

## **Public Consultation on Costing Methodologies for Key Wholesale Access Prices in Electronic Communications**

### **response from the International Telecommunications Users Group (INTUG)**

#### **Summary**

INTUG welcomes this consultation, which addresses a critical issue for business users of electronic communications, especially in the context of roll out of Next Generation Access Networks. Rapid establishment of an international competitive market for services based on fibre access technology is a vital enabler for economic growth, improved productivity and job creation throughout the European Union. It is also a central issue to successful achievement of the Digital Agenda.

The fixed access network is particularly difficult to replicate, and in Member States where there is limited alternative infrastructure, coupled with significant economic constraint, there is likely to be only one fibre access network installed in many geographical areas. The regulated price for copper and fibre access networks is therefore critical to the roll-out of services and investment by businesses in innovative new processes, which generate growth, jobs and improved productivity.

The outcome is dependent on the impact of the regulated price applied to existing copper networks, relative to that for fibre networks, and the influence this has on investment. The Digital Agenda requires roll-out of fibre to enable delivery of the superfast broadband coverage and speed targets, and further investment in copper-based DSL technologies to increase speed in the short to medium term could be seen as deflecting investment from the long term goal. A high regulated price for copper may deter incumbents from investing if there is no alternative infrastructure, and may block implementation of new applications by businesses using legacy networks, due to the high consequent cost of access.

Since there is significant variation between the current situation in each Member State, especially with regard to the presence or absence of alternative infrastructures, a one size fits all approach in absolute terms is inappropriate. The right balance between copper and fibre access prices may have to vary between Member States, since copper also has other characteristics critical for some uses, e.g. provision of limited power, whereas fibre may be more resilient to flooding. Topology limitations, arising from amplification needs, may result in differences that preclude identical cost models for copper and fibre.

The cost methodologies adopted must be realistic, and must reflect the real incremental cost incurred to provide additional capacity, calculated on a bottom up basis, whilst eliminating, for example, any continuing depreciation charges for fully written off assets. A current cost approach rather than historical cost accounting is more likely to observe these principles. Passive infrastructure should be valued independent of the technology accommodated.

Whilst continued availability of wireless/mobile services, including WiFi and 4G/LTE, will contribute to the overall landscape of facilities, these are definitely not alternatives or substitutes long term, and must not be used in any market analysis to determine the presence or absence of fixed competition. During the migration period, their availability and cost will vary between Member States. The influence they have on the relative speed of fibre investment will therefore also be different. Fibre investment in backhaul networks from 4G/LTE masts will contend with access networks for operator capital investment.

The next few years will inevitably see a period of parallel running by infrastructure owners as the migration from copper to fibre proceeds. This will be a period of additional cost, inefficiency and operational risk to customers. There are therefore major advantages for all in completing migration in the minimum period possible, but this must be subject to protection of operational service quality, and adequate periods of time for alternative operators and their customers to move to the new environment. There will obviously also be investment constraints applying to those rolling out the fibre infrastructure. State Aid, conforming to the Commission guidelines, should be used for positive influence here too.

**Specific answers to each of the consultation questions are in the following pages. The numbering of the Commission document questions has been retained.**

## **About INTUG**

The International Telecommunications Users Group (INTUG) represents the interests of public and private business users of telecommunications globally. Users include some of the world's largest financial institutions, car manufacturers, pharmaceutical companies, fast moving consumer goods enterprises, retail and distribution companies, and small and medium enterprises (SMEs), as well as public sector utilities and other services.

The INTUG community includes user associations in many large EU Member States, including Belgium, Denmark, France, Germany, Spain, the Netherlands, Sweden and the UK, and the multinational user group EVUA, plus user groups in other parts of the world.

INTUG consulted its members on the response to the Cost Methodology questionnaire, and took account of members' own responses.

Nothing in this submission is confidential and the contents can be considered to be in the public domain. The submission is available on the INTUG web site at [www.intug.org](http://www.intug.org).

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## **INTUG Response to Costing Methodologies Questionnaire**

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

**Answer: Yes.**

Question 2: Would the proposed list of access products 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.

**Answer: The products listed are appropriate for the Recommendation, although the examples quoted for Bitstream Service should not be considered complete as other product options will emerge. Wholesale Line Rental (WLR) should be included in the list, as there are many current business applications, which will depend on such services for the foreseeable future, and the cost of such services is often included indirectly in charges to end customers.**

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

**Answer: LRIC principles are best, but still leave scope for misrepresentation of real costs, especially if the basis used is the original cost of additional elements or the highest or even average current cost, when that is above the real cost actually incurred in the instance in question. The real incremental cost of an efficient operator should be the basis for the model. FDC can reward current inefficiencies and/or use of legacy resources excessively (see answer to Question 4 below).**

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

**Answer: Asset valuation should reflect the most efficient operator, and bottom-up valuation avoids the risk of inaccurate calculation through the allocation of partial costs from other elements of the model. Double counting should be avoided where fully depreciated assets are being used and still being charged.**

Question 5: Would 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?

