

Draft Summary of responses to Consultation Document

on

Competition analysis, Model Interconnection Offer (MIO),
Reporting obligations, and Retail price regulation

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For

The Uganda Communications Commission (UCC)

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Introduction

The Uganda Communications Commission (UCC) has commissioned PricewaterhouseCoopers (PwC) to provide assistance in the area of interconnection, competition analysis, and retail price regulation ("Interconnection and Retail Costs and Pricing" project).

The Interconnection and Retail Costs and Pricing project started in September 2008. At this time, the UCC invited a number of operators for a 'stakeholder meeting' during which the UCC provided information about the planned work programme and invited attendees to raise and discuss issues of concern to them in relation to the areas covered by this project. Since then, the UCC's advisors have carried out the various parts of this work programme:

- A legal and regulatory due diligence of the framework governing interconnection and competition issues
- Review of the state of competition in the communications sector
- Meetings with operators for data gathering and network analysis
- Calculation of the costs of telecommunications services.

Based on this work the UCC and its advisors produced two consultation documents summarising the key issues identified and preliminary recommendations made.

'Consultation Document 1' covering Interconnection, Cost model, Dominance, and Retail Price Regulation was published on 16 December 2008, and interested parties were asked to respond by 8th January 2009, subsequently extended to 26th January.

Responses have been received from MTN, Orange, Smile, UTL, Warid, and Zain. The UCC have published these responses (except to the extent those responses were marked as 'in commercial confidence'). The UCC has also published its analysis of, and response to, issues raised in responses received.

The second consultation paper ('Consultation Document 2') on Competition analysis, Model Interconnection Offer (MIO), Reporting obligations, and Retail price regulation was published on [29 January] 2009. The initial deadline was [15 February] 2009, however this was extended to 11 March 2009.

MTN, Orange, Roke, Smile, UTL, Zain, and Warid submitted responses to Consultation Document 2. The Commission would like to thank all these operators for the time and effort invested in analysing the issues concerned and for playing their part in the important process of shaping the regulatory framework for the telecoms markets in Uganda.

This document summarises the responses received and provides the UCC's reply to the issues and comments that have been raised. The original responses (except to the extent those responses were marked as 'in commercial confidence') will be made available from the UCC's web site.

Each of the questions raised in Consultation Document 2 is reproduced in this response document (numbered as in the consultation document). Each question is followed by a summary of the responses received and the Commission's response addressing significant points that have been raised.

Issue Error! No text of specified style in document.-1: Retail voice market

Do you agree with the UCC's view that the retail voice market in Uganda should be regarded as effectively competitive on a forward-looking basis?

About half of the respondents, both large but also smaller operators, agreed with the Commission's assessment of the retail voice market without reservations. One of the operators proposed a further review in two years' time.

One of the new entrant operators expressed concerns that in Consultation 2, the Commission did not use some of the criteria proposed in Consultation 1 such as innovation and countervailing buying power in the assessment of the effectiveness of competition in retail markets. In addition to these, the operator suggested additional criteria such as technological superiority, privileged access to capital markets, joint dominance and market share based on outgoing air-time revenue. The operator believes that applying all these criteria the Commission may find that the relevant wholesale and retail markets are not sufficiently competitive.

The Commission would have to observe that the same operator expressed full agreement with the proposed criteria in its response to Consultation 1, considering them standard and aligned with international best practice. Nevertheless, the Commission acknowledges that a market analysis is not a simple check list against determinist criteria, but a complex assessment of market power based on relevant criteria in a specific market. In addition, the comments of the operator are noted: "we understand that the Commission intended to have some flexibility in the use of the criteria listed in Consultation 1 in determining whether or not the retail markets and wholesale markets are effectively competitive." Nevertheless, the Commission below makes the following comments on the specific points raised by this operator.

First, in respect of the retail voice market, the Commission applied the same criteria in Consultation 2 as were proposed in Consultation 1. In particular, the Commission did not propose to assess market power in retail voice markets using innovation or countervailing buying power as criteria. In that regard, the Commission rejects this operator's first point concerning the Commission's omission of consideration of certain proposed criteria.

In respect of the additional criteria suggested by this operator, the operator did not explain which of these additional criteria are relevant specifically to the retail voice market. The Commission maintains that its analysis already considered the main criteria relevant to the assessment of competition in this market, as well as other markets. Moreover, the Commission notes that stakeholders were already provided the opportunity to comment on the make up of these criteria in response to Consultation 1. That said, for completeness, the Commission makes the following remarks on the four suggested additional criteria in the context of this market:

Technological superiority: the Commission stresses that it encourages a technology neutral investment policy and in any case considers that this criteria can be, and was, (implicitly) analysed in the context of the structural barriers to entry criterion, as described in section 2.2.2 of Consultation 2. It is not clear that this affects the consideration of competitiveness in the retail voice market, since all operators potentially have access to suitable technology.

Privileged access to capital markets: similarly, this can be considered in the context of barriers to entry; table 5-1 of Consultation 1 listed "access to financial resources" as an indicator of barriers to entry. In this market context, it is not clear that it poses a material influence on the market. For example, the Commission notes, as it did in Consultation 2 in section 2.2.2., that a recent entrant, HiTS, is now a subsidiary of Orange/France Telecom, which is a significant global player.

Joint dominance: as noted in footnote 2 of Consultation 2, this was considered by the Commission, but it was found that the stringent conditions required to establish joint dominance are unlikely to be found in a growing, dynamic, heterogeneous market such as Uganda's retail voice market, and hence it did not merit further analysis.

Market share on basis of outgoing revenue: The Commission notes the comprehensive analysis of market shares it conducted in Consultation 2. Market shares were analysed based on both volume and revenues, with the results indicating an increasingly competitive market, stimulated by the entrance of new operators and effective promotional campaigns from existing operators.

Countervailing buyer power: given the relatively small size of customers, this is not a factor in the retail market, however it was appropriately considered in the context of termination markets.

Another operator raised the more general issue that the Commission's definition of SMP should be clearly defined by the Commission. Further, it submitted that the retail voice market is not competitive. It suggested remedies to promote competition, such as number portability, asymmetric regulation, and the outlawing of volume discounts on interconnect rates.

The Commission notes that these comments by this operator were made as assertions rather than arguments backed by evidence. It therefore is not in a position to place much weight on these comments. That said, the Commission makes the following remarks on this operator's suggested remedies:

Number portability: Consultation 2 primarily considered the competitiveness of the markets in order to ascertain the appropriateness of SMP remedies placed on operators. Number portability is a measure that could be imposed in a separate process, after due consideration of its costs and benefits in the Ugandan market. The Commission plans to review this prospect in the near future.

Asymmetric regulation: this operator does not expand on what it means by this term. In some contexts it means that regulatory remedies are imposed on operators deemed to have SMP; in other contexts it means that some form of artificial assistance is granted to new entrants in order to promote competition. The Commission notes that it has applied the former definition. In respect of the latter, the Commission generally rejects this approach as a matter of principle. In any case, this issue is more relevant in the context of mobile termination, hence the discussion is deferred to that section below.

Outlawing of volume discounts in interconnect rates: Similarly, this issue is discussed below in the context of termination charges.

