EUROPEAN COMMISSION
Directorate-General Information Society and Media

Electronic Communications Policy

QUESTIONNAIRE

FOR THE PUBLIC CONSULTATION ON COSTING METHODOLOGIES FOR KEY WHOLESALE ACCESS PRICES IN ELECTRONIC COMMUNICATIONS

Consultation
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This document does not represent an official position of the European Commission, but is intended to stimulate debate on the part of stakeholders and the public. It does not prejudge the form or content of any future proposal by the European Commission.

I. PURPOSE OF THIS DOCUMENT

This questionnaire is intended to stimulate an open and wide-ranging debate on the principles of costing methodologies with the objective of providing EU guidance to national regulatory authorities on how to set wholesale access prices in the transition period from copper to fibre-based networks, as announced in the Digital Agenda for Europe (DAE).

This questionnaire addresses separately (i) different costing methodologies relating to the implementation of the cost orientation obligation and (ii) incentives to invest in NGA networks in sections IV and V, respectively.

The Commission invites written comments on the questions raised in this document, to be submitted by **28/11/2011**.

II. PROBLEM DEFINITION

It is broadly acknowledged that the fixed access network (at least parts of it) constitutes a bottleneck, because it is particularly difficult to replicate (due to significant economies of scale and large sunk costs in most cases). Retail services which make use of the access network can potentially be foreclosed by the vertically integrated operator with significant market power (SMP operator). In such a scenario the SMP operator may have the incentive and may have the ability to supply its input (i.e. the access to its network) at an excessive price, which may ultimately lead to excessive prices at the retail level.

Price regulation based on cost orientation on the wholesale access market has proven to be an appropriate remedy in cases where the market power cannot be expected to erode within a reasonable period of time. This remedy aims at (i) mimicking an effectively competitive market performance by promoting downstream competition and (ii) ultimately benefitting consumers, while (iii) giving the appropriate investment signals.

National Regulatory Authorities (NRAs) are still applying divergent approaches when remedying market failures[1]; in particular, when setting cost oriented wholesale access prices. Even where NRAs apply the same cost model for the same access products, there are divergences in terms of implementation. This leads to a variety of access prices across Europe. The price for the local loop[2], for example, ranges from 5.21 €/month in Lithuania to 12.41 €/month in Ireland. Consequently there is a lack of predictability and legal certainty for (cross-border) investors, alternative operators and potential market entrants. This constitutes barriers within the internal market. The resulting lack of competition also harms European consumers who are not able to benefit from the choice of services and affordable prices which could otherwise exist.

Since in most Member States fibre roll-out is still very limited[3], setting access prices is a

[1] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on market reviews under the EU Regulatory Framework (3rd report) - Further steps towards the consolidation of the internal market for electronic communications (COM(2010) 271 final).

[2] Monthly rental per fully unbundled local loop in 2010, as estimated in the Digital Agenda Scoreboard 2011.

[3] "Compared to the US, Korea, Japan, China and even Russia, the EU has today almost the lowest number of FTTH lines and estimates indicate that growth in the adoption of this technology in the EU will increase at lower speeds than in other countries". See Digital Agenda Scoreboard 2011 (Fast and ultra fast internet access. Pillar 4. Figure 20)

critical task also because it will influence incentives to invest in NGA networks. At the same time, access prices will affect the ability of alternative operators to compete against SMP operators and alternative (cable) platforms on the basis of today's access products, which still mainly rely on copper networks.

In this regard, regulatory consistency in costing methods is particularly important in the context of recent market developments. The deployment of a new fibre based next generation access (NGA) network requires considerable investments and involves a significant risk which should be duly remunerated. At the same time, copper-based telecoms services (offered by SMP operators and service providers on the SMP operators' networks) are facing in parts of the EU increasing competitive constraints from cable TV networks, in terms of speed[4] and prices. Alternative operators find it increasingly difficult to compete on the basis of today's access prices. In any case, consumers' switching to cable, mobile and NGA retail products has led to a reduction of services provided over the copper networks, which increases the unit costs of copper and consequently access prices where the so called BU-LRIC[5] models are used.

