Targeted consultation on Guidance on cost of capital for EU electronic communications regulators

Fields marked with * are mandatory.

Targeted consultation on Guidance on cost of capital for EU electronic communications regulators

1. Objectives of the consultation

This consultation is part of a Commission initiative aiming to provide guidance to European National Regulatory Authorities (NRAs) for electronic communications on the methodology for calculating the reasonable rate of return in the context of NRAs' regulatory measures.

The EU's Regulatory Framework for electronic communications sets out a series of rules which apply to the electronic communications sector throughout the EU. It encourages competition and efficient investment, improves the functioning of the market and guarantees basic user rights. The overall goal is for European consumers to benefit from increased choice thanks to low prices, high quality and innovative services.

Draft decisions that mandate cost-orientation remedies or a margin-squeeze test include an estimation of the reasonable rate of return allowed on regulated services. This is typically measured through the Weighted Average Cost of Capital (WACC). The Commission services have observed significant discrepancies in NRAs' approaches to estimating the WACC, including in the methodology individual NRAs apply in sequential notifications to the Commission.

The Commission services' preliminary assessment suggests that a common methodology for the calculation of the WACC could be based on four regulatory principles:

1. consistency in the methodology to determine the parameters in the WACC formula;
2. regulatory predictability to limit unexpected variations in the regulatory approach of NRAs' methodology and in the value of the parameters over time;
3. the promotion of efficient investment and innovation in new and enhanced infrastructures, taking account of the risk incurred by the investing undertakings;
4. transparency of the method to determine the reasonable rate of return on their investments, avoiding unnecessary complexity.

Achieving these objectives will contribute to a stable regulatory environment that supports investments in electronic communications networks in the EU to the benefit of consumers. It will discourage the artificial distortion of investments by inconsistencies in NRAs' approaches over time and across the EU, which could harm the functioning of the Digital Single Market (DSM). The DSM is a strategy of the European Commission to ensure access to online activities for individuals and businesses under conditions of fair competition, consumer and data protection, removing geo-blocking and copyright issues. A DSM is one in which the free movement of persons, services and capital is ensured and where the individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition and a high level of consumer and personal data protection, irrespective of their nationality or place of residence.

Enhanced scrutiny of the determination of the WACC would help implement the current Regulatory Framework, while being compatible with the objectives of the proposed European Electronic Communications Code (EECC). The Commission guidance will also be relevant to the implementation of the Code once it will enter into force.

A background document describing the Commission services' working assumptions for determining the WACC in regulatory proceedings in the electronic communications sector accompanies this consultation questionnaire and can be found here.

2. Personal data

Contributions will be published on the website of the Directorate General for Communications Networks, Content and Technology - unless confidentiality is specifically requested.

To this end we would kindly ask you to clearly indicate in the general information section of this questionnaire if you would not like your response to be publicly available. In case your response includes confidential data please also provide a non-confidential version of your response, which will then be published on the relevant website.

Please read the Privacy Statement on how we deal with your personal data and contribution.

Note that, whatever option chosen, your answers may be subject to a request for public access to documents under Regulation
(EC) N°1049/2001
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3. Replying to the consultation

All questions are optional. You can also pause at any time and continue later. Once you have submitted your answers, you can download a copy of your contribution.

The following acronyms are used in the questionnaire:

- WACC: Weighted Average Cost of Capital
- CAPM: Capital Asset Pricing Model
- RFR: Risk-Free Rate
- ERP: Equity Risk Premium
- SMP: Significant Market Power

Outline of the consultation:

- Questions 1-5: General information
- Questions 6-11: General approach to assess the most appropriate methodology to estimate the WACC
- Questions 12-31: Estimation of the WACC parameters
- Questions 32-33: Distinction between electronic communications services
- Questions 34-35: Transitional period

Although all types of respondents are welcome to participate in this consultation, given the highly technical nature of the topic, most questions require expert knowledge of the WACC and its calculation.

4. General information

* **Question 1:**
Please provide us with your personal details.