One operator did not agree that the retail voice market should be regarded as effectively competitive on a forward looking basis. It states that it feels that there should be more regulation in the market, as there is a clear dominance in the market which results from the high interconnection rates. The Commission notes that the basis for this assertion is not clear. In any event, the Commission agrees that high interconnect rates are deleterious to competition, hence its proposed measures in the context of wholesale markets such as termination.

On the basis of the Commission's consideration of stakeholder views, the Commission is not minded to alter its view that the retail voice market is effectively competitive.

Issue Error! No text of specified style in document.-2: SMP

Do you agree with the UCC's view that the evidence available does not allow one to conclude that one or more operators is or are dominant in the Ugandan retail voice market going forward.

Operators' opinions were divided on this issue in accordance with their view on question 2-1 above, with half of the respondents agreeing that no operator should be designated as SMP in this market, and half expressing disagreement.

Most of the discussion relevant to this question has already been addressed in the section above. The remainder of this section considers comments not covered in the section above.

One respondent agreed with the findings however noted that this was on account of the actual state of the market, not the evidence presented. This comment was not elaborated upon. However, the Commission considers that the evidence presented is consistent with the observation made by this operator.

One operator which disagreed with the Commission's conclusion felt that dominance is indicated in the market in terms of profitability and in terms of the number of customers. It noted that whilst recent entry of new operators has opened up the market and created a more competitive environment, a dominant player still persists in the retail voice market.

The Commission notes that this statement was not supported by particular evidence. Moreover, the respondent does not nominate which operator is characterised by SMP. However, in terms of the number of customers, the Commission notes that this analysis was carried out, and in its view it does not support a conclusion that the market is characterised by dominance.

In terms of profitability, the Commission notes that evidence of overall profitability of the enterprise alone is not evidence of significant market power in a particular market. It is also noted that the cost information is not sufficiently available on this market to support robust conclusions of excessive pricing. The Commission has therefore based its assessment primarily on structural factors and developing trends in the market.

Another operator agreed that dominance was likely not present in this market. However, it also submitted that the difference between dominance and market power is important in this context. It believed that while dominance may not be found (except possibly in the case of MTN) market power, demonstrated through operators' countervailing buying power in the relevant retail markets will be found. Operators' countervailing buyer power in the retail voice market thus has an impact on the upstream wholesale (call termination) market and is thought to enable operators to influence behaviour at that level.

The Commission would characterise this latter point as raising the distinction between market power of sellers and market power of buyers, or countervailing buyer power. As noted by this operator, CBP is a factor potentially mitigating market power in termination, rather than a factor affecting market power of suppliers in the retail voice market, and hence this issue is addressed further in section on termination below.

Based on the issues and argumentation provided above, the Commission, therefore, considers that the evidence and argument presented in response to 2-2 does not suggest the Commission came to the incorrect conclusion on this question. The Commission therefore affirms its draft decision in finding an absence of SMP in the retail voice market.

Issue Error! No text of specified style in document.-3: Retail internet services market

Do you agree with the UCC's view that the retail Internet market in Uganda should be regarded as increasingly competitive?

All but one operator agreed without qualification with the Commission's finding that the retail internet market is effectively competitive. Such relatively broad consensus from a range of different types of operators can be taken as indicative that the Commission's analysis and conclusions were correct.

One operator, however, reiterated its earlier general point that a consideration of additional criteria may lead the Commission to draw different conclusions. The Commission reiterates its points made above in 2-1 in relation to this point.

Whilst agreeing with the Commission's finding, another operator also queried what the Commission's approach would be towards ensuring fair access to the eventual international fibre optic cable. The Commission reiterates the importance of the fibre optic cable infrastructure in bringing about further development of the internet market, in terms of costs, prices, quality of service etc. Equally, fair and non-discriminatory access to this cable is likely be a key driver of competition and these potential benefits. The Commission intends to review in due course the arrangements under which this cable is made available.

In light of the comments on this question, the Commission is not minded to change its view that the retail internet services market is competitive.

Issue Error! No text of specified style in document.-4: Retail leased lines market

Do you agree with the UCC's view that the retail leased lines market in Uganda requires regulatory intervention?

Responses were generally split on this question. In general, new entrants agreed with the Commission's position. One stated that it agrees with the findings that the retail leased line market in Uganda is not effectively competitive, given UTL's high market share, high barriers to entry and vertical integration. It urged the Commission to impose appropriate, justified and proportionate remedies on the wholesale leased line market as in its view this would address the failure of competition in the retail lease line market. The operator submitted that this is because retail markets will become competitive once there is increased competition or regulation is effective at a wholesale level.

In contrast, the larger operators disagreed with the Commission's view that some form of regulatory intervention is required in this market. These operators considered the market to be competitive. These comments are addressed more specifically below.

One large operator considered the retail leased line market in Uganda to be effectively competitive on a forward-looking basis, stating that the evidence available is that new entrants are deploying infrastructure which enables efficient delivery of leased line services such as point to point and VPN.

The Commission accepts that new players are entering the leased line market, which is to be encouraged. However, this does not preclude a finding of significant market power on UTL in retail leased lines in the absence of wholesale regulation. As stated in Consultation 2, this finding is based on evidence of very high market shares, as well as other structural factors.

Another large operator stated that while there is clear dominance in the retail leased lines market in Uganda, it does not agree that there is a need for regulatory intervention in this area. It does not elaborate on this point, however.

The Commission notes the concession by this operator of "clear dominance" in the retail leased lines market. However, its conclusion that there is no need for regulatory intervention is not supported by the perspective of the competition framework and that of fundamental regulatory principles. The basis and logic of the ex ante regulatory framework is that regulatory remedies should be imposed wherever it is deemed that a market is not effectively competitive and dominance is found. Neglecting to apply remedies in such a situation would compromise the objective of promoting competition.

Another large operator also disagreed with the Commission's conclusion on the basis that the Commission accepts that it has not been able to gather sufficient granular data on which to form absolutely robust conclusions, e.g. data on different bandwidths and distances. It also points to the available pricing evidence, which showed that a) MTN's prices for leased lines are higher than those of UTL and b) MTN's revenue is nearly double UTL's, which – in this operator's view – suggests that the retail line market is effectively competitive on a forward-looking basis. This operator submits that this evidence shows that it is not able to command a price premium on its leased line products. It also noted infrastructure development by Warid which enables it to deliver leased line services in competition with incumbents.

The Commission acknowledges that the data available on leased lines was not entirely comprehensive. However, the Commission believes it was sufficiently detailed on which to form reasonable conclusions, and it is not clear that further evidence would alter its conclusions. In this regard, the Commission did not place significant weight on the average revenue information. This is because it does not capture relative quality characteristics, such as bandwidth and distances. Rather, the Commission primarily based its finding on structural factors in the market.

One other large operator also disagreed with the Commission's position. It submitted that the technology to provide leased line services is evolving, such that leased line services can now be

provided over several technologies. In the opinion of this operator, regulatory intervention could deter the incentive to invest in these technologies and increase the barriers to enter this market.

The Commission agrees with this operator on the importance of investment in leased line technologies. However, the Commission does not accept that incentivising investment and regulation to promote competition are mutually exclusive. The need to ensure incentives for efficient investment underlies the Commission's approach of adopting appropriate and proportionate regulation. Further, it will be important to ensure that investment in infrastructure occurs efficiently and not in the form of inefficient and costly duplication.