**Answer: Different depreciation policies and rates and inconsistent tax treatment create inconsistencies between Member States, and between operators. Fully depreciated assets being used for legacy support of copper based customers should not be allowed as a justification for increasing the price of such services.**

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?

**Answer: For the reasons stated above, it is probable that current accounting using CCA BU-LRIC will unduly compensate incumbents and maintain or increase the profitability for legacy copper-based services, reducing incentives to invest in fibre**

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

**Answer: Yes. Yes, but the time period to be used in the model should be realistic. Historical cost is clearly inappropriate.**

Question 8: Would it be appropriate to value assets differently, depending on 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)?

**Answer: No. No, as it does not affect the profitability or ROCE.**

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

**Answer: The time horizon of replicability of copper by fibre might be a guide.**

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)?

**Answer: HCA using LRIC with allowance for the use of fully depreciated assets.**

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

**Answer: CCA would be appropriate.**

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

**Answer: Yes. When replaced by fibre.**

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?

**Answer: LRIC/CCA, noting the qualifications in the answer to Question 3 above. DCF is exposed to conjectural hypothesis about future costs, prices and volumes.**

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

**Answer: Passive civil engineering infrastructure should be valued independently from the technology used (which may not be known, disclosed or decided at the time of acquisition of the infrastructure). The cost structure should be based on physical capacity. Costing related to service capability would hinder fibre roll-out**

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?

**Answer: Not fully, since copper also provides a limited source of power resulting in service resilience not matched by fibre. However fibre has the capability for significantly longer runs without amplification or material loss of capacity, and is also more resilient to the impact of flooding. Where power capability is irrelevant, fibre could be considered a more cost efficient asset for transmission capability. The topology of networks (e.g. Point-to-Point, GPON, Tree and Branch, density of cabinets) vary and NRAs should not use a single model for copper and fibre access.**

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?

**Answer: Yes. Yes.**

Question 17: Is the migration from copper to fibre a pre-condition for achieving the DAE broadband targets? 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?

**Answer: Yes, as too many people are too far from the exchange to achieve the required broadband target speeds. VDSL2 will not apply to all copper-connected customers. The copper network would require active devices in street cabinets.**

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?

**Answer: Copper and fibre both require investment to reach DAE speed targets, with less than 100% reach for copper (see above). The risk premium is an overstated element, since there is evidence of significant suppressed demand (e.g. M2M and smart device use in home applications), which will consume superfast broadband.**

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

**Answer: There is no single answer to this question since the start point in each Member State is different with regard to existing infrastructure competition, e.g. from cable networks, and existing regulated copper and fibre prices. Generally speaking, a cautious incumbent owning most infrastructure will play safe if copper profit is high and not invest in fibre. The only 100% effective way to force fibre investment is to switch off copper for all but the specialist uses which require it. This could be done by imposing a copper price cap below current cost.**

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

**Answer: Yes, if there is little or no existing alternate infrastructure, e.g. cable. Where there is, the incentive to invest in fibre NGA will still be substantially there.**

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?

**Answer: Faster fibre investment by a dominant incumbent.**

Question 22: Do you consider the parallel running of copper and fibre networks creates 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?

**Answer: Parallel running by its very nature creates cost inefficiencies and migration periods should be minimised. Inefficiencies should therefore, on the contrary, increase the incentives to phase out legacy infrastructure.**

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

**Answer: Copper to fibre migration started in core networks, progressed to backhaul networks, and is now hitting the volume areas of FTTC AND FTTH, where the greatest passive infrastructure costs are incurred. The dual technology support overhead cannot be fully eliminated until the access networks have migrated. One specific area to address is the backhaul networks from mobile masts, which should be replaced with fibre for 4G/LTE.**

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?

**Answer: In the timeframe being considered, fixed narrowband telephony services will have become entirely flat rate charge based, incorporated in a service bundle. For those customers who currently require only this service, the premise should be provided with a fibre connection and charged a flat rate, pending additional service take up by subsequent occupants.**

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

**Answer: Fibre, cable and 4G mobile (and WiFi for that matter) are not substitute products for each other. As in Question 19, the answer will vary by Member State.**

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?

**Answer: Costs would continue to support existing services requiring the power supply element of copper networks, and/or extremely low latency delivered to embedded devices such as meters and fail safe process control valves. This might generate disproportionate increases in the cost of such services, when remaining services are migrated off the copper infrastructure.**

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?

**Answer: As indicated in Question 26 above, some services might be very costly to re-engineer to remove dependency on special characteristics of copper networks. In strained economic circumstances, the opportunity cost of simply re-engineering a working operation for no perceived or actual operational benefit is a deterrent.**

Question 28: Could current copper based alternative operators adapt smoothly to the new NGA environment and continue running their business over the new fibre networks?

**Answer: Yes. Indeed, alternative operators have already shown greater adaptability.**

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?

**Answer: A pricing scheme alone will be insufficient. There will be instances where other incentives are also required to encourage state, regional and local investment.**

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? Could prices for copper access at exchanges or in 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?

**Answer: (i) No. (ii) Unlikely.**

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

**Answer: As it is unlikely to work, there is no appropriate timeframe.**

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?

**Answer: 3 years from mid 2012 to mid 2015.**