Respondent's first name:

Tony

* Respondent's last name:

Shortall

* Name of the organisation:

FTTH Council Europe ASBL

* Respondent's professional email address:

tony.shortall@telage.net

* **Question 2**:
You answer as:

- [ ] Private individual
- [ ] Consumer association or user association
- [ ] Business (please specify sector)
- [ ] Fixed network operator
- [ ] Mobile Network Operator (MNO)
- [ ] Mobile Virtual Network Operator (MVNO)
- [ ] Convergent operator
- [ ] Internet content provider
- [ ] Government authority
- [ ] National Regulatory Authority
- [ ] Other public bodies and institutions (please specify)
- [x] Other (please specify)

If "Other", please specify.

Trade association representing the interests of the whole fibre value chain in Europe

* **Question 3:** What is your country of residence? (In case of legal entities, please select the primary place of establishment)

- ( ) Austria
- (•) Belgium
- ( ) Bulgaria
- ( ) Czech Republic
- ( ) Croatia
- ( ) Cyprus
- ( ) Denmark
- ( ) Estonia
- ( ) France
- ( ) Finland
- ( ) Germany
- ( ) Greece
- ( ) Hungary
- ( ) Italy
- ( ) Ireland
- ( ) Latvia
- ( ) Lithuania
- ( ) Luxembourg
- ( )

Malta
- Netherlands
- Poland
- Portugal
- Romania
- Spain
- Slovenia
- Slovakia
- Sweden
- United Kingdom
- Other

Question 3(b):

In which national markets/continents do you operate?

- [x] Austria
- [x] Belgium
- [x] Bulgaria
- [x] Croatia
- [x] Cyprus
- [x] Czech Republic
- [x] Denmark
- [x] Estonia
- [x] Finland
- [x] France
- [x] Germany
- [x] Greece
- [x] Hungary
- [x] Ireland
- [x] Italy
- [x] Latvia
- [x] Lithuania
- [x] Luxembourg
- [x] Malta
- [x] Netherlands
- [x] Poland
- [x] Portugal
- [x] Romania
- [x] Slovakia
- [x] Slovenia
- [x] Spain
- [x] Sweden
- [x] United Kingdom
- [ ] Other (please specify)

***Question 5:**
Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

- (selected) Yes
- No
- Not Applicable

*If "Yes", please indicate your organisation's registration number in the Transparency Register.

09838612482-61

If your organisation is not registered in the Transparency Register, please do so before answering this questionnaire. If your organisation responds without being registered, the Commission will consider its input as that of an individual.

5. Consultation questions

5.1. General approach to assess the most appropriate methodology to estimate the WACC

Question 6:
In your view, do differences in the methodologies used by NRAs to estimate the WACC explain the differences in the current WACC levels estimated by NRAs?

- (selected) Yes, very much
- Yes, to some extent
- Only a little
- Not at all
- I don't know

Please explain your response.

Question 7:
In your view, do differences in the national economic and financial conditions in every Member State explain the differences in the current WACC levels estimated by NRAs?

- (selected) Yes, very much
- Yes, to some extent
- Only a little
- Not at all
- I don't know

Please explain your response.

Yes please see Figure at the link below which shows bond yields over time and their differences for selected countries across Europe.

https://www.economicshelp.org/wp-content/uploads/2014/09/eu-bond-yields.png

Question 8:

Are differences in the methodologies used by NRAs to estimate the WACC likely to distort market participant's investment decisions and create inefficiencies affecting the Digital Single Market?

- (x) Yes, very much
- ( ) Yes, to some extent
- ( ) Only a little
- ( ) Not at all
- ( ) I don't know

Please explain your response.

WACC plays an important role in setting cost-oriented regulated prices because it determines the reasonable rate of return on the capital employed. Regulated prices should provide the regulated firm with the opportunity to finance (efficient) investment and provide access seekers with efficient “build-vs-buy” price signals. An increase (decrease) in WACC will, other things equal, increase (decrease) regulated prices. Even minor changes in the WACC can influence the regulated prices significantly given that the telecommunications sector is very capital intensive. Inappropriate difference will inevitably distort investment decisions.