The Commission has considered the comments made on this question and believes the evidence still points to the finding that, as about half the operators agree, the leased lines market is not effectively competitive without some form of intervention made at the wholesale level. The form of this intervention is dealt with more specifically below.

Issue Error! No text of specified style in document.-5: Retail leased lines market remedies

Do you agree with the UCC's view that such intervention should occur at wholesale level (i.e. upstream)?

The response to this question was split corresponding to the response to the previous question. The three large operators who disagreed with the previous question on whether regulatory intervention is required naturally disagreed that intervention is necessary at the wholesale level, simply re-stating that the retail market is competitive, hence regulatory intervention is not required.

One of the operators who disagreed argued that the presence of high economies of scale and other high entry barriers especially in the upstream market will naturally lead to very few firms existing in the leased line market. Under these circumstances, the operator submitted that few firms that emerge will be able to take advantage of their size in order to lower costs. Additional regulation will, according to this operator, undermine and constrain the cost advantage that these firms seek in order to survive in this market.

The Commission does not follow the argument above as presented by this operator. As the market analysis shows, the upstream leased lines market is indeed characterised by economies of scale and barriers to entry. This is indeed why regulation which provides access to this infrastructure to third parties, as opposed to inefficient duplication and bypass, is appropriate in these circumstances.

The operators who voiced agreement that regulatory intervention is required all agreed that such intervention is appropriately applied at the wholesale level.

One operator noted that the market shares calculated by the Commission – UTL and MTN have market shares (based on both value and volume) of around 75% and 25%, respectively – supports the conclusion that UTL and MTN control 100% of the market and therefore dominate the market. This operator submitted further that these market conditions facilitated collusion rather than competition, effectively giving rise to a monopoly. Intervention at the wholesale level is necessary to eliminate this possibility, according to this operator.

This operator agreed with the Commission in stating that to compete favourably in this market, a retail firm would have to incur high investment costs and overcome several high entry barriers. This infrastructural duplication would trap similar economic resources in the same activities and lead to economic inefficiencies. Competition in this market could be substantially enhanced if it were made possible for retail firms to rent or economically share the existing network infrastructure at wholesale prices. The operator believes such intervention should be carried out at the upstream level. The operator also pointed out that regulatory intervention will also lead to increased information and reporting of leased line costs and revenues, especially at the wholesale level. This additional information would lead to better planning and allocation of business resources.

Another operator in support of the Commission's conclusion noted that the introduction of appropriate, justified and proportionate ex ante remedies in key wholesale markets where problems exist will be the more effective method of improving competition and efficiency in the retail leased line market. It also suggested that the Commission, in planning its work programme for market analysis, should give priority to the analysis of wholesale markets. The operator argued that this is because retail markets will become competitive once competition – or regulation successfully mimicking competition – is effective at a wholesale level. It also noted that in the current review of the European regulatory framework, the European Commission has proposed that regulation should focus mainly on wholesale markets.

The Commission notes the comments by these operators as supportive of the Commission's findings. In respect of collusion, the Commission did not explicitly consider this possibility in the report, and notes that collusion may be facilitated by an effective duopolistic market structure. The Commission's findings do not, however, rely on the existence of joint dominance.

In relation to the focus on wholesale markets, this is entirely consistent with the approach articulated and taken by the Commission in its market analysis of the Ugandan market. The Commission refers to its statement in Consultation 1, which noted in 4.1.1: “Where potential competition issues are identified in a retail market it is essential to understand whether this problem may originate in the retail market itself or in a related wholesale market. Where the latter is the case, wholesale markets are then defined, since ex ante regulation should first address the market failure in the wholesale market concerned. Regulation at the wholesale rather than retail level is most capable of generating sustainable and meaningful competition in markets. Incidentally, most of markets identified in the EC’s 2007 reform proposal are wholesale markets.”

Given that regulatory intervention is required in leased lines markets as set out in the previous section, the Commission considers that industry comments provide further support to its view that such intervention should be applied at the wholesale rather than retail level.

Issue Error! No text of specified style in document.-6: Termination services

The UCC invites comments – and substantiating evidence – on the analysis of termination services and its conclusion that markets 4 and 5 are not competitive and not prospectively competitive.

The majority of the respondents agreed with the Commission's finding that termination markets are not effectively competitive. In essence, it was felt that market power was in the intrinsic nature of the industry and an inevitable outcome of the market definition. Two operators, however, did not fully agree with the Commission's position, as discussed in more detail below.

One operator agreed with the Commission's overall conclusion however it considered that insufficient consideration was given to the existence and role of countervailing market power (CBP). It noted that CBP can, in principle, ameliorate market power. It characterised the bargaining situation as one of "bilateral monopoly," where the originating operator has an "originating access monopoly." The market power of the purchaser derives from the fact that if the terminating operator wants its subscribers to receive calls from the originating operator's subscribers, it has no choice but to interconnect with that operator.

Even under a reciprocal arrangement, the operator considers at least three of the primary ways through which CBP might be exercised are:

- Threatening not to interconnect;
- Threatening to charge a high termination rate for traffic going the other way; and
- Threatening a large increase in the retail price of calls to the other operator's network.

Whilst this operator sees CBP as a major factor in principle, the operator argues, however, that, in fact, CBP has not adequately constrained market power in termination in Uganda. It points out that the same conclusion was reached by Ofcom in its September 2006 statement on mobile termination. The operator views market dynamics as follows: large operators can afford not to interconnect with small players and new entrants; however the converse is not true. The argument runs that, consequently, small players and new entrants have far less bargaining power than the large operators. In the absence of regulatory constraint, they would be vulnerable to the actual exercise or even the threat of exercise of CBP by large operators. Such operators, it is argued, could force smaller operators to pay a higher termination rate for outgoing traffic and to accept a lower rate for incoming traffic. This can be the case even under reciprocity, since it only applies to access and not to pricing.

This operator is therefore of the view that given the above and in line with the principle of proportionate regulation, call termination on the network of smaller operators should either be excluded as separate markets, or treated differently if in the same market. It also notes that the successful cases brought by Hutchison in Ireland and the UK, where it was able to demonstrate that, as a smaller operator, it did not possess market power in its termination market because purchasers of its termination services had CBP.

The operator argues further that, even if the Commission considers that each network operator has SMP on its own call termination market, it does not necessarily follow that the remedies for each of the operators should be the same. It raises the example of regulators in markets where all network operators have been defined as having SMP (such as Sweden and UK), which have tended to impose different remedies on different operators, with a less aggressive approach applied to smaller operators. In particular, this operator sees the use of asymmetric termination rates as a common method for applying remedies to SMP operators in the call termination market. For new entrants, it is argued that it is not proportionate to determine that new entrants have SMP and to apply the same remedy as those applied to established incumbents.

It is therefore suggested that despite a finding of dominance for all players in the call termination market, remedies be imposed in a proportionate manner with relevance to the CBP of larger operators such as MTN and UTL.

In terms of the remedies to be applied to dominant operators, this operator argued for a cost based approach. Under this approach, it is argued that the Commission can ensure lower interconnection rates which will increase competition and lower prices to consumers. It reiterated its position set out in Consultation 1 that in the interim until cost information is readily available and regulatory accounts have been submitted by operators with SMP, interconnection rates should be set based on benchmarking. This operator also provided examples of interconnection rates in other African countries, pointing that in those countries where regulators have imposed cost based interconnection, rates are around \$0.07 per minute; with the lowest being \$0.06 cents (Kenya). Given trends in the East African region and based on benchmarks, this operator argued for the introduction of a glide path, with a starting rate of 100 UGX.

