Guidance on cost of capital for EU electronic communications regulators

Synopsis report of targeted consultation

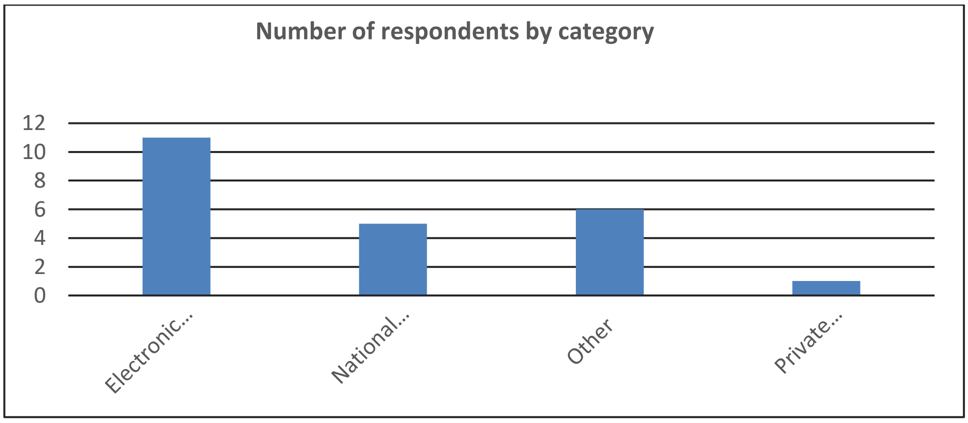
1. Methodology of the targeted consultation and of this report

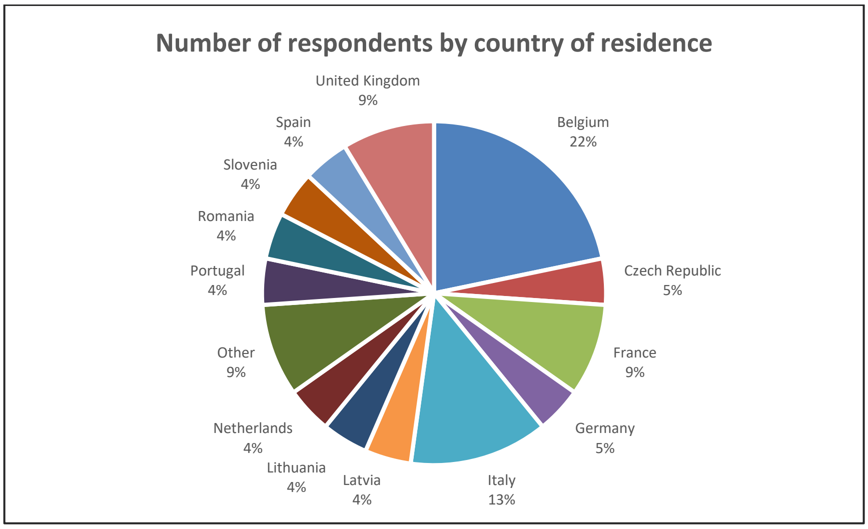
The European Commission ran a consultation on the cost of capital for EU electronic communications regulators from 11 July to 3 October 2018. The objective of the consultation was to collect additional evidence and views from interested parties to inform the Commission's future guidance on the calculation of the Weighted Average Cost of Capital (WACC) for EU electronic communications regulators, expected in early 2019. The replies from contributors who agreed with the publication of their contribution are available here. This report provides an overview of the replies to the consultation.

All contributions provided via EU Survey and by email have been analysed for the purposes of this report. The consultation targeted electronic communications operators, National Regulatory Authorities (NRAs), industry associations, other public authorities, civil society organisations and citizens.

2. Respondent's profile

The Commission has received 23 replies: 11 from electronic communications operators, 5 from NRAs, 1 from an individual and 6 from other entities (four trade associations and two public bodies/institutions other than NRAs). Out of the electronic communications operators, 7 are fixed network operators, 6 mobile network operators and 5 convergent operators (some respondents fall into more than one category). One respondent is a mobile virtual network operator (MVNO). The largest number of replies come from Belgium and Italy.