It should be also noted that wholesale access prices for the legacy copper network may significantly affect the incentives to invest in new NGA networks, in particular those capable of contributing to the Digital Agenda for Europe target relating to the take-up of 100 Mbps internet access services. In defining the most appropriate costing methodology for copper and such NGA networks, it should therefore also be considered an objective to promote efficient investment and innovation in new and enhanced infrastructures[6].

The DAE has recognized the need for regulatory consistency and has called for the Commission to provide guidance on costing methodologies.

Question 1: Would you agree with the proposed problem definition?

III. LEGAL CONTEXT AND SCOPE

III. 1 Legal context

According to the regulatory framework for electronic communications[7], it is principally the NRAs task to impose appropriate and proportionate regulatory obligations. For access products which constitute bottlenecks, NRAs normally impose obligations of cost recovery

[4] The upgrade of cable TV networks to Docsis 3.0 allows very high broadband capacities (up to 100Mbps shared capacity) already today.

[5] Bottom-up long-run incremental cost.

[6] See Article 8(5)(d) 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).

[7] In accordance with Article 8 of Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive).

and price controls[8] according to Article 13 of the Access Directive. For this purpose, NRAs may impose cost accounting methods that are different from those used by the SMP operator.

Further guidance comes from the NGA Recommendation[9], which states that access to unbundled local loops in case of Fibre to the Home (FttH), to the terminating segment, to the copper sub-loop, to civil engineering infrastructure and to wholesale broadband services should be cost oriented.

The Commission has under the Article 7 procedure established "case law" which does not single out one specific cost model but asks (i) for consistent pricing of access products along the same value chain, to safeguard the investment ladder principle, (ii) for a consistent application of the principles of a cost model to all relevant input data, and (iii) to recognize the importance of using the costs of a modern efficient network to set access prices where a bottom-up LRIC model was applied.[10]

Article 19 of the revised Framework Directive gives the Commission a power to ensure the consistent application of the provisions of the regulatory framework. If the Commission finds that there are divergences in the implementation by NRAs of their regulatory tasks, which may create a barrier to the internal market, the Commission may, taking utmost account of the opinion of BEREC, first issue a Recommendation. After at least two years following the adoption of a Recommendation, a binding decision on the harmonised application of the provisions of the framework, including the remedies imposed on SMP operators may be issued.

III. 2 Key access products

In line with the NGA Recommendation, a Recommendation on costing methodologies would apply, at least, to all the wholesale access services included in markets 4 and 5[11]: (i) access to the civil engineering infrastructure, (ii) unbundled access to the copper and fibre[12] loops, (iii) unbundled access to the copper sub-loop[13], (iv) virtual unbundled access to the fibre loop (VULA), and (v) wholesale broadband access (bitstream services) over copper and fibre networks (comprising ADSL, ADSL2+, VDSL and Ethernet). The relative prices of these wholesale services may affect the transition from copper to fibre and consistency among them is essential.

A consistent costing approach would also be desirable for the provision of wholesale terminating segments of leased lines (market 6 of the Recommendation). This market has

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8 Price control can be based on, for example, benchmarking, indexation to the retail price index, and cost orientation.

9 Commission Recommendation on regulated access to Next Generation Access Networks (NGA), 20.09.2010.

10 E.g. cases IT/2010/1133, DE/2011/1177, AT/2010/1084.

11 Markets listed in the Annex to the 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 (the Recommendation).

12 In the case of Fibre to the Home (FTTH).

13 In the case of Fibre to the Node (FTTN).

been found to be non-competitive throughout the EU and concerns mainly the business segment of the broadband market. Further to that, the boundaries of market 5 become increasingly blurred since Ethernet-based services replace dedicated capacity leased lines and any artificial distortion in the demand for bitstream and leased lines services should be avoided.