The Commission notes that this operator raises several issues and arguments in relation to termination, which can be characterised and summarised as follows:

- CBP of purchasers can in principle counteract the presence of SMP of terminating operators in supply of termination
- This has not been adequately analysed by the Commission
- That said, in fact, this is generally not the case in Uganda, although CBP of large purchasers potentially constrains the market power of smaller terminating operators
- In light of that, the Commission should treat smaller terminating operators more favourably, either by:
 - Defining termination on their networks as a separate market, or
 - If in the same market, by applying an asymmetric remedy in favour of the smaller operators

Whilst it should be noted that this operator ultimately concurs with the Commission that these markets are not effectively competitive, the Commission considers the reasoning and the evidence adduced by this operator to be flawed in a number of respects.

First, the Commission considers that it did adequately assess in Consultation 2 the existence and role of CBP in termination markets. The issue was addressed in several paragraphs in section 2.6.

This respondent's characterisation of the bargaining situation as one of bilateral monopoly may be broadly correct in theory. However, in the Commission's view, it has overstated the status of the originating operator as an originating access monopoly. Bargaining power is derived from the relative strengths of each party's 'outside option.' The Commission affirms its view that even small terminating operators have significant market power, which is not sufficiently ameliorated by any CBP of large purchasing operators. This is for two main reasons:

- § it is commercially significant for MTN and UTL for their subscribers to be able to call subscribers of all operators, whether large or small. Indeed, given that calls to a small operator represent a small proportion of a customer's total bill, it is possible that small operators have even more market power in termination than large operators.
- § More significantly, operators have an obligation to interconnect, separate from SMP-based remedies. This means that even large operators cannot credibly refuse to interconnect and purchase termination from small operators. This confers an ability of both small and large operators to command excessive prices for termination.

The operator's understanding of international precedent is also erroneous. In particular, small MNOs have been found to have SMP and designated as such, and asymmetric termination charges are generally discredited. In particular, H3G in the UK was found by Ofcom to have SMP in termination, which was recently upheld by the Tribunal on appeal. In relation to asymmetric termination rates for the purposes of entry assistance, such an approach was also recently repudiated by the EC as well as the ERG. Therefore, the Commission does accept an asymmetrically favoured approach to new entrants, either in terms of SMP designation or in the application of SMP remedies.

Another operator acknowledged that the current market is structured such that each operator is the only one capable of terminating calls on its network. It argues, however, that competitive on-net call charges provide competition, which discourages high termination charges.

The Commission notes that this operator did not expand on its reasoning for why low on-net charges discourage high termination charges. One interpretation of the argument is that, in response to low on-net charges at large networks, small operators have an incentive to set a low termination charge, in order to lower the cost of calling that network. This would enable them to better compete with the large operators, by reducing the on-net/off-net differential applied by large operators. Another aspect to this argument is that consumers value receiving incoming calls, and hence would switch away in response to a rise in prices faced by calling parties to call them. The Commission does not find this proposition compelling. The strategic incentive of large operators to set high off-net prices would remain unchanged.

The Commission acknowledges the arguments made in the responses. In conclusion, however, the Commission considers that the fundamental market dynamics of the termination market suggest that terminating operators hold the incentive and ability to set high termination charges. The Commission therefore finds a lack of effective competition in this market.

Issue Error! No text of specified style in document.-7: Call origination services

Stakeholders are invited to offer their considered views in relation to the question whether a call origination wholesale service should be created through regulatory intervention.

All but one operator agreed with the Commission's decision not to mandate a call origination service in the current market conditions. One operator shares this position on the basis that "it might lead to payment of rates by the carriers which would increase the rates." It is not clear from this statement alone what exactly this operator is referring to in the two uses of the term "rates", hence the Commission is not able to respond further on this point.

One operator stated that it "supports" the Commission's decision to implement a call origination wholesale service through Carrier Pre-Selection (CPS), as this would enable this operator to have access to subscribers of other operators. It also remarked that the successful implementation of CPS would lie more on the establishment of a low rate for call origination and low interconnection rates generally.

The Commission considers that this operator has erroneously interpreted our proposal with respect to CPS. The proposal is that CPS is not be mandated, based on an analysis of the competitiveness of relevant markets. However, the Commission agrees that were CPS to be implemented, it would be important to ensure call origination charges are constrained to a cost based level.

The Commission has taken account of the submissions by operators on this question in reaffirming its position not to mandate a CPS at this time and to create a call origination service through regulation at this time.

Issue Error! No text of specified style in document.-8: Desirability and availability of transit services

Operators are requested to provide information on whether they would seek to buy transit services if these were available at a reasonable price. Stakeholders are also invited to provide information on the extent to which they believe transit services are available. The UCC also welcomes information on instances where transit services may have been requested but have not been made available.

Most operators expressed interest in being able to purchase transit services at a reasonable price. One of these operators intends to enter into agreements with existing operators to transit its traffic as part of its strategy to cut costs in the deployment of its network. Hence it stated that it broadly supports the Commission's efforts to establish transit services which will in the short term allow new entrants to rapidly enter the market through conclusion of a few initial agreements. This operator also submitted that in the long term, transit arrangements will ensure the provision of affordable communication services and serve as an effective redundancy method once all operators are interconnected.

In contrast, two of the large operators both submitted that they would not purchase transit services. One of these operators stated that it is not aware of transit being offered, whereas the other operator believes transit services are available on commercial terms and knows of no instances where transit services were requested but not made available.

In framing this question, the Commission's intention was to gain a greater understanding of the demand and supply in relation to transit services in Uganda. It can be seen that the larger operators are not interested in purchasing transit services, which is likely to reflect their wider coverage areas, as well as a dampened incentive to facilitate interconnection between third party operators. The smaller operators showed interest in purchasing transit services, were they to be offered at a low price.

The Commission considers this information useful and supportive of its rationale for regulatory intervention in the area of transit services. The Commission discusses its approach to transit further in the questions 2-10 and 2-11 below.

Issue Error! No text of specified style in document.-9: Regional points of interconnection

Do you believe that the availability of regional points of interconnection would lead to more efficient routing? The UCC would also be interested to hear of views in relation to market entry possibilities that might arise in different parts of Uganda if interconnection were to be made available in these regions.

All respondents agreed that regional points of interconnect would lead to more efficient routing of calls, with one operator suggesting any obligation to provide should be limited to operators with SMP. The Commission addresses this latter issue in more detail further down under points 3-5 and 3-6.

Issue Error! No text of specified style in document.-10: Regulation of transit charges

Stakeholders are invited to comment on whether or not transit charges should be regulated. Where regulation is proposed the UCC invites comments on whether these charges should be based on costs (including a fair return on capital).

Responses to this question were similar to the comments received to Issue 2.8, but not identical. The two larger operators shared a view that transit should not be regulated and should be left to market forces, which should be relied upon to deliver cost based charges.