3. Questions on the general approach to assess the most appropriate methodology to estimate the WACC

Respondents' views on the various questions asked in the consultation are summarised below. The proportion of respondents supporting/rejecting the various options within each question is expressed as a percentage of replies to the specific question, excluding those respondents who answered "I don't know" or did not answer.

Differences in WACC levels

The majority of respondents support the view that current differences in WACC levels are due to both differences in methodologies and differences in financial conditions

The majority of respondents consider that both differences in the methodologies applied by NRAs and financial conditions between Member States explain the differences in the levels of the WACC estimated by NRAs. Out of all respondents, 68% consider that differences in the methodologies applied by NRAs explain at least to some extent the differences in WACC levels (Question 6 - Q6). In addition, virtually all respondents also consider that differences in the national economic and financial conditions in every Member State explain the differences in the current WACC levels estimated by NRAs (Q7).

Impact on investment decisions and the Digital Single Market

Respondents are divided on whether differences in the methodologies may have an impact on investment decisions

56% of respondents agree that differences in the methodologies used by NRAs to estimate the WACC are likely to distort market participant's investment decisions at least to some extent (Q8).

Support for the Commission's initiative

The majority of respondents support intervention by the Commission and consider that there are no major risks in the application of a common WACC methodology.
Among those replying to this question (Q9), 67% agree that the Commission should intervene (notably through the publication of its Guidance). Among these, several respondents state that the application of a common WACC methodology would not generate major risks for the electronic telecommunications sector, provided that it is not unduly prescriptive and does not compromise NRAs' ability to take into account domestic economic and financial conditions. An additional 21% of respondents is unsure about whether the Commission should intervene or not.

40% of respondents support the intervention by the Commission but claim that there would be risks
40% of respondents support the Commission initiative, however they state that there would be certain risks linked to the application of a consistent methodology for the WACC estimation, such as the risk of not taking into consideration the specificities of each market.

33% of respondents reject intervention by the Commission, expressing some concerns on the existing evidence for an EU intervention.
33% of respondents disagree with the need for the Commission to intervene. They criticise that the Commission has not provided theoretical nor empirical evidence to suggest that EU guidelines are necessary. One respondent is of the view that the general principles framework is sufficient for the further convergence of WACC calculations and thus thinks that the level of details proposed by the Commission is not needed. However, not all NRAs share this position. For example, one NRA is supportive of the Commission's initiative, provided that it will include detailed guidance for all parameters and that it will be applied by all NRAs. In its view, a common methodology would simplify the calculations (if some parameters were established at EU level, for example) and increase the comparability of WACC values across countries.

Principles on which to base the guidance on the WACC methodology

The majority of respondents support the regulatory principles proposed by the Commission
There is strong support for the four guiding principles that the Commission proposed to use in the design of its guidance: i) consistency, ii) predictability, iii) efficiency and iv) transparency. Of those responding to this question (Q11), 74% agree that these four principles are the most relevant and appropriate ones.

4. Questions regarding the estimation of the WACC parameters

Risk-Free Rate (RFR) and Equity Risk Premium (ERP)

No consensus for consistency in the geographic scope of the two parameters
Q12 asked whether the RFR and the ERP should be estimated consistently, i.e. if both should be based either on an EU (notional) value or on a domestic value. There is no consensus among respondents, as 44% state that consistency in the calculation of the two parameters is

not necessary, 33% argue that both parameters should be based on a domestic value and the remaining 22% believe that both should be based on an EU (notional) value.

Little support for the use of an EU (notional) value for both the RFR and ERP

Q13 asked whether the RFR and ERP should be estimated using an EU (notional) value due to the fact that: i) a domestic parameter would incorporate country risk (which is diversifiable and should therefore not be part of the WACC), ii) shareholders of EU operators are mostly non-nationals, and iii) transaction costs from holding equity in different EU markets are small. 71% of respondents disagree that the RFR and ERP should be based on notional EU values due to the reasons listed above.

The majority of respondents support the use of historical series to estimate the ERP

In Q14, the vast majority of respondents (94%) agree that the ERP should be estimated mainly using historical data series (such as the ones published by Dimson, Marsh and Staunton, or Damodaran, or Duarte). There is very limited support for alternative solutions, such as surveys of financial investors.