Question 9:

Should the Commission act to reduce inconsistencies in NRAs' methodologies to estimate the WACC?

- ( ) Yes
- ( ) No
- (x) I don't know

Please explain your response.

The fundamental issue is to promote the desired investment decisions. The questions is whether access pricing is the appropriate mechanism the elicit an investment decision in the context of VHCN (FTTH/B). The FTTH Council thinks that it is not and notes that the newly agreed Regulatory Code says essentially the same thing with specific provisions concerning VHCN investments (Article 76) a series of provisions to lower deployment costs for VHCN (Articles 61, 72, 73 etc) and a number of provisions promoting Wholesale Only operators (Article 80) or encouraging vertically integrated operators to separate (Article 78) – all with the ambition of encouraging and promoting investment in VHCN. Importantly, price control exemptions predominate in these provisions so as to preserve investment incentives. The FTTH Council believes these provisions should be central in any assessment of WACC in the context of FTTH/B.

Question 10:

Are there important risks in applying a consistent methodology to estimate the WACC in regulatory proceedings in the electronic communications sector across the EU?

- ( ) Yes
- ( ) No
- (x) I don't know

Please explain your response.

The fundamental issue is to promote the desired investment decisions. The questions is whether access pricing is the appropriate mechanism the elicit an investment decision in the context of VHCN (FTTH/B). The FTTH Council thinks that it is not and notes that the newly agreed Regulatory Code says essentially the same thing with specific provisions concerning VHCN investments (Article 76) a series of provisions to lower deployment costs for VHCN (Articles 61, 72, 73 etc) and a number of provisions promoting Wholesale Only operators (Article 80) or encouraging vertically integrated operators to separate (Article 78) – all with the ambition of encouraging and promoting investment in VHCN. Importantly, price control exemptions predominate in these provisions so as to preserve investment incentives. The FTTH Council believes these provisions should be central in any assessment of WACC in the context of FTTH/B.

Question 11:

Should the Commission assess the most appropriate approach to derive the WACC based on the principles of consistency, predictability, efficiency, and transparency as defined below?

Consistency: is achieved when related WACC parameters are estimated using the same methodology and assumptions.

Predictability: is achieved when NRAs, in estimating a WACC parameter, adopt a stable regulatory approach that mitigates uncertainty over time regarding (i) the methodology used by the NRA and (ii) the value of the parameter.

Efficiency: is achieved when the approach used by an NRA to estimate the WACC ensures the right balance between the three different types of economic efficiency: productive, allocative and dynamic efficiency.

Transparency: the approach used by NRAs to estimate the WACC and each of its parameters should be transparent to stakeholders. For this, the approach used should avoid unnecessary complexity, be made accessible to stakeholders and favour the use of publicly available resources, where possible.

- ○ Yes, these four principles are the most appropriate ones
- ○ No, one or more of these principles are not appropriate (please specify which principles)
- ● No, there are other principles that should be considered (please specify which principles)
- ○ I don't know

Please explain your response.

The four aspects that are considered in the context of determining appropriate WACC estimations, namely consistency, predictability, efficiency and transparency are of course correct and appropriate in terms of establishing a specific WACC number; however, it is incomplete since that WACC number does not exist in a vacuum but in a specific context and the omission of that context is troubling to the FTTH Council.

The greatest omissions in the FTTH Council's view concern regulatory commitment and also demand uncertainty leading to option values. The regulatory commitment towards rewarding investment is crucial. A clearer acknowledgement of the need for an appropriate reward for investors would normally help in strengthening investment incentives – but to be effective this would have to be combined with a clear indication of the magnitude of the reward that successful investors should be allowed, and a commitment to protect such returns from being eroded through a process of frequent reviews.

The key issue is therefore not just one of correctly calculating what rate of return an investor would have to expect to make in the case where uncertain demand materialises, for example, in order to be compensated for the risk that it might not. In order to have the desired effect, the investor must also be able to rely on the regulator's commitment to allow this rate of return after the event. Although this may seem obvious, it is far from clear that the required premium will survive the pressure to bring down prices if demand turns out to be high, in particular where the premium has to be substantial in order to compensate for a high level of uncertainty. Put differently, the calculation of an appropriate premium is only one part of the equation – credible commitment to sticking with this premium in the face of pressure from competitors and customers is another, even more important aspect.

Further adjustments would be needed to account for the option value that an investor gives up as a result of committing resources – i.e. the value of delaying investments until some of the uncertainty over future returns has been resolved (see box below). The value of this option is commonly reflected in firms using hurdle rates that are well in excess of their cost of capital, and regulated returns that should promote investments have to take account of this. Put differently, expecting to be able to earn a regulated return that covers a firm's WACC is insufficient to trigger investment that is sunk and where returns are uncertain.

5.2. Estimation of the WACC parameters

The estimation of the WACC requires calculating the value of each of its parameters. To do this, NRAs rely on rates of return on specific assets that best approximate the value of the theoretical parameter in the CAPM framework. In this regard, NRAs can choose between different approaches.

The following questions relate to the approach to follow when estimating the WACC parameters and present some preliminary options which would follow the general principles described in question 11 above.

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

Question 12:

Should the RFR (i.e. the return on a risk-free asset) and the ERP (i.e. the return on equity over and above the return on that risk-free asset) be estimated consistently? (i.e. either both should be estimated based on an EU (notional) value or both should be estimated using a domestic value)

- ○ Yes, both should be estimated based on an EU (notional) value
- ○ Yes, both should be estimated based on a domestic value
- ○ No, one parameter can be estimated based on an EU (notional) value and the other parameter can be based on a domestic value (no consistency in approach needed)
- ◉ I don't know

Please explain your response.

The use of the Weighted Average Cost of Capital (WACC) model is a stylised tool to estimate what the alternatives available to the putative investor might be. Hence in the case where stock markets are delivering significant returns relative to the norm, one would expect WACC to rise since the alternative of investing in the stock market is relatively more attractive. Similarly, in the event that bond yields were higher, then a higher return would be required since, a no or limited risk, a relatively higher return could be obtained. Normally, both the risk free rate or return and the BETA of the stock market ought to move in parallel – both factors reflect the strength or weakness of the underlying economy.

However, after the financial crash generated by Lehman brothers two things have happened which have greatly distorted this 'norm'. The first is that central banks across the World printed enormous amounts of money to ensure that there was adequate liquidity in the financial system. This had the effect of pushing down long term bond yields even through a period of significant economic growth.

The second thing which happened was that the same central banks entered into a period of asset buying, both bonds and stocks, in the open market – by pushing up the price of bonds, bond yields fell (hence lowering long term interest rates further) and at the same time, by buying stocks and other assets, the value of these assets were driven up. The upshot of all these activities is that traditional financial models for setting prices and encouraging investments have been greatly distorted. The emergence of negative yields on 5 and 10 year Government bonds is a quite remarkable development but scarcely raises an eyebrow today. In practice today, many banks face fines for holding cash (they must pay a negative interest rate on sums deposited at the ECB for instance) hence the willingness to lend is higher than might be expected. Long term infrastructure projects with a reliable yield are highly desirable in the financial sector at this time. For instance if a bank or financial entity believes that an operator has a de jure or de facto monopoly then its ability to raise finance for a project will be very high and the rates at which finance will be available will be much lower than the norm. Hence one reason that European markets have seen an enormous proliferation of Wholesale Only operators.

Question 13:

Do you agree with the following statement?
"It is justified to estimate both the RFR and ERP using an EU (notional) value (rather than a domestic value), in order to take into account that:

1. in the CAPM framework, only non-diversifiable risks should be rewarded and a domestic parameter value would incorporate diversifiable country risk;
2. the shareholders of EU SMP operators are mostly non-nationals (particularly, large shareholders which are the most likely to influence the company's decisions), implying that a "home bias" is unlikely in the case of EU SMP electronic communications operators
3. transaction costs from holding equity in different EU markets are likely to be small."

- [x] I agree that the RFR and ERP should be estimated using an EU (notional) value for these reasons
- [ ] I agree that the RFR and ERP should be estimated using an EU (notional) value for the reasons given above and also for other reasons (please specify any other reasons)
- [ ] I do not agree that the reasons provided above support the estimation of the RFR and ERP using an EU (notional) value (please explain why)
- [ ] I don't know

Please explain your response.

Question 14:

Should the ERP be estimated using published historical series (examples of these being the ones published by Dimson, Marsh and Staunton ('DMS'); Damodaran (2017) or Duarte (2015)), or is another type of approach (such as surveys of financial investors) preferable?

- [ ] Yes, it should be estimated using published historical series.
- [ ] No, it should not be estimated using published historical series, another approach should be used (please specify which).
- [x] I don't know

Please explain your response. Please also mention which published historical ERP series you consider preferable (e.g. DMS, Damodaran, Duarte or alternative sources of published historical series) and the reasons for your preference.

Please see the answer to Question 12 above. There are profound distortions in current markets (the 0.4% estimate of the difference quoted from the paper supporting this paper looks very wide of the mark) mean that extreme caution should be applied to any time series which includes the last several years.

Question 15:

If an EU (notional) approach was used to determine the RFR and ERP, how should they be estimated?

- ( ) They should be estimated using an off-the-shelf estimate of the EU ERP (for example, DMS provide an average for 13 European countries)
- (x) They should be estimated via a weighted average of all EU Member States' ERP
- ( ) Neither an off-the-shelf ERP nor a weighted average of all EU Member States' ERP is appropriate, another approach should be used (please specify)
- ( ) I don't know

Please explain your response.

Question 16:

Should the RFR be adjusted for the period overlapping with a period of quantitative easing programmes of EU central banks in order to account for their impact on Treasury bond yields?

- (x) Yes
- ( ) No
- ( ) I don't know

Please explain your response.

Please see the accompanying paper.

Equity beta, gearing and cost of debt

Question 17:

Should the equity beta, the gearing and the cost of debt be estimated using the domestic SMP operator as the main focus to better reflect the non-diversifiable risk of the regulated company, which is likely to be influenced by the characteristics of the domestic electronic communications market?

- ( ) Yes, without further conditions
- (x) Yes, but their value should be compared with (and potentially adapted to) the values of a benchmark of peer EU electronic communications companies, in order to ensure that the domestic parameter value does not reflect inefficiencies of the SMP operator
- ( ) No, another approach should be used for the calculation of at least one of these parameters (please specify)
- ( ) I don't know

Please explain your response.

Question 18:

If a benchmark of peer EU electronic communications companies was used in the calculation of one or more parameters, please indicate which of the following criteria should NRAs use to select the operators in the peer group:

- [ ] The operators are listed and have liquidly traded shares
- [x] The operators own and invest in electronic communications infrastructure
- [ ] The operators have their main operations in the EU
- [ ] The operators have investment grade
- [ ] The operators are not involved in any substantial mergers and acquisitions

Please explain your response

Question 19:

Should the equity beta be estimated regressing the company's returns against an EU (or domestic) market index that is consistent with the choice of a notional EU (or domestic) calculation assumption for the RFR and ERP?

- ( ) Yes, it should.
- (•) No, the choice of market index should not necessarily be linked to the geographic scope of RFR and ERP.
- ( ) I don't know

Please explain your response.

Question 20:

If the equity beta was estimated regressing the company's returns against an EU market index - rather than against a domestic market index - which index should be used?