Two of the smaller operators argued that transit charges should be regulated on the basis of cost. One of these stated that it is very supportive of the implementation of a transit framework which will enable new entrants to enter the market quickly and lower the cost of deploying a network and would also serve as an effective redundancy method once the operators have all interconnected. In its view, given the fact that the transit market is not sufficiently competitive, transit charges should be regulated and remedies applied to operators with SMP in the transit market – i.e. cost based interconnection and regulatory accounting. In the interim, in the absence of cost information, it suggested that the Commission should benchmark and apply the transit rates applicable in comparable countries for the purpose of implementing the transit framework as soon as possible.

One of the smaller operators argued that additional regulation of transit charges will create higher barriers to entry in a market with already high entry barriers. It submitted that transit operators will be sufficiently disciplined by the presence of vertically integrated operators and by CBP of other purchasers.

Another operator objected to regulation of transit prices. It reasoned that the presence of 4 vertically integrated operators and new market entrants is more than sufficient to ensure that transit operators provide quality transit at competitive market prices. Indeed, it argued that the prices of new entrants in transit services should be equal to or lower than the transmission costs of existing operators, as otherwise the transit operators will fail to effectively compete. This operator saw additional regulation as reducing entry and competitiveness of the prospective transit market.

The Commission has noted the submissions of the respondents on the question of how to regulate transit charges. It is clear that there is a diversity of opinions held amongst the operators on this issue. Overall, the comments highlight that there is a perceived lack, especially from the point of view of smaller entrants, of commercially attractive or viable transit services in Uganda at present.

The Commission reiterates its view that the creation of a transit service is likely to be a positive development for the Ugandan telecoms market. The main benefits have been raised in the responses. In particular, it would help alleviate the existence of inefficient network duplication and network routing, facilitate new entry, and enhance regional coverage opportunities. The question, however, is whether such a service should be brought about by regulatory intervention, or whether the market will also deliver the service in the absence of regulation. The Commission considers that regulatory intervention is justified where there is evidence of a lack of effective competition or the presence of an operator with significant market power (it may also be the case that a lack of transit may reflect market failures other than market power, although it is not clear what these may entail.) In an effectively competitive market, operators would have the incentive to offer transit were it to be demanded.

The current lack of supply of transit could rather be seen as a "feature of the market" which restricts or prevents competition. This is the driver of market investigation references to the CC in the UK context under the Enterprise Act. In the context of transit in Uganda, it may not be necessarily the case that this reflects anti-competitive behaviour but simply as a result of historical legacy, or some other factor, resulting in all operators being directly interconnected and transit not being provided.

The Commission considers that the alleviation of this imperative through the encouragement of a transit market would promote competition and entry and efficiency. The Commission therefore

considers, on the balance of a number of considerations, that a safeguard cap on transit represents the most appropriate and proportionate measure in relation to transit services. On the one hand, if competition is effective, such a cap on transit charges will not be binding on operators. On the other hand, mandating interconnection at reasonable prices will encourage the development of transit in Uganda, to the benefit of competition and ultimately consumers.

The Commission is also minded to monitor market developments, and observe whether a transit market is created. The Commission notes that some protection is also afforded as market behaviour remains constrained by the threat of ex post competition law governing abuses of dominance.

Issue Error! No text of specified style in document.-11: International access

Stakeholders are invited to explain whether they believe, and if so why, that the provision of (wholesale) international access should be mandated. The UCC is also interested to know of any instances where the service has been requested but no agreement has been reached (reasons)?

Most respondents agreed with the Commission's draft view that the market is effectively competitive, that no dominant players exist, and that mandating of access is not required. They submitted that there are no or low barriers to entry into this market and that access should be left to the operators to negotiate on a commercial basis, taking into account capacity and quality considerations. Further, it was put forward by respondents that they had not experienced instances where the service has been requested and no agreement has been arrived at.

The exception to this view was one operator who believed that the provision of wholesale international access should be mandated for operators who have been designated as having SMP in international access if that market is not sufficiently competitive. In addition it proposed that parties who fail to reach an agreement on international access should be afforded the same right under section 13(4) of the Interconnection Regulations 2007 to request the Commission to intervene in order to resolve the dispute.

The Commission notes that on the basis of its submission, this operator is expressing a conditional view; i.e. *if* it were the case that the market is not sufficiently competitive, then it would be appropriate to mandate access. The operator is not submitting that the market is not competitive, in fact.

The Commission notes that most of the respondents are in support of its position, whilst no respondents argued that the market was not effectively competitive and hence in need of regulatory intervention.

Issue Error! No text of specified style in document.-12: Transmission links market

Do you agree that significant market power is present in the wholesale leased lines and transmission links market?

The views submitted in response to this question could be split into large operators/those who provide transmission and smaller operators. The former submitted that there is no SMP in wholesale leased lines or transmission, whereas the latter generally agreed with the Commission's position that UTL and MTN have SMP in these markets.

One smaller operator agreed with the Commission's finding of SMP, pointing out the presence of only two operators, UTL and MTN, and supported the findings of the market assessment conducted to determine the effectiveness of competition in these markets. Another operator also agreed, stating that UTL should be deemed to have SMP, and that if UTL and MTN have 100% market share, then it can be concluded that the 2 firms dominate the market and have SMP.

The Commission upholds its draft view on this market, in the light of comments received.

Issue Error! No text of specified style in document.-13: SMP in Transmission links market

Do you agree that UTL and MTN have significant market power in the wholesale leased lines and transmission links market?

As per the previous question, the responses to this question were divided between the two largest and the small operators. The two large operators expressed disagreement with the Commission's view on SMP in this market, with one asserting that there are no barriers of entry into the market and that, in fact, recent entrants are providing the same services and competing effectively.

Small operators, by contrast, agreed with the Commission's view, as in the previous question. One operator further emphasised that a wholesale remedy should consist of MTN and UTL creating a wholesale service so that small operators can resell their services in order to promote "enterprise development."

One operator noted that whilst it perceived the leased lines market to be a retail market, if a wholesale market is mandated then it will be important to value network investments made by the operator.

The Commission has noted the comments of the industry on this question. Whilst large [SMP] operators maintained that there are low barriers to entry in this market and hence a lack of SMP, the Commission was presented with little or no evidence on this critical point.

In light of these comments and in the light of the analysis of market structure contained in Consultation 2, the Commission reaffirms its finding that UTL and MTN have SMP in the market for transmission links.

Issue Error! No text of specified style in document.-14: Pricing of transmission links and wholesale leased lines

The UCC's preliminary view is that wholesale leased lines should be made available at 'retail minus' (i.e. the provider's retail price after discount, minus avoidable retail costs). Other elements of market 10 (transmission links) should be made available at cost. Costs would be calculated by the provider but UCC would conduct imputation tests in cases of dispute or where it sees the need to do so.

Do you agree with the UCC's proposal in relation to charging principles for market 10?

The operators which considered MTN and UTL to have SMP in this market generally agreed with the Commission's proposed regulatory pricing principles. Interestingly, however, two operators who agreed with the Commission's SMP finding did not think that price regulation was appropriate in this market. One of these operators argued that, whilst the market was not effectively competitive, further restrictions on an operator to make their transmission links available at cost do not provide sufficient economic incentives to invest in the market. It argued that this will create inflexibility, increase barriers to entry and reduce the competitiveness of the market.