The majority of respondents support adjusting the RFR to account for Quantitative Easing (QE) programmes

Q16 asked whether the RFR should be adjusted for the period overlapping with QE programmes of EU central banks in order to account for their impact on Treasury bond yields. 76% of respondents agree that such an adjustment would be appropriate.

Industry-based variables - equity beta, gearing and cost of debt

The majority of respondents support estimating industry-based variables using a mix of EU benchmarks and the domestic operator with significant market power (SMP)

Q17 asked whether the equity beta, the gearing and the cost of debt should be estimated focusing mainly on data of the domestic SMP operator. Only 15% of respondents support this approach, while 30% agree with the use of a national scope but argue that their value should be compared (and potentially adapted) to the values of a benchmark of EU telecoms operators. In contrast, 55% argue that another approach (i.e. not be based on the SMP operator) should be used for at least one of the three parameters.

The majority of respondents broadly agree with the criteria for the selection of the operators to be included in the peer group to estimate industry-based parameters

Q18 put forward five criteria that could be used for the selection of the peer group of EU operators, against which some industry-based WACC parameters (such as the beta, gearing and cost of debt) could be benchmarked. There is strong support for the five criteria. Some of the criteria are supported by more than 90% of respondents and at least 50% of respondents agree with all five of them.

There is no clear support for consistency between the market index used to estimate the equity beta and the RFR and ERP

Q19 asked whether the market index used for the calculation of the equity beta should be consistent with the scope (notional or domestic) of the RFR and ERP. Views are split here, as around half of the respondents agree that the market index choice should be consistent with the assumptions made for RFR and ERP, while the other half disagrees. In Q20, the Commission asked respondents to indicate which market index should be used, if the beta was estimated by regressing the SMP operator's returns against an EU market index. The majority of respondents (67%) did not indicate a preference for a specific EU market index. Among those who did provide a view, the Stoxx Europe 600 Telecommunications and the S&P Europe 350 are the preferred options.

<u>There is no clear support for adjusting equity betas</u>
Only nine respondents provide their view on this question (Q21). 44% of them indicate that NRAs should apply adjustments to the calculated equity betas. Another 44% of respondents indicate that in some cases adjustments could improve the quality of calculations, but that the choice of the adjustment should be left to NRAs.

<u>There is support for relying on book value of debt to estimate the gearing</u>
There is strong support (88% of respondents) for the common practice of estimating the gearing using the book value of the company's debt, including the cost of long-term financial leases (Q22).

<u>Assumptions underpinning the RFR, ERP, cost of debt and equity beta</u>

<u>The majority of respondents support using the same bond maturity to calculate the RFR, ERP and cost of debt</u>
Q23 asked whether the RFR, the ERP and cost of debt should be based on bonds (i.e. Treasury bonds in the case of the RFR and ERP, and corporate bonds in the case of the cost of debt), with the same maturity, to ensure consistency in the calculation. 53% of those who responded to the question agree with the approach and highlight the importance of ensuring consistency in the calculation of these three parameters.

<u>The majority of respondents (56%) support using 10-year maturity bonds to estimate the RFR and cost of debt</u>
Q24 asked respondents to indicate the maturity of the treasury bonds and corporate bonds that should be used to estimate the RFR and cost of debt. The majority (78%) of those who responded indicate that NRAs should use government bonds and corporate bonds with a relatively long maturity (10 or 20 years), with a majority of respondents supporting 10-year maturity bonds.

<u>The majority of respondents (77%) support adjusting yields of 10-year bonds in the calculation of the RFR to ensure consistency with the ERP calculation</u>
Among the organisations that responded to Q25, 77% agree that, when calculating the RFR, it is appropriate to make an upward adjustment to the yields on a 10-year maturity Treasury bond, if the ERP series are based on excess returns over 20-year maturity bonds (which have a

higher yield compared to 10-year bonds). Those who agree with the idea of an adjustment were asked whether a 40 basis point upward adjustment would be appropriate (Q26). Of those who responded, 88% agree that the 40 basis points upwards adjustment, as estimated by the Brattle Group in its study for the Commission, is appropriate.