- [x] S&P Europe 350
- [ ] Eurostoxx50
- [ ] MSCI Europe
- [ ] STOXX Europe TMI Telecommunications Equipment
- [ ] STOXX Europe 600 Telecommunications
- [ ] Other (please specify)
- [ ] I don't know

Please explain your response.

The investment options of the firm are not limited to the sector in which it operates. Please see the paper accompanying this response.

Question 21:

Should NRAs make adjustments to equity betas (such as Vasicek, Blume or Bayesian adjustments)?

- ○ Yes (please specify)
- ○ No
- ○ I don't know

Please explain your response.

Question 22:
Should the gearing be estimated using the book value of the company's debt, including the cost of long-term financial leases?

- ● Yes
- ○ No
- ○ I don't know

Please explain your response.

RFR, ERP, cost of debt and equity beta

Question 23:
Should the RFR, the ERP and cost of debt 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?

- ● Yes
- ○ No, the maturity of the bonds used to calculate the different parameters should not necessarily be the same.
- ○ I don't know

Please explain your response.

Please see the paper accompanying this response.

Question 24:
Please indicate the maturity of the Treasury bonds and corporate bonds that should be used to estimate the RFR and cost of debt:

- ○ 5 years
- ○ 10 years
- ○ 20 years
- ○ Others
- ○ I don't know

Please explain your response.

Question 25:

If the yield on a 10-year maturity Treasury bond was used to derive the RFR, should its value be adjusted upwards to account for the fact that historical ERP series are typically based on excess returns over 20-year maturity bonds (which have a higher yield)?

- Yes
- No
- I don't know

Please explain your response.

Question 27:

In your view, what is the appropriate lenghth of the averaging period (time-frame of the data used for the calculation) that should be used to determine the RFR, the ERP, the equity beta and the cost of debt

- Less than 1 year
- 1 year
- 2-4 years
- 5 years
- 6-7 years
- 8-9 years
- 10 years
- More than 10 years

Please explain your response.

Question 28:

In your view, what kind of averaging method (calculated over the averaging period) should be used to estimate the RFR, the ERP, the equity beta and the cost of debt?

- Arithmetic average
- Geometric average
- Median
- Another type of average should be used
- I don't know

Please explain your response.

Question 29:

What observation frequency should be used to estimate the RFR, the ERP, the cost of debt and the equity beta?

- Daily Data
- Weekly Data

- Monthly Data
- I don't know

Please explain your response.

Inflation

Question 30:
Which approach should be used to determine the inflation rate, which is used to derive a real WACC?

- The inflation rate should be consistent with the approach used for the RFR and the ERP (i.e. use an EU-wide inflation rate if EU RFR and ERP were chosen, or use a domestic inflation rate if domestic RFR and ERP were determined)
- The approach for the calculation of the inflation rate should not necessarily be consistent with the approach used to determine the RFR and the ERP
- I don't know

Please explain your response.

Question 31:
Should the inflation rate used to derive a real WACC be forward-looking with a time horizon closest to the maturity period of the Treasury bond used for the calculation of the RFR and ERP?

- Yes
- No
- I don't know

Please explain your response.

5.3. Distinction between electronic communications services

Question 32:
Should NRAs be able to set different WACCs for the services they regulate (fixed networks, mobile networks, NGA networks, etc.)?

- [x] Yes
- No, all services should have the same WACC
- I don't know

Please explain your response.

Imposing an obligation to provide access has substantial implications for investment incentives, and the terms that will apply to such access matter. Regulatory policy has of course always been aware of this, and the ability of investors to recoup efficiently incurred costs as well as sending the correct price signals for efficient new investment has been a key regulatory objective besides the encouragement of competition on the basis of wholesale access to network infrastructure. These objectives are, however, not necessarily well aligned, and regulators have always had to think about the right trade-off between static efficiency (preventing inefficient use of existing assets through the exploitation of market power) and dynamic efficiency (encouraging new investment and innovation). As both regulators and operators have pointed out, the specific implementation of a cost-based charging regime needs to be based on both specific market conditions and the relative importance of the conflicting regulatory objectives.

When looking at fibre networks, the investment impact of regulatory policy acquires a new dimension. The issue at hand is not simply one of allowing a fair return on assets that have been in the ground for a long time or sending the right signals for efficient bypass of existing network infrastructure. Network operators do not just need to undertake incremental investment to maintain or improve the existing infrastructure and enable the provision of access services that would not otherwise be available (such as unbundled local loops or bitstream access), but rather consider large sunk investments that will eventually replace the existing network infrastructure. Put succinctly, the balance between ensuring a competitive downstream market (while allowing existing operators to recover efficiently incurred costs) and providing incentives to invest in competing infrastructure (where such competition was economically viable) that has been struck in the regulation of access to legacy copper networks may need to change to provide strong incentives for the investment in new fibre access networks. More emphasis may need to be given to creating the right environment for investment in new infrastructure relative to promoting the most widespread use of infrastructure that might hypothetically exist. Strict price regulation either now or signalled in the future does not send the appropriate signal to investors in FTTH/B.

Question 33:

Do you agree with the following statement?

The most appropriate way to differentiate the WACC between services is to disaggregate the regulated company's beta and cost of debt. Compared to Discounted Cash Flow modelling, it ensures (i) consistency between the WACC estimated for individual services and the company's average total WACC; (ii) regulatory predictability as it relies less on the regulator's judgment and assumptions; (iii) a more efficient estimator of the market expectations as to the risk associated with the company's activities; and (iv) simplicity and transparency for stakeholders.

- ( ) Yes, I do.
- (x) No, I don't (please specify which alternative approach is more appropriate)
- ( ) I don't know

Please explain your response.

For FTTH/B investments it is best to abstain from setting a specific WACC or cost orientated price. In the event that it must be done, then evidence suggests that a fully distributed cost model might be the more appropriate. Nitsche and Wiethaus (“Access Regulation and Investment in Next Generation Networks: A Ranking of Regulatory Regimes”, ESMT Working Paper No 09-003, June 2009, later published in the International Journal of Industrial Organization, Vol. 9, 2011) developed a simple model to assess the incentives to invest in Next Generation Networks (NGN) under different regulatory regimes:

- access charges set at Long Run Incremental Costs (LRIC), which in the model entails an entitlement to recover investment costs from access seekers if the investment is efficient (i.e. if the NGN investment turns out to be justified by the willingness to pay of end-users);
- access charges set at Fully Distributed Cost (FDC), which means that investment costs are recoverable from access charges regardless of whether the investment turns out to be successful;
- risk sharing, where the incumbent and the new entrant jointly invest in the network (aiming to maximise

industry profits), and then use it to compete downstream without making any payments; and
• a 'regulatory holiday', with the absence of any regulatory obligation to provide access, at least for a predefined period of time.
Investment incentives are measured by the extent of NGN deployment, and expected consumer welfare takes account of both NGN roll-out and end-user prices in the different cases.
The authors find that both a regulatory exemption or a FDC-based access charges provide greater investment incentives than risk sharing and that the latter provides greater incentives than LRIC-based charging unless the probability that consumers have a higher willingness to pay for NGN access is sufficiently large.

5.4. Transitional period

Question 34:
Should there be a transitional period during which NRAs could converge towards the approach described in the Commission's Guidance?

- Yes (please specify the appropriate length)
- No specific transitional period is needed
- I don't know

Please explain your response.

Question 35:
Would a transitional period of 3 years be appropriate considering that (i) market reviews are currently conducted every 3 years and (ii) business cycles have an average duration of 5 years? A 3-year period would be approximately half-way through this period.

- Yes
- No
- I don't know.

Please explain your response. If your answer is "no", please indicate which transitional period (if any) would be preferable.

If you wish to provide additional information on the responses you provided in this questionnaire, please use the text box below.

If you wish to submit a document (eg: position paper, study, etc.) please click on the button below.
The maximum file size is 1 MB

Contact

CNECT-WACC-CONSULTATION@ec.europa.eu