Consistent with their disagreement on the SMP finding, those operators which opposed the finding of SMP argued that pricing of transmission links and wholesale leased lines should be left to the market and commercial negotiation. One operator noted in this regard that infrastructure development should be encouraged.

One operator who agreed with the Commission's proposal in relation to charging principles emphasised the vital role of wholesale leased lines in the provision of a wide range of business connectivity services in Uganda. In that light, it argued that it was therefore critical that, where they are not supplied under conditions of effective competition, the Commission must ensure that they are regulated effectively. In particular, this operator believed that this should involve a cost based pricing regime rather than a retail minus regime, given the dominant position of UTL and MTN in the wholesale leased line and transmission link market. In addition, it suggested that the Commission should draw on the list of proposed best practice remedies offered by the European Regulators Group to address problems of SMP and failure of competition in the relevant markets for wholesale leased lines.

In relation to the appropriate pricing principle to regulate wholesale prices, the Commission notes the argument of this operator that cost-based pricing is appropriate for both wholesale leased lines and transmissions links, as opposed to the Commission's draft view that retail minus is appropriate for wholesale leased lines whilst cost-based is appropriate for other transmission links such as PPCs. It is worthwhile the Commission elaborating on its rationale for this pricing approach. The choice of these remedies is based on fundamental features of cost-based and retail-minus pricing approaches, respectively. Cost-based pricing is appropriate where one is primarily concerned with the absolute level of prices where suppliers have an incentive and the ability to raise prices to levels materially in excess of costs. In the context of wholesale transmission links, market power of UTL and MTN confers an ability to elevate the prices of these services above costs, to the detriment of communication providers which use these inputs in the provision of communication services, such as mobile operators requiring PPCs for the purposes of BTS backhaul.

A retail-minus approach, however, is more appropriate where the primary concern is encouraging efficient entry downstream where the incumbent is vertically integrated, and where one is less concerned about the absolute level of prices. In the context of wholesale leased lines, UTL and MTN have the incentive and ability to supply these services at a price which makes it difficult for access seekers to compete in the downstream provision of retail leased lines to corporate end user customers. The Commission considers it important to promote entry and competition in the retail leased lines market. By regulating the margin between wholesale and retail prices, a retail minus avoidable downstream efficient cost approach can help guard against the emergence of an anti-competitive margin squeeze, which could foreclose competition.

The Commission has also considered best practice in its analysis and conclusions with respect to pricing of wholesale transmission services. In particular, the Commission has made reference to the ERG's guidance on remedies imposed on SMP providers of leased lines. This document notes that:

"Whether or not there is an explicit pricing obligation, assurance of protection against downstream margin squeeze ... is necessary.

The choice of price control method should be based on [these considerations] and on market circumstances... NRAs may need to take additional steps to guard against margin squeeze... Where judged necessary to facilitate downstream entry, specific forms of ex ante margin control could be necessary... In considering the minimum acceptable margin, NRAs will have to strike a balance between short term efficiency, derived from the economies of scale and scope realisable by an SMP player, and the longer term benefits (assessed on a realistic basis) of a more competitive downstream market, brought about by new entrants which should, in due course and to a reasonable extent, be able to match those economies."¹

The Commission considers its position to be consistent with the approach articulated by the ERG. In particular, where the promotion of efficient downstream competition is given a higher relative weight than the absolute level of end-to-end prices, then controlling the wholesale-retail margin via a retail minus pricing approach is likely to be appropriate. This is the case in wholesale leased lines as the primary input into the provision of retail leased lines. For other transmission links however, the Commission is more minded to ensure these are provided on the basis of efficient costs, recognising that these will be provided appreciably above costs in the absence of price regulation.

The Commission has therefore decided to uphold its draft decision in respect of pricing principles applicable to market 10.

¹ Page 9 of http://erg.ec.europa.eu/doc/publications/erg_07_54_wll_cp_final_080331.pdf
Responses to consultation document 2 – UCC draft summary and reply

Issue Error! No text of specified style in document.-15: International leased lines and transmission links

Do you agree with the UCC's proposed treatment of international leased lines and transmission links as set out above?

The responses to this question were very brief and mirrored those in response to question 14 in relation to national infrastructure.

One operator submitted, formally in response to question 12, that it requires clarification on what is referred to as international leased lines and transmission links, noting that this does not exist at the moment and given that it does exist, this is outside the remit of the UCC.

The Commission considers that it does not follow that the absence of an existing market renders it outside the purview of the UCC. Indeed, a lack of a market at the wholesale level is often evidence of a lack of effective competition requiring some regulatory intervention.

International transmission is dedicated connectivity to abroad, which is a potential wholesale service now not being provided due to a lack of supply in the required infrastructure.

The Commission refers to the comments in made above in relation to in relation to pricing of national wholesale transmission services, and in light of the brief responses to this question, it therefore does not further expand on these responses and reiterates its view and decision above.

Issue Error! No text of specified style in document.-16: SIP signalling

Do you agree with the Commission that operators should (unless economically unreasonable) offer IP interfaces with SIP signalling on request?

Several respondents supported the view that operators should offer an interface for IP traffic using SIP signalling, some of the responses having conditioned the agreement to whether this is technically and economically feasible. However, one of the operators suggested that the UCC should remain “technology neutral” and so avoid specifying an interface technology, while another regarded this as an operational rather than a regulatory issue.

The UCC observes that the market reality is that IP based networks are increasingly common, with new entrants typically committing to a completely IP based approach. A requirement to use a “traditional” TDM interface with SS7 signalling for interconnection places a significant cost burden on entrants striving for high operational efficiency. The entrant is required to invest in technology and skilled people to implement the SS7 interface, without the economies of scale needed to make such investment economically efficient, while using IP based signalling throughout the rest of their network.

While the UCC agrees that technology neutrality is its normal policy, the telecoms market is in a state of migration between TDM and IP technologies, with the newer operators moving directly to IP in their implementations. While market forces may, in the longer term, result in the industry as a whole migrating to IP technology, just as it has moved from electro-mechanical switching systems using a plethora of signalling systems to TDM with SS7, the UCC is of the view that the pace of this migration is likely to be slowed by at least some of the established operators. This slowing of such migration is likely to hinder the development of the new entrants, and so of the market as a whole. For this reason the UCC wishes to use regulation to ensure that new entrants are able to exploit the emerging IP technology as soon as possible, and as efficiently as is practical.

The Commission’s view is that for the market as a whole it would be more efficient for the larger operators to provide interconnection using IP. Of the leading signalling systems used with IP, SIP is a relatively low cost signalling option, albeit with some functional restrictions compared to other options. Even where operators have not adopted an IP approach, many have some IP capability within their network, as reflected in the responses.

It should also be noted that it is likely that an engineer familiar with SS7 signalling will, relatively easily, be able to deal with SIP interconnection whereas the reverse is not true. As a result, the status quo would impose significant costs on small IP based operators (media gateway, business process for SS7 interconnection, and HR costs for SS7 expertise) whereas this would not apply to larger operators in case SIP interconnection is mandated for them.

Issue Error! No text of specified style in document.-17: H.323 signalling

Do you agree with the Commission that operators should (unless economically unreasonable) offer H.323 signalling on request?

The responses are largely aligned with the previous issue. Most of the larger established operators were not in favour of adopting H.323 signalling, while the smaller and new entrant operators were in favour of this approach.