No consensus on choice of averaging period

Q27 dealt with the important question of the appropriate length of the averaging period (timeframe of the data used for the calculations) that should be used to determine the RFR, the ERP, the equity beta and the cost of debt. There is no clear consensus among respondents. However, the preferred choices among those who responded to the question were averaging periods of 2-4 years or of 5 years (27% of respondents supported each of the two options), which seem to strike a good balance between the benefits of obtaining stable parameter values and the use of relatively recent data.

Other respondents advocate the use of shorter averaging periods of 1 year, which they claim would better reflect the financial conditions at any given moment. On the other hand, some argue that an averaging period of 10 years or more would be more appropriate, notably to better reflect the long-term nature of investments by telecommunications operators. One respondent highlights that trade-offs between a forward-looking estimation and a reduced volatility of the bond yields needs to be considered. It suggests using a 3-5-year averaging period for the calculations of the RFR and equity beta.

The majority of respondents support using an arithmetic average

Q28 asked what kind of averaging method should be used to estimate the RFR, the ERP, the equity beta and the cost of debt. Among those who answered the question, 57% prefer the arithmetic average, which is the most commonly used averaging method applied by NRAs. There is a common view that this method provides a higher level of transparency and reliability, and no significant downside. Conversely, some respondents support the use of a geometric average. These respondents explain that the geometric average should be preferred in cases where there is a correlation between stock and bond returns or among stock returns over time.

The majority of respondents support using daily observations

Q29 asked which observation frequency should be used to estimate the RFR, the ERP, the cost of debt and the equity beta. Among those who responded to the question, 57% agreed with the use of daily observations, which provide a greater number of data points and, therefore, more robust estimations of the parameters.

Inflation

There is no clear support for calculating inflation using an approach consistent with the RFR and the ERP

60% of respondents agree that the inflation rate should be consistent with the approach used to calculate the RFR and the ERP (Q30). 40% of respondents contend that such a consistency is not necessary. Further, 55% of respondents support the use of a forward-looking inflation rate with a time horizon aligned with the bond maturity used to estimate RFR and ERP (Q31). Others disagree with this approach. According to one respondent, the assumptions on market developments underlying forward-looking price increases are not academically quantifiable and do not satisfy the principle of transparency.

5. Questions regarding the distinction between electronic communications services

The majority of respondents consider that NRAs should be able to set different WACCs for different services

Most respondents (68%) support allowing NRAs to set different WACCs for different services (Q32). One respondent mentions in particular the higher risks of mobile networks compared to fixed networks (which should be reflected in different betas), although it also contends that service-specific WACCs would be more meaningful in large countries with an SMP operator providing many different services. Another focuses in its reply on the need to estimate a different WACC for next generation access (NGA) fibre network rather than adding a risk premium to regulated prices for NGA investments.

32% of respondents argue that all services should have the same WACC, referring in particular to the increased fixed-mobile convergence as a key factor speaking against the differentiation of the WACC based on the type of regulated service. However, even some respondents who express strong disagreement with the idea of calculating service-specific WACCs, recognise that, depending on local circumstances, it might be appropriate for an NRA to distinguish between the WACC of a convergent operator and that of a mobile-only operator.

The majority of respondents do not support the disaggregation of beta and cost of debt to estimate differentiated WACCs

29% of respondents agree that beta and cost of debt disaggregation is the most appropriate way to differentiate the WACC between services (Q33). However, the majority (71%) of those who answered Q33 do not support the beta and cost of debt disaggregation approach. Some respondents simply justify their response based on their opposition to have service-specific WACCs. Other respondents underline certain application problems and methodological uncertainties entailed by the disaggregation approach. Finally, some respondents conclude that, while both beta and cost of debt disaggregation may be appropriate where information and conditions permit (particularly when it is possible to estimate the domestic SMP operator's beta and cost of debt), NRAs should not be required to perform disaggregation in all circumstances.

6. Questions regarding the transition period

The majority of respondents support a transition period of 3 years

The majority of respondents (65%) are in favour of a transition period, during which NRAs could converge towards the approach described in the Commission's Guidance (Q34). Most of these respondents (64%) also agree with a 3-year duration (Q35), while some envisage a different period. Finally, some respondents consider that no specific transition period is needed.

7. Next Steps

The European Commission will make use of all the input provided by respondents to the consultation in the preparation of its guidance, which is foreseen to be published in the first half of 2019.