On the contrary, wholesale line rental (WLR) services should probably not fall within the scope of this Recommendation. The demand for WLR services seems to be stagnant or decreasing with Voice over Broadband (VoB) access becoming a substitute for public switched telephone network (PSTN) access.

Question 2: Would the above proposed list of access products to be covered by the Recommendation be appropriate? Should WLR and/or other(s) access product(s) also be part of this list? If yes please specify them and briefly explain why.

IV. POSSIBLE COSTING METHODOLOGIES

IV.1 Cost models, modelling approaches and asset valuation methods

When setting cost-oriented access prices, NRAs can use different *cost models,* e.g. fully distributed costs (FDC)[14] or LRIC[15]. These can be combined with different *modelling approaches,* e.g. top-down, bottom-up[16], or a hybrid model to reconcile the former two.[17] Within these models NRAs can make use of different *asset valuation methods,* e.g. historic cost accounting (HCA) or current cost accounting (CCA)[18].

IV.2 BU-LRIC models and alternatives

Some NRAs use FDC models. These would often be of a top-down nature since these models aim to distribute all costs incurred by the incumbent and start from the incumbents' accounts. The asset valuation may be HCA or CCA.

[14] Under FDC all costs, including joint and common costs, are fully allocated to all the operator's services/products according to a specified distribution/allocation key. Therefore, the costs of a given service/product are composed of direct volume-sensitive costs, direct fixed costs and a share of joint and common costs.

[15] The LRIC approach would calculate the increment in costs (including a reasonable rate of return) which the SMP undertaking incurs when providing an additional wholesale access service to independent retail undertakings (including its own retail arm). In the long term all costs are considered to be variable because the production capacity is not a constraint (as it is the case in the short term). Therefore long run incremental costs include capital and the volume-sensitive costs resulting from a substantial change in production.

[16] The bottom-up (BU) approach develops the cost model on the basis of the expected demand in terms of subscribers and traffic and sets the network design and estimates the related costs on the basis of a network engineering model. In a top-down (TD) model the starting source of information is the cost actually incurred by the operator derived from the operators' accounts.

[17] Some NRAs use a hybrid TD-BU modelling approach, i.e., whilst taking account of actually incurred costs adjustments are made for efficiencies.

[18] Under CCA network assets are valued at replacement costs. HCA reflects the cost at the time of purchasing the asset.

The majority of NRAs use LRIC[19] models for the calculation of access prices in markets 4 and 5, often in combination with a bottom-up modelling approach (BU-LRIC) and an asset valuation at current costs.

The BU-LRIC model assumes the construction of a new, efficient network. NRAs also argue that bottom-up models make them more independent of the SMP operators' (sometimes unreliable) accounting information.

NRAs further argue that the BU-LRIC model is well suited for regulatory purposes because the price of a regulated asset is geared towards the costs of an efficient operator in a competitive market, and make-or-buy decisions are not unduly distorted.

CCA BU-LRIC models were designed with efficiency gains in mind, i.e. where technology becomes cheaper or prices of assets can be spread over a larger number of users, unit costs will decrease.

It cannot be excluded that the use of CCA today could lead to "overcompensation" for the copper network since the real price of copper has increased since the network was first rolled-out and the assets are to a large extent (if not fully) depreciated.

As far as fibre is concerned the use of a CCA BU-LRIC model is arguably more appropriate since it is expected that fibre networks will in all likelihood be built in an efficient manner and operators can be fully compensated for their construction at today's prices.

Question 3: Which is the most adequate cost model (LRIC, FDC, other) to calculate prices for regulated assets in markets 4, 5, and 6?

Question 4: Which is the most adequate modelling approach (top-down, bottom up) and asset valuation method for regulated assets in the above markets?