The UCC position on adopting regulation to create an environment allowing IP interconnection without the need for newer entrants to use TDM and SS7 has been set out in response 3-1 above. The UCC recognises that H.323 represents the telecom industry development adapting the proven robust and extensive features of SS7 to the emerging world of IP. It is, arguably, the established telecoms operators natural selection of a signalling system for an IP interconnection. However, it, like SS7, can be expensive and time consuming to implement, while SIP is a significantly simpler solution, though lacking features.

For this reason the UCC is proposing to require operators with SMP in markets other than termination to implement H.323 to facilitate adoption of this interface by operators requiring the features available, but also to require implementation of SIP to allow operators who are offering more basic services to be able to start operation rapidly, and to bring to the market the benefits of efficiency.

Issue Error! No text of specified style in document.-18: Time frame for IP interconnection

The UCC seeks stakeholders' views on what would be a reasonable timeframe for the implementation of IP interfaces, SIP and H.323 signalling, respectively.

A number of operators argued that the proposed six months timeframe was too short for implementation of IP interconnection, due to budgetary constraints and lengthy implementation time.

However one of the respondents quoted a test conducted in South Africa, according to which the implementation should take three months. Only one of the respondents fully agreed with the 6 months timeframe. Some operators, however, claimed that a timeframe of 12-18 months would be required.

The Commission believes that it is important to strike the right balance with regard to time frames. On the one hand, reasonable time should be allowed for an orderly implementation process. On the other hand, the implementation desirable arrangements should not be unduly delayed.

Based on its experience and the responses received the Commission believes that a three month time frame, as initially stated, would be possible where parties are willing to cooperate. However, the Commission realises that a slightly longer time frame might be allowed in order to ensure that operators are given sufficient time to agree and implement the detailed aspects of IP interconnection. The Commission, therefore, extends the time frame to six months.

Issue Error! No text of specified style in document.-19: Transit

The Commission invites comments on suitability of the transit services defined in the draft MIO.

The majority of operators are in favour of the proposed transit services, however some views favour a mandatory regime while other views would prefer that transit services should be left to the market to determine, under commercial viable terms and rates. One respondent recommended additional mechanisms to be put in place to allow operators adequate time to plan for capacity (e.g. forecasts of traffic such third parties to be provided on a specified periodicity).

The Commission recognises the merits of market forces and commercial agreements, however the market analysis revealed that the transit services are not appropriately functional yet in Uganda and each operator currently interconnects with all the other operators, creating delays and other detriments in particular for new entrants. The purpose of this proposal is to ensure that entrants can rapidly and cost effectively connect to all networks in Uganda.

Issue Error! No text of specified style in document.-20: Location of zonal access points

Do you agree that it would be desirable to be able to interconnect in the cities listed above? If you would like to make an alternative proposal please provide the rationale for your suggestion.

Generally the responses agreed with the locations, but some of the operators required that this list should not be mandatory, subject to economic and technical viability. One operator expressed a preference for Kampala, Jinja and Mbarara as these are the main centres of population and of the banks. Another operator recommended that operators should have the option to propose further sites where economically and technically viable.

Finally one respondent expressed concern that mandatory zonal interconnection points may reduce the ability of an operator to design and implement the most efficient business model and may negatively impact on the quality of service if inefficient routing is required.

The Commission agrees with the point above that one of the criteria for the selection of zonal points of interconnection should be economic and technical viability (see Issue 3.5).

As to the specific cities chosen by the Commission the Commission notes that it had encouraged operators to submit their views on which zones / cities would be most appropriate but only one operator made specific recommendations in this regard.

The Commission also agrees that operators should have the option to propose further sites where economically and technically viable. Interconnection in those further sites, when proposed, could either occur based on mutual agreement between operators or the Commission might mandate this where it believes that this would enhance competition and efficient operation.

Issue Error! No text of specified style in document.-21: Operators to provide zonal interconnection points

The Commission invites views on the criteria which should be used to determine operators that are to provide zonal interconnection points.

The responses generally suggested a case by case approach, with the decision residing mainly with the operators. Some of the criteria suggested in the replies included economical viability, operators' development plans, volumes of originating and terminating traffic in various regions in time, financial capability, market power.

One response recommended equal treatment for all operators, as subjecting only specific operators to the requirements will drive up their costs and impair competition.

A distinct view proposed that only the operators with SMP in the fixed voice market should be subjected to this obligation.

The Commission acknowledges that, where supply and demand effectively drive the development of markets and promotes fair competition, regulatory intervention would not be required. However, the Commission has noted that no progress has been done in the area of zonal interconnection, although technically feasible. The Commission wishes to encourage efficient service provision in all regions in Uganda at affordable prices for consumers.

The Commission agrees with the point above that one of the criteria for the selection of zonal points of interconnection should be economic and technical viability. The Commission, therefore, proposes that an obligation to provide zonal access points in the five cities concerned would only apply to operators and only in those of the five cities where the operator concerned has significant infrastructure (e.g. powered building with 140 MB/s transmission capacity).

Issue Error! No text of specified style in document.-22: Emergency services

Stakeholders are invited to comment on the UCC's views of the treatment of emergency calls as outlined above. Do you believe emergency calls should be given higher priority, if so how high?

One of the responses suggested that all calls are given the same priority and giving emergency calls higher priority was not possible. Another response suggested the same thing, saying the proposal was not technically feasible. One operator suggested that the UCC should regulate interconnect capacity to ensure that no emergency call failed due to limited interconnect capacity. The newer operators agreed with the proposal, adding in one case that interconnection of emergency calls should be free. Finally, one of the established mobile network operators fully agreed with the Commission's proposal.

The Commission maintains that emergency calls are generally handled in a way that is different from non emergency calls. Differences include the call being released only by the called party and not by the calling party, CLI suppression being overridden in all cases, and in emergency calls being carried in a separate trunk group, given a higher priority to assure a higher probability of success even in the presence of a surge in non emergency traffic as often happens in cases of, for example, a major incident. It is also well known that emergency calls across interconnection services have a relatively high tariff recognising the costs of handling the calls. Although these are free calls for the end customer, they are not normally free of charge at the wholesale level.

The Commission shall analyse any further submissions operators may want to make in this regard and it will issue further guidance in due course.

Issue Error! No text of specified style in document.-23: Fraud

Stakeholders are invited to comment on the UCC's views in relation to operator cooperation in the context of fraud detection and prevention as outlined above.

The Commission welcomes the positive responses to this proposal. One of the responses recommended the creation of a Fraud Forum similar to that of GSM Africa, where membership should be encouraged but not mandatory. An opposite view suggested enforced registration to the newly created body, where the respective body should be formalised and extended at least within East Africa.

The Commission shall analyse the proposals and issue further announcements in this regard.

Issue Error! No text of specified style in document.-24: Calls to special numbers

Stakeholders are invited to comment on the UCC's views in relation to calls to special numbers as outlined above.

The respondents agreed with the transparency principles (publication of rates), but stressed that the regulatory intervention should exclude price caps set by the Commission. The operators strongly supported the view that they should be sole decision makers in relation to the level of charges, as long as these were fully transparent to the end customers. One of the respondents expressed confidence that transparency is already ensured in the market.

Another respondent gave an example where a price cap could impede business: "if a relief organization wanted to fund raise during an emergency situation by charging a high premium price for calls to a special relief number, the maximum tariff could impede the relief objectives during the emergency".

All operators agreed that 08XX numbers should be free of charge and mentioned that this is already in place.

The Commission wishes to clarify that the proposal envisages setting maximum tariffs for special ranges of numbers by the providers of 09XX themselves, without the Commission's intervention. The operators would be free to set any charges up to the published level. This is common practice intended to ensure that (i) consumers have visibility of the retail charges payable and (ii) that operators can compete at retail level (subject to the overall cap).

Issue Error! No text of specified style in document.-25: Numbering plan implementation

Stakeholders are invited to comment on the requirement in relation to the implementation of numbering plans and changes in the numbering.

The respondents agreed with the UCC's proposal and recommended that the Commission regularly updates the plan on the web-site and give a reasonable notice time to operators when changes are made.

Issue Error! No text of specified style in document.-26: SMS

Stakeholders are invited to comment on the UCC's views in relation to the need for operators to accept SMS messages from other networks and to pass SMS messages to other networks.

The respondents agreed, with two saying that SMS is already accepted from other networks, and one pointing out that termination of SMS originated on the internet should be a chargeable service.

The Commission's rationale for imposing this requirement is to ensure that transit services encompass SMS messages. The rationale for the creation of a functional transit market as such has already been explained in the context of Issues 2.8 – 2.10.

Issue Error! No text of specified style in document.-27: SMS transit

Do you believe that (some or all) operators should provide a transit service for SMS messages? In particular, should there be an obligation on (some or all) operators (i) to accept SMS messages from operators other than the originating operator and (ii) to pass on SMS messages for termination on another interconnected operator's network?

The majority of respondents indicated agreement with the proposal, with similar obligations for SMS transit as for voice transit. However one operator suggested that transit was not necessary as all operators are interconnected.

Another view was that the obligation should not apply to an operator that did not provide SMS services. Only one operator fully disagreed with mandatory SMS transit and suggested that this service should be determined by the business model of each operator.

The Commission's view is that as more operators enter the market, maintaining full interconnection would add increasing, avoidable cost. Transit services offer the possibility of efficient construction and use of interconnect links. However, this arrangement would only be viable if transit services are available for all traffic, i.e. including SMS messages.

Issue Error! No text of specified style in document.-28: MMS

The UCC also seeks views on the appropriateness of imposing the same requirements (of this section) for MMS.

The responses suggested the same treatment for MMS as for SMS. The same applies to the Commission's view in relation to the need to ensure that transit services are available for all traffic, including MMS.

Issue Error! No text of specified style in document.-29: Cost information requirements

Do you agree with the UCC's view that the information to be submitted by all operators should be restricted to basic information on cost and revenue levels required by UCC to monitor the market? Do you agree with the draft guidelines and standard templates attached to this consultation document?

Part of the respondents, especially the larger operators, agreed with the information requirements proposed in the Basic Annual Reporting, finding it reasonable as content and templates structure.

One of the operators disagreed on the grounds of confidentiality and competitive sensitivity of the information. The Commission emphasises that the purpose of requesting this information is not publication. Operators may mark confidential information as such and this confidential information shall not be made public, but shall be solely used by the Commission to perform its duties of sector monitoring and regulation, to conduct market reviews and identify market failures, if any. The Commission may publish market reviews but these shall not reveal specific operators' (confidential) data.

One of the new entrant operators expressed concerns that the current proposal requires some degree of regulatory accounting separation from all operators. The operator suggested that the information should only apply to operators designated with SMP.

The Commission maintains that the Basic Annual Reporting does not involve accounts separation. Separate reporting guidelines and templates for accounting separation have been proposed in the Consultation 2 (see section 4.1.2). These requirements will not affect operators not designated with SMP. The information proposed hereby for all operators simply requires a revenue breakdown of services, which is very important for the purpose of market analysis (e.g. market share analysis), an operational cost and assets breakdown by high level categories, without the need for cost allocation to services. Therefore, service costing and accounting separation are not required for the purpose of the Basic Annual Reporting.

At the opposite end, one of the mobile operators disagreed that only basic information should be requested from all operators, but rather all costs in totality should be considered. The content and format proposed by the Commission aimed to capture all costs and revenues from all operators, while the 'basic' concept refers only to the level of granularity required, not to the completeness of information. The level of detail for revenues was determined by the Commission to enable market analysis on the relevant market structure determined by the current study, while the level of cost detail as kept at the minimum in order to avoid imposing burdening costing exercises to operators not designated as having SMP. The Basic Annual Reporting would be implemented to ALL operators, while SMP operators would have additional reporting obligations.

Issue Error! No text of specified style in document.-30: Accounting separation and market power

Do you agree with the UCC's view that accounting separation should be restricted to operators found to have market power?

Regarding the Commission's proposal to implement accounting separation to operators having SMP, the views widely ranged from full agreement to partial agreement or strong disagreement, while some of the responses indicated an incomplete understanding of the principles and objectives of the regulatory accounts separation.

For example, one of the respondents agreed with the principle, but suggested that the Basic Annual Reporting and the Quarterly Operational Reporting should be sufficient to provide the necessary information. The Commission notes that these two sets of information do not involve any degree of accounting separation nor cost allocation to services, therefore they could not meet the objectives of separated accounts, as described in the Consultation paper.

One of the operators strongly advised against accounting separation and cost based regulation in general. Unfortunately the Commission cannot respond to this comment, as no supporting arguments have been provided. It is not clear if the respondent opposes accounting separation or cost based principles in general.

Finally, another argument opposing accounting separation calls for consistency of reporting requirements between operations in different geographical regions. The operators showed concern that the reporting requirements in Uganda may be different from requirements in other markets in which the operator is active. The operator notes that "globally, convergence and standardisation of reporting and standards across markets are being adopted".

The Commission wishes to make clear the distinction between group management reporting and local regulatory reporting requirements. It is common that groups operating in various regions tend to implement common and standardised reporting platforms, however national regulatory obligations may vary from country to country, depending on the level of market liberalisation, regulatory policy and specific local market conditions. It is possible that one entity of a global group has SMP in various markets in one country, but another entity of the same group activating in another country does not have SMP in any market. As a result, the regulatory obligations are likely to differ significantly between the two territories, even if an entirely consistent approach to reporting and policy is adopted in both territories.

Issue Error! No text of specified style in document.-31: Methodology and standard templates

Do you agree with the framework, principles, methodology and standard templates attached to this document?

The responses in relation to this question were mixed in relation to the framework and methodology for accounting separation. One of the respondents believes that the methodology should be developed in consultation with relevant players. The Commission agrees with this view, having invited all relevant players to submit their views on the methodology and reporting format as part of the present Consultation. Another respondent welcomes the implementation of separated accounts as a means of identifying the cost of interconnection.

The Commission takes the opportunity to clarify that proposed separated accounts are based on a fully allocated costing methodology, not on a long run incremental costing methodology, therefore maintains that the bottom-up LRIC model developed would be optimal for calculating interconnection costs, while the separated accounts would enable to identify anti-competitive behaviour like discrimination and cross subsidisation.

Finally, some of the larger operators disagreed with this proposal and suggest further reviewing of this subject in line with recognised international principles. The Commission understands and agrees that implementation of Accounting Separation is a complex matter and requires thorough market analysis, however stