas where there is demand for high quality products, which compares to 30.5% coverage by alternative operators.

<sup>16</sup> The access remedy includes Telekom Slovenije's obligation to provide high-quality bitstream wholesale offers over its FttH network (currently non-existent), which, in AKOS' view, is crucial to assure high-quality backhaul/fronthaul connections for 5G deployments and other high-quality products in areas not covered by FttO.

<sup>17</sup> AKOS proposes to apply said LRIC+ methodology both to the three product categories mentioned above - traditional interface leased lines, alternative interface leased lines and high-quality bitstream over non-dedicated lines – and to other related services (installation, change of capacity on VPN L2 connections, various SLA services per VPN L2 connection, etc.). The first set of cost-oriented prices shall apply no later than 60 days from the entry into force of the draft measures under assessment. Until then Telekom Slovenije will have to keep the prices set in the reference offer which is valid at the time of the entry into force of AKOS' final decision.

<sup>18</sup> AKOS explains in the reply to the RFIs that it has recently started to develop its own BULRIC+ model. Beyond this, AKOS submits that it may at any time use any of the mentioned verification methods to check the correctness of Telekom Slovenije's calculations and demand price adjustments, where appropriate.

## WACC

- (19) The text of the notified draft measure refers to WACC (Weighted Average Cost of Capital) values calculated in 2014, i.e. 10.15% for legacy networks and 10.76% for NGA networks. Only in the reply to the RFIs AKOS informed the Commission that it calculated new WACC values in 2017 (2017 WACC). Those are set at the level of 9.02% for legacy networks and 11.52% for NGA networks<sup>19</sup>, using the parameters described in the table below.
- (20) Parameters and values used by AKOS to calculate the 2017 WACC

<b>Cost of equity</b>	
Nominal risk-free rate	1.84%
Levered beta	0.76%
Equity risk Premium	5.20%
Cost of equity	5.79%
Size premium	3.67%
<b>Adjusted cost of equity</b>	<b>9.46%</b>
<b>Cost of debt</b>	
Nominal risk-free rate	1.84%
Debt premium <sup>20</sup>	1.29%
<b>Cost of debt</b>	<b>3.13%</b>
<b>Gearing D/(D+E)</b>	31.05%
Tax rate	19.00%
<b>Pre-tax WACC legacy networks</b>	<b>9.02%</b>
<b>Pre tax WACC NGA networks</b>	<b>11.52%</b>

- (21) In particular, AKOS calculates the WACC based on the capital asset pricing model (CAPM) formula:

$$re * (E/(D + E)) + rd * (1 - t) * (D/D+E)$$

where re stands for required rate of return on equity, E market value of equity, rd required rate of return on debt capital, D market value of financial liabilities, and t tax rate.

<sup>19</sup> These are nominal, pre-tax values.

<sup>20</sup> AKOS calculates the debt premium by subtracting the average yield of 20-year European bonds of companies with AAA credit rating (1.08%) from the average yield of 20-year bonds in the telecommunications sector (2.37%) in the period April-September 2017.

- (22) In the reply to the RFIs AKOS submits that the 2017 WACC was calculated in accordance with the WACC-related study prepared by the Brattle group for the Commission<sup>21</sup>. However, AKOS adjusts the common CAPM formula by including a 'size premium' of 3.67% in the cost of equity<sup>22</sup>. According to AKOS, the model and the calculations are effective as of their publication on the NRA's website on 4 January 2018 while the comments from the interested public were received until 19 January 2018.
- (23) The LRIC+ price-setting mechanism is complemented by a prohibition of margin squeeze in the form of an economic replicability test to be applied to the three categories of high-quality access products included in the relevant market (but not to other related services)<sup>23</sup>.

### 3. THE COMMISSION'S SERIOUS DOUBTS

- (24) On 9 February 2018, the Commission expressed serious doubts as to the compatibility with EU law of AKOS' notified 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 Article 13(1) and (2) of the Access Directive<sup>24</sup>.

#### 3.1. Mark-up for company size in the WACC calculations

*Compliance with Article 8(2)a and 8(5)d of the Framework Directive in conjunction with Article 13(1) and (2) of the Access Directive*

- (25) The Commission referred to Article 8(2)a and 8(5)d of the Framework Directive as well as Article 13(1) and (2) of the Access Directive, which require NRAs to impose a cost control obligation aimed at achieving, among others, the objectives of encouraging efficient investments, including in next generation networks and allowing a reasonable rate of return on adequate capital employed, while promoting efficiency and sustainable competition and maximising consumer benefits in terms of choice, price and quality. In particular, the Commission referred to Article 8(5)d of the Framework Directive, which stipulates that NRAs shall promote efficient investment and innovation, whilst ensuring that competition in the market is preserved.
- (26) Since the weighted average cost of capital is a component of a cost-oriented price to be applied by SMP operators in the market at stake, NRAs are bound by these provisions in calculating the WACC value.

<sup>21</sup> The Brattle Group, "Review of approaches to estimate a reasonable rate of return for investments in telecoms networks in regulatory proceedings and options for EU harmonization", 2016.

<sup>22</sup> The calculation of the 'size premium' is based, in particular, on the work *Duff & Phelps 2017 Valuation Handbook – U.S. Guide to Cost of Capital*, John Wiley & Sons, New Jersey, 2017. In the reply to the RFIs AKOS confirmed that also the 'old' WACC (calculated by the regulator in 2014) included a country risk and premium for small size.

<sup>23</sup> AKOS specifies in the notification that the proposed margin squeeze test is based on the EEO (equally efficient operator) principle and is consistent with BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex ante/sector specific margin squeeze tests), BoR (14) 190. AKOS clarifies in the reply to the RFI that, although the prohibition of margin squeeze shall already apply to the first set of LRIC+ prices, the first margin squeeze calculations will have to be submitted by Telekom Slovenije by 30 June 2019 and thereafter at least once a year.

<sup>24</sup> Directive 2002/19/EC of the European Parliament and the Council of 7 March 2002 on access to, and interconnection, of electronic communications networks and associated facilities, OJ L 108, 24.4.2002, p. 7 (of the Access Directive).

- (27) Regarding the WACC calculation, the Commission expressed serious doubts that the notified WACC value would actually reflect the currently prevailing competitive conditions, in both the relevant and the capital markets in Slovenia, taking into account the risk incurred by the investing undertakings, and contribute to the required robustness regarding the relevant parameter used to set the cost-oriented prices of the SMP operators. Therefore, the Commission had serious doubts that the notified WACC would represent a reasonable rate of return on adequate capital employed which would encourage efficient investments and would promote efficiency and sustainable competition and would maximise consumer benefits.
- (28) Specifically, the Commission noted that AKOS calculated the cost of equity applying a mark-up ('size premium') which would reflect the risk of the variability in the return of the operators' shares in the long run perspective depending on the size of undertakings, defined according to the 2017 study by Duff & Phelps<sup>25</sup>, and which is derived from the market capitalisation of the companies listed in the US stock exchange.
- (29) Such a 'size premium' corresponds to a mark-up of 3.67 percentage points in the cost of equity used for the WACC calculation leading to the nominal pre-tax WACC to increase by approximately 53%<sup>26</sup>.
- (30) AKOS explained that its WACC calculations were based on a study prepared by the Brattle Group for the Commission. However, the Commission noted that AKOS adjusted the resulting WACC formula by adding a mark-up in order to account for the smaller size of (and higher risks faced by) Slovenian companies compared to that of the other Union operators considered when calculating the equity beta in the common WACC formula.
- (31) The Commission concluded that: i) as stated in case SK/2017/2010<sup>27</sup>, such a mark-up for size is not commonly applied by other NRAs in the EU; ii) it did not consider the justification for the size premium provided by AKOS to be sufficient<sup>28</sup> and iii) AKOS did not provide sufficient information on how it reaches the value of the size premium

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<sup>25</sup> See citation in footnote 24.

<sup>26</sup> The Commission calculated that the nominal pre-tax WACC obtained without the inclusion of a 'size premium' would amount to 5.9%, while the value obtained including the 'size premium' amounts to 9.02%. The Commission also noted that the WACC calculated by AKOS is particularly high relative to the nominal pre-tax WACC values in other EU countries reported by BEREC in 2017 and that therefore it is 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 on the market for wholesale high-quality access in Slovenia and in the rest of the Union is going to increase over the coming years.

<sup>27</sup> The Commission's serious doubts in this case (C(2017) 7251) were endorsed by BEREC in its opinion BoR (17) 251 and subsequently confirmed in the Commission Recommendation closing the Phase II investigation (C(2018) 1035).

<sup>28</sup> The Commission recalled that the traditional parameters of the WACC formula (the size premium is not one of them) should be able to fully account for the non-diversifiable risk of the companies, including the risk of Slovenian companies. Any additional diversifiable (i.e. non-systemic) risk associated with investing in Slovenian companies could in theory be "diversified away" by investing in companies in other countries or in other industries. In addition, the Commission considered that: (i) AKOS seems to have captured the inherent non-diversifiable risk of the Slovenian operators already through the use of Slovenian government bonds to determine the risk-free rate; and (ii) it appeared 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.



of 3.67 percentage points nor did it explain why this value is appropriate for use in calculating the WACC of the Slovenian regulated company.

- (32) In the light of the above and in the absence of any valid justification provided by AKOS, the Commission considered that the mark-up should not have been included in the WACC calculation as it 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, on the prices of the relevant regulated products.
- (33) Therefore, the Commission expressed serious doubts that the WACC value as proposed by AKOS, would actually promote efficient investment and innovation, whilst ensuring that competition in the market would be preserved and that consumers would have the maximum benefit in terms of choice, price and quality.
- (34) In conclusion, the Commission expressed serious doubts that the proposed calculation of WACC complies with the policy objectives set in Article 8(2)a and 8(5)d of the Framework Directive and therefore complies with Article 13(1) and (2) of the Access Directive and therefore subsequently that AKOS's proposal is compatible with EU law, as set out in Article 7a(1) of the Framework Directive.

#### **4. OBSERVATIONS SUBMITTED BY THIRD PARTIES**

- (35) By the deadline set for third-party observations the Commission received comments from one interested party.
- (36) This party expressed its concerns regarding: (i) the validity of current WACC calculations; (ii) the validity of the calculation of cost-oriented prices; and (iii) whether price control obligations have been appropriately designed and enforced. In particular, it questioned whether AKOS has systematically applied, monitored and reviewed the price control obligations imposed on Telekom Slovenije (especially as it appears that the LRIC+ model is not in use). It asked the Commission to further investigate this issue.

#### **5. PROCEDURE FOR CONSISTENT APPLICATION OF REMEDIES**

##### **5.1. BEREC's Opinion**

- (37) On 23 March 2018, BEREC issued an opinion with regards to the Commission's letter of serious doubts pursuant to Article 7a (3) of the Framework Directive.
- (38) BEREC considers that the Commission's serious doubts are justified.
- (39) BEREC is of the opinion that the use of a size premium in WACC calculations is not commonly applied by NRAs in the EU. Indeed, the 2017 BEREC report 'Regulatory Accounting in Practice' states 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. The 2016 Brattle report does not discuss the size premium either.
- (40) BEREC is of the view that the inclusion of a size premium has not been sufficiently justified by AKOS. According to BEREC, 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. Furthermore, BEREC's 2017 Report recognises that it has been highly debated whether the risk premium associated with company size is statistically significant. Hence, 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.

- (41) Furthermore, BEREC is of the view that AKOS fails to justify why the relative size of Slovenian telecom companies (compared to European telecom peers) represents a higher exposure to non-diversifiable risks or why these could not be accounted for by the conventional application of the CAPM. Moreover, AKOS indicates that including a size premium may be required by national auditing laws but fails to explain such requirement and its relevance.
- (42) Finally, BEREC agrees with the Commission that AKOS fails to explain why the value of the size premium of 3.67% is appropriate for use in calculating the WACC of the Slovenian regulated company. Indeed, BEREC finds that AKOS has not explained why it is appropriate to derive the value of the size premium applicable in Slovenia from a table published in the Duff & Phelps 2017 Valuation Handbook which uses information on US companies.

## **5.2. Close cooperation among AKOS, BEREC and the Commission**

- (43) AKOS, BEREC and the Commission closely cooperated pursuant to Article 7a (2) and (4) of the Framework Directive in order to identify the most appropriate and effective measure in light of the objectives laid down in Article 8 of the Framework Directive.
- (44) A tripartite video conference between AKOS, BEREC and the Commission was held on 11 April 2018.
- (45) At this occasion, AKOS communicated its intention to change the way it calculates the WACC taking into account the position taken by the Commission and BEREC regarding the size premium. AKOS also stated that its new WACC calculations would not result in changes to the notified draft measure. Instead, the new WACC would be set in parallel proceedings.
- (46) The Commission informed AKOS that from a procedural point of view the start of a review of the WACC in parallel with the presently notified market review could not in itself affect the outcome of the pending Phase II investigation, of which the 2017 WACC value is an integral part. Indeed, the Commission considers that the revised WACC methodology is still subject to the requirements of Articles 6 and 7 of the Framework Directive and will therefore lead to separate proceedings to be carried out in the future. Given the timeline of these procedures, the changes announced by AKOS could not lead the Commission to withdraw its serious doubts expressed on the draft measure currently under review.

## **5.3. Conclusion of the procedure opened to ensure the consistent application of the remedies**

- (47) Since AKOS maintained its notified draft measure at the end of the three months period following the Commission's notification of its serious doubts in accordance with Article 7a (1) of the Framework Directive, the Commission, taking utmost account of the opinion of BEREC, may issue a recommendation requiring AKOS to amend or withdraw the notified draft measure or may take a decision to lift its reservations indicated in the serious doubts letter.
- (48) The Commission finds that the reservations expressed in its serious doubts letter remain valid.

### **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**

- (49) The weighted average cost of capital is a component of a cost-oriented price to be applied by SMP operators in the market at stake. The Commission recalls that NRAs are bound, pursuant to Article 8 of the Framework Directive as well as Articles 13(1) and (2) of the Access Directive, to impose a cost control obligation that meets the objectives of encouraging efficient investments, including in next generation networks, and allowing a reasonable rate of return on adequate capital employed, while promoting efficiency and sustainable competition and maximising consumer benefits in terms of choice, price and quality (Article 8(2)a and 8(5)d of the Framework Directive).
- (50) In particular, Article 8(5)d of the Framework Directive stipulates that NRAs shall promote efficient investment and innovation, whilst ensuring that competition in the market is preserved.

#### *Inconsistency between the CAPM framework and the use of a size premium*

- (51) The Commission considers that, from a methodological point of view, the addition of a mark-up for company size ("size premium") is not consistent with the framework typically used by NRAs to estimate the WACC, namely, the capital asset pricing model (CAPM)<sup>29</sup>. In contrast, in line with BEREC's opinion, other parameters considered within the CAPM's WACC formula, such as the equity beta, should be able to fully account for the non-diversifiable risk of the companies considered, including the risk of Slovenian companies. Any additional diversifiable risk associated with investing in telecoms companies in Slovenia could in theory be "diversified away" by investing in companies in other countries or in other industries.
- (52) The Commission therefore considers that, when calculating the cost of equity, it is not justified to apply a mark-up which would reflect the additional risk associated with the greater variability in the long-term return of an operator's shares due to the (allegedly smaller) size of that undertaking ("size premium"). In fact, the Commission takes the view that such a mark-up is liable to result in an overestimation of the cost of equity, which in turn is likely to significantly impact the final value of the WACC<sup>30</sup> and, correspondingly, the prices of the relevant regulated products.

#### *Insufficient empirical evidence supporting the use of a size premium*

- (53) Beyond the above methodological arguments, the Commission finds that the justification for the size premium provided by AKOS is not well-grounded.
- (54) According to AKOS, the size premium should account for the fact that Slovenian telecoms operators are smaller and have a lower credit rating than the European

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<sup>29</sup> As already stated in case SK/2017/2010 by both BEREC (BoR (17) 251) and the Commission (C(2018) 1035) and confirmed by BEREC in its opinion on the present case, the size premium is not commonly applied by NRAs in the EU. BEREC also recalled that the use of a size premium is not discussed in the 2016 Brattle report nor addressed in the 2017 BEREC report 'Regulatory Accounting in Practice'.

<sup>30</sup> The 9.02% WACC calculated by AKOS for a legacy network (11.52% for an NGA network) is higher than the mean average legacy WACC (7.98%) reported in BoR (17) 169, BEREC Report - Regulatory Accounting in Practice 2017 (published 5 October 2017). The impact of the size premium is considerable given that, based on the information provided by AKOS, the WACC without the mark-up would be 5.35% for a legacy network and 7.85% for an NGA network.

companies used as reference. In support of this line of argument AKOS cited a number of academic works<sup>31</sup>.

- (55) Conversely, the Commission emphasises that: (i) it appears that some of the studies cited by AKOS do not go beyond discussing the possible existence of a size effect and can thus not be considered truly supportive of the use of size premia<sup>32</sup>; and (ii) a number of recent studies dispute the evidence relied upon by AKOS to justify the use of a size premium (also referred to as “small cap premium”) and clearly call into question the existence of such a size effect in today’s market context<sup>33</sup>. Most importantly, many contend that evidence of a size effect has not been observed since the early 1980s in the United States and is weak or non-existent in other countries<sup>34</sup>. The studies referred to above use several other arguments to question the need for size premia, including the fact that small firm effects have at most been observed only for very small stocks<sup>35</sup> or that most or all of the small size effect is in fact a liquidity effect, i.e. it reflects the higher liquidity risk faced by small firms and tends to disappear once illiquidity is accounted for<sup>36</sup>.
- (56) The Commission considers that any non-diversifiable risk associated with the stocks of Slovenia's SMP operator should be reflected in its equity beta, including any risks associated with its smaller size. For this reason, it would have been more appropriate for AKOS to also reflect on the equity beta, the gearing and the cost of debt of the Slovenian regulated firm, rather than relying solely on the use of a peer group, to estimate the values used in its WACC estimation. This said, in evaluating the SMP operator's beta, AKOS should also take into account that individual beta values may be inflated by the additional financial risk associated with relatively higher leverage.

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<sup>31</sup> In addition to Duff & Phelps, cit., AKOS referred to S.P. Pratt and A.V. Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (5th edition), McGraw-Hill, New York, 2007, pp. 193-198; S.P. Pratt and R.J. Grabowski, *Cost of capital: Estimation and Applications* (2nd edition), Wiley & Sons, New Jersey, 2002, pp. 75, 90-108; A. Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (2nd edition), Wiley & Sons, New Jersey, 2002, pp. 136-138, 207.

<sup>32</sup> For instance, including Damodaran among the supporters of the use of a size premium in the calculation of the cost of capital raises questions, given that the same author actually appears to be very critical of this practice (see A. Damodaran, *The Small Cap Premium: Where is the beef?*, 11 April 2015, available at <http://aswathdamodaran.blogspot.be/2015/04/the-small-cap-premium-fact-fiction-and.html>)

<sup>33</sup> The observation of a size effect in the present market situation is widely disputed. See e.g. A. Damodaran, *The Small Cap Premium: Where is the beef?*, cit., including the literature cited therein, and M. A. Crain, *A Literature Review of the Size Effect*, 29 October 2011, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1710076](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1710076). The use of a size premium is also questioned in a recent report by the UK Regulators Network (UKRN), “Estimating the cost of capital for implementation of price controls by UK regulators”, 6 March 2018, available at <http://www.ukrn.org.uk/news/estimating-the-cost-of-capital-for-implementation-of-price-controls-by-uk-regulators/>.

<sup>34</sup> This is argued by all the sources cited in the footnote above. See also J. Hsu and V. Kalesnik, *Finding Smart Beta in the Factor Zoo*, July 2014, available at [https://www.researchaffiliates.com/en\\_us/publications/articles/223\\_finding\\_smart\\_beta\\_in\\_the\\_factor\\_zoo.html](https://www.researchaffiliates.com/en_us/publications/articles/223_finding_smart_beta_in_the_factor_zoo.html).

<sup>35</sup> See A. Damodaran, *The Small Cap Premium: Where is the beef?*, cit., and J. L. Horowitz, T. Loughran and N. E. Savin, “The disappearing size effect”, *Research in Economics*, 2000, vol. 54, issue 1, 83-100, showing that any statistically significant size effect vanishes when removing the smallest firms from the sample (less than USD5m market value).

<sup>36</sup> See e.g. A. Damodaran, *The Small Cap Premium: Where is the beef?*, cit., and M. A. Crain, cit., and the literature cited therein, as well as the UKRN report, cit.

For this reason, while relying on the SMP operator's equity beta, the beta used should in principle be consistent with that of similar peer companies in other EU countries. A good practice would be to ensure that the adopted equity beta value be within a range of values of similar EU telecoms companies with: (i) investment grade; (ii) most of their company revenues originating from the EU; and (iii) most of its revenues from similar activities as those being regulated.

- (57) Regarding AKOS' contention that the size premium may be obligatory under Slovenian auditing rules, the Commission refers to BEREC's opinion, which finds that such rules did not appear to be binding on AKOS and that AKOS did not explain why auditing rules would be relevant to its regulatory decision in this case.

*Unjustified level of the size premium*

- (58) Finally, even if one were to assume, for the sake of argument, that the use of a size premium could be justified, the Commission considers that AKOS fails to adequately explain its choice to set the level of the premium at 3.67%.
- (59) During the second phase investigation, AKOS provided some additional information to explain how it reached the 3.67% figure. AKOS clarified that, based on the Duff & Phelps 2017 Valuation Handbook, it used size premium values recommended for companies with a market capitalisation between USD2.16m and USD567.843m (micro-cap deciles 9-10). According to AKOS, the majority of Slovenian companies fall within that range, while telecoms operators other than Telekom Slovenije are much smaller than the latter and are not listed on the stock exchange.
- (60) However, as stated by BEREC in its opinion, the Commission points out that AKOS did not justify why it would be appropriate to use Duff & Phelps data on US companies to derive the value of the size premium suitable for Slovenian companies. As a matter of fact, AKOS did not present any evidence pointing to the existence and magnitude of size effects in Europe or specifically in Slovenia.
- (61) Beyond that, the Commission is not convinced that AKOS correctly applied Duff & Phelps figures when calculating the size premium. Based on the information provided by AKOS, Telekom Slovenije has a market capitalisation of USD623m, such that it would not fall in either decile 9 or 10 but rather in decile 8 of the Duff & Phelps table (the corresponding 'low cap' size premium being "only" 1.75%). Further, it is not clear to the Commission why it would be relevant to look at the market capitalisation of Slovenian companies that are not active in the telecoms sector. As to the value of other Slovenian telecoms operators for which the WACC would also be applicable, the Commission did not receive any information on their market capitalisation and therefore could not determine whether the reference to deciles 9-10 is accurate.

**Conclusion**

- (62) In light of all the above, the Commission stands by its position outlined in the serious doubts letter that the notified WACC is not likely to actually reflect the currently prevailing competitive conditions in both the relevant market and the capital markets in Slovenia, taking into account the risk incurred by the investing undertakings. In particular, AKOS failed to demonstrate that the notified WACC would represent a reasonable rate of return on adequate capital employed which would encourage efficient investments and would promote efficiency and sustainable competition and would maximise consumer benefits.

- (63) The Commission therefore concludes that the proposed calculation of the WACC does not comply with the policy objectives set in Article 8(2)a and 8(5)d of the Framework Directive and therefore is not in line with Article 13(1) and (2) of the Access Directive.
- (64) On the basis of the above, and recalling its reasons expressed in the serious doubts letter, the Commission issues the present recommendation requiring AKOS to amend or withdraw the draft measures.

HEREBY RECOMMENDS:

1. AKOS should amend or withdraw the price control and cost accounting remedy in order to bring its WACC calculations in line with the policy objectives set in Article 8(2)a and 8(5)d of the Framework Directive and therefore complies with Article 13(1) and (2) of the Access Directive.
2. AKOS should avoid any overestimation of the cost of equity, in particular by ensuring that a “size premium” mark-up is not included in the WACC calculation.
3. The Commission will publish this recommendation on its website. AKOS is invited to inform the Commission within three working days following receipt of this recommendation whether it considers that, in accordance with European Union and national rules on business confidentiality, it contains confidential information which AKOS wishes to have deleted prior to publication. Any such request should be reasoned.
4. In accordance with Article 7a(7) of the Framework Directive, where AKOS decides not to amend or withdraw the notified draft measure on the basis of this recommendation, it shall provide the Commission with a reasoned justification.
5. In accordance with Article 7a(6) of the Framework Directive, AKOS shall communicate the adopted draft measure to the Commission within one month of the Commission issuing this recommendation. This period might be extended, at AKOS’ request, to allow AKOS to undertake a public consultation in accordance with Article 6 of the Framework Directive.

6. This Recommendation is addressed to AKOS.

Done at Brussels, 8.6.2018

*For the Commission*  
*Mariya GABRIEL*  
*Member of the Commission*