Question 5: Would the use of BU-LRIC based on CCA lead to an increase in copper access prices due to the reduction in subscriber numbers and the valuation at current cost of (nearly) fully depreciated assets?

Question 6: What is your view on the argument that the use of a CCA BU-LRIC model for the copper network could unduly compensate the incumbent for legacy assets?

Question 7: Would you expect fibre networks to be built in a cost-efficient manner? In this regard, would you consider the use of a CCA BU-LRIC model for fibre as appropriate?

IV.3 Asset valuation and replicability considerations

Normally NRAs would be expected to use either HCA or CCA and not mix the two approaches. In practice, some NRAs recognize that those assets which cannot be economically replaced (such as for example ducts) must not necessarily be valued at their full replacement costs.

Such approach would call for a distinction of the assets valuation method, within the same cost model, depending on their replicability. For example, non-replicable assets could be valued according to their actual costs incurred at the time of construction (HCA) or on the

[19] According to BEREC the LRIC approach is currently used by around half of the NRAs (see BEREC Report on Regulatory Accounting in Practice 2010). For example, LRIC is applied in 16 out of 26 countries in market 4, and in 10 out of 19 countries in market 5.

basis of alternative approaches reflecting the costs of maintenance. The latter is, for example, used for the regulation of water utilities (IRA – infrastructure renewal accounting). Replicable assets and operating expenditure could be valued according to a forward looking costing methodology with its emphasis on efficiency considerations (e.g. CCA BU-LRIC). This would ensure that operators competing with newly built infrastructure on some parts of the value chain would not be put at an undue cost disadvantage when compared to operators using a regulated access product (LLU or bitstream).

This approach would thus aim at applying realistic replicability considerations. The degree to which each asset would be replicated could, nonetheless, vary among and within different Member States, depending on the presence of alternative competing infrastructures (cable and other local area networks), the level of unbundling and the presence (and physical qualities) of civil engineering assets such as ducts, poles and manholes. Any conclusion with regard to replicability could be drawn from the assessment of technological change[20], retail demand and the state of competition over a sufficiently long time horizon.

In a copper model this could mean that those legacy assets which will not be replicated (including ducts) would not be valued higher than the level of the actual costs incurred at the time of construction, i.e. normally HCA. Replicable assets, such as switching equipment and DSLAMs, however, would be valued according to replacement cost (CCA) with an emphasis on efficiency considerations. It should also be examined whether copper should be considered as a replicable asset, at least in the areas where there are concrete plans to replace it with fibre (which could arguably be considered as its modern equivalent).

The replicability principle would also imply that most fibre-based assets could be based on their (actual) replacement costs (CCA). However, fibre uses in principle the same legacy civil engineering infrastructure as copper. As a consequence, the assumption of newly built ducts in a BU-LRIC cost model could overestimate the actual costs incurred by the SMP operator. It could therefore be more appropriate to value ducts as in the copper model or, alternatively, use a discounted cash flow (DCF) model for fibre-based access products.

A DCF model looks at *actual* expenditure and revenue streams over a relatively long time horizon and has the additional advantage of stabilising accesses prices over that given time horizon. Furthermore, a DCF model is considered conducive to investments since it maintains the incentive to outperform the model and keep the extra profits.

Question 8: Would it be, in your view, appropriate to value assets differently depending on their replicability? Would the application of different valuation methods, depending on the replicability of the assets, be appropriate irrespective of the cost model used (e.g. LRIC or FDC)?

Question 9: What could be an appropriate time horizon when considering the replicability of different assets?

Question 10: What would be, in your view, the appropriate method to value non replicable legacy assets: (i) HCA (either LRIC or FDC), (ii) infrastructure renewal accounting (IRA) or (iii) other methods (please explain these methods and their suitability)?

Question 11: What could be the appropriate method for those assets which can be replicated with a view to ensuring that competition on those assets is not distorted? Would CCA be suitable for that purpose?

[20] Some technologies might be suitable in certain countries but not in others.

Question 12: Could copper be considered a replicable asset? If so, under which circumstances?

Question 13: Could LRIC/CCA be appropriate to calculate the cost of fibre-based access products or is another cost model such as DCF better suited for this purpose?

Question 14: In which manner would replicability considerations enter into the modelling of fibre access prices? Should civil engineering infrastructure be subject to different valuation methods depending on whether such infrastructure is *de facto* used for fibre deployment? Which circumstances could hinder the use of existing civil engineering infrastructure to deploy fibre networks?

IV.4 Modern equivalent asset (MEA) approach

Some stakeholders argue that fibre access technology could be considered as a Modern Equivalent Asset (MEA) for copper. Consequently, in their view, NRAs could use a single model for both copper and fibre access prices based on the cost of fibre deployment.

However, in most Member States fibre roll-out is still very limited, and the provision of access products and services still mainly relies on copper networks. Therefore, one could argue that in a single MEA model the SMP operator would be compensated for a fibre network which is largely not yet built, which could potentially result in unjustified higher copper prices.

Question 15: Could fibre be considered as the MEA for copper? In this respect, could the fibre access network be considered as the most cost efficient method, using modern technology, of providing the same services, to the same level of quality and to the same customer base as is provided by the existing copper access network?

IV.5 Consistency in the costing methodology for products along the same value chain

When regulators use a given cost model as a basis for a cost orientation obligation imposed for a given access product, then it could be argued that all access products provided over the same technology, along the same value chain, should be based on the same cost model.

Furthermore, it could be argued that each asset should normally be valued on the basis of the same asset valuation methodology[21]. Such an approach would allow regulators to assess whether the economic space between the access products on the ladder of investment is sufficient to allow for fair competition.

Question 16: Would it be, in your view, appropriate to calculate the access prices for products along the same value chain according to the same cost models? Would this approach ensure consistency in the costing methodology?

[21] For example, ducts could not be valued simultaneously on the basis of HCA and CCA for calculating the costs of copper LLU and bitstream services, respectively

V. ACCESS PRICES FOSTERING INVESTMENT IN NGA NETWORKS

V.1 Copper access prices and the incentives to invest in NGA networks

In the current period of transition from copper to NGA networks, the setting of access prices may also influence incentives to invest in NGA networks.

In this respect, some alternative operators argue that higher copper access prices (stemming in particular from the use of CCA) could lead to disincentives to invest in NGA infrastructure where incumbents receive a higher price for copper based access and correspondingly higher revenues from their own downstream retail operations. According to those operators, investment in fibre could be made unattractive due to supernormal profits on the existing copper network and migration from copper to fibre might not occur at the desired speed. Moreover, they argue that high copper access prices may not permit alternative operators to avail themselves of a sufficient margin to eventually invest in fibre. Consequently, unduly high copper prices may hamper the migration from copper to fibre.

On the other hand, incumbents argue that the use of CCA for copper could promote investments, as it offers good returns that could help to finance new infrastructure and consumers are more likely to switch due to a smaller retail price differential between copper and fibre based retail broadband products. Moreover, they argue that if copper became considerably cheaper, alternative providers offering services over parallel infrastructures (fibre, cable or perhaps other local access networks) may have difficulties in competing with similar services provided over the SMP operator's legacy network. Further to that, in their view, significantly lower copper price would reduce retail prices and may make consumers less ready to switch to the relatively higher priced fibre products.

Concerning NGA access prices, it should be recalled that, according to the principles established in the NGA Recommendation, the price of access to the unbundled fibre loop should be cost-oriented. When setting the price of access to the unbundled fibre loop NRAs should take into account the additional and quantifiable investment risk incurred by the SMP operator. In principle this risk should be reflected in a premium included in the cost of capital for the relevant investment. Such premium should normally provide incentives to invest in fibre.

Question 17: Is, in your view, the migration from copper to fibre a pre-condition for achieving the DAE broadband targets? In particular, could future technological developments allow the traditional copper network to support bandwidths similar to those of NGA networks (i.e. 100 Mbps) and, if so, under what circumstances?

Question 18: How do you consider that the incorporation of a risk premium in the WACC should be calculated to adequately and effectively reward the investment risk and provide the necessary incentives for investment in NGA infrastructures?

Question 19: What role do copper prices and a price differential to fibre access play with respect to NGA investments?

Question 20: Would, in your view, a price increase for copper access products have an impact on the incentives of SMP operators and the economic capacity of alternative operators to invest in NGA?

Question 21: What results could be expected in case of a significant reduction in the copper access prices on consumers and operators, e.g. in terms of retail copper/fibre-based broadband prices and fibre investment incentives?

V.2 Charge control for copper based products

When imposing cost orientation and price control regulation, NRAs determine (i) the applicable *cost methodology*, which sets the basis for access prices, and (ii) the *charge control*, which determines the relationship between the price and the underlying cost, by setting the degree of pricing flexibility (i.e. the price differences on the basis of the technology, the services, the geographical areas, etc.) and the price evolution over the regulatory period. The same cost methodology can thus be compatible with different price controls[22]. The relationship between these two fundamentals in tariff regulation is particularly important where NGA investments must be fostered.

Based on the cost modelling principles set out in section IV, it could be additionally envisaged to formulate a charge control which links the levels of copper and fibre access prices to the SMP operator's fibre roll-out commitments, migration process and actual investments along the lines below. The application of charge controls can thus provide tools for incentivising investments in NGA networks.

V.2.1 Glide-path for the reduction of copper-based access prices

In case the cost modelling approach leads to a reduction of copper access prices - e.g. prices calculated on the basis of historical costs for network elements which will not be replicated – it could be appropriate to foresee that the reduction would not take place immediately but would, after a certain time, follow a glide path.

It could also be envisaged that the application of a glide path for copper-based access prices would be linked to credible NGA investment commitments, in particular those capable of contributing to the Digital Agenda for Europe target relating to the take-up of 100 Mbps internet access services. In such a scenario, the glide path would only come into (full) effect if such investments were not carried out, and stricter cost standards could also be considered in order to increase the opportunity cost of not migrating to NGA, such as for example short run incremental costs (SRIC) [23].

V.2.2 Higher copper prices in return for investment

It could be considered that for those lines/exchanges/areas where NGA investments are carried out, the copper access charges could contribute to the incentives for such NGA investments.

Copper access prices could in those instances be (i) calculated by way of an average between copper and fibre prices which would increase with the share of fibre investments, or (ii) equal to fibre access prices in line with the MEA approach in those lines/exchanges/areas where

[22] For example, a NRA may decide to set the cost-oriented access prices according to the CCA LRIC cost methodology and apply a glide-path that lowers prices towards the costs expected at the end of the regulatory period. Costs at the end of the regulatory period would have been calculated on the basis of certain assumptions on the evolution of demand, investments etc.

[23] The SRIC cost model would only consider those costs that are incremental to the provision of a service or an increase in the production in the short run, i.e. it mainly excludes fixed costs and includes only variable costs.

fibre is deployed (or is to be credibly deployed[24]).

V.2.3 Appropriateness of copper switch-off

It is often argued that, in order to avoid the (costly) parallel running of networks, which could lower the incentives to invest in new fibre networks, it would be useful to promote the rapid switch-off of the legacy copper network where the incumbent deploys a parallel fibre network (while taking duly into account the situation of alternative operators providing services on the basis of copper LLU).

Question 22: Do you consider that the parallel running of copper and fibre networks create inefficiencies for both SMP operators and alternative operators? Would this lower the incentives to invest in NGA networks? Do you consider, in this regard, that the migration from copper to fibre should be carried out in a relatively short timeframe in order to minimise such inefficiencies and increase the incentives to invest in fibre networks?

Question 23: Could a copper switch-off accompany a steered copper to fibre migration? In this respect, in what circumstances, in which areas and in what timeframe would a copper switch-off be appropriate?

Question 24: With regard to copper switch-off, how could those consumers be served which would also, post-migration, demand fixed narrowband telephony services at a rate comparable to today's rates? Do you consider that the benefits associated with the provision of higher quality services could outweigh the associated potential price increase of basic internet and telephony services?

Question 25: How would NGA network migration occur in a world where multiple infrastructures exist and where it could not be taken for granted that copper customers migrate to fibre rather than cable and/or 4G mobile? How would this uncertainty affect the investment incentives of the SMP/alternative operators?

Question 26: What would be the main operating costs, technical difficulties (for SMP operators) and service discontinuity issues stemming from both the copper switch-off and the migration from copper to fibre? In this respect, do you consider that some services which are currently provided over copper could not be provided over fibre?

Question 27: What could be the obstacles to a swift migration from copper to fibre in terms of economic viability, consumers' switching costs (such as consumer inertia, reluctance to switch provider when advantages in price and/or quality are not perceived), construction works, ownership rights etc.? In this respect can a clear distinction be made between areas where migration will and will not occur within a reasonable timeframe?

Question 28: Could current copper based alternative operators adapt smoothly to the new

[24] In such a scenario, the fibre investment plan should be realistic, approved by the NRA, contain clear milestones and allow for a swift switch off of copper as soon as fibre is laid down in a specific MDF. With the completion of the fibre investment, all alternative access seekers would be migrated to fibre with a fully equivalent access product (before the SMP operator is allowed to sell retail offers) and pay the fibre access price.

NGA environment and continue running their business over the new fibre networks?

Question 29: How could an access pricing scheme that combines both copper and fibre be constructed in order to ensure efficient migration to fibre and achieve the DAE targets?

Question 30: Could a pricing scheme for copper be envisaged that rewards fibre investors at those exchanges where a credible commitment is made to carry out NGA investments? In this respect, could prices for copper access at those exchanges (or in those areas) where fibre investments are carried out be calculated on the basis of i) the average cost of copper and fibre access, ii) the MEA approach, i.e. entirely reflect the cost of fibre deployment?

Question 31: With regard to question 30, what would be an appropriate time-frame for such an incentive pricing scheme, i.e. for how long should higher copper prices apply and by which time should fibre investments be finalised?

Question 32: In case a glide path for copper based access prices were to be used, what would be the appropriate length and intermediate steps of such a glide path?

VI. ANY OTHER ISSUES

Respondents are invited to raise any other issues relating to costing methodologies for key wholesale access products that they might wish to address in this consultation.

VII. RESPONSES

Responses to this public consultation should reach the European Commission by 28/11/2011 at infso-costaccounting@ec.europa.eu. See Annex I for further information on submitting your response.

ANNEX I

Responding to the consultation

The Commission invites written views and comments on the issues raised in this document, to be submitted by **28/11/2011**.

Contributions, together with the identity of the contributor, may be published on the website of the Directorate-General for Information Society and Media, unless the contributor objects to publication of personal or confidential data on the grounds that such publication would harm his or her legitimate interest. For more details, please see the Commission's general statement on personal data protection[25] as well as the specific privacy statement for this consultation[26].

Please give the name of a contact person in your organisation for any questions on your contribution. Please note that there is no need to provide a hard copy in addition to your contribution provided electronically.

Contact address:

Procedures related to National Regulatory Measures
Unit (B5), BU33 6/26
DG Information Society and Media
European Commission
B-1049 Brussels
Belgium
Tel +32 2 298 48 25 or +32 2 296 42 29

Email: infso-costaccounting@ec.europa.eu

[25] http://ec.europa.eu/geninfo/legal_notices_en.htm#personaldata

[26] http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/index_en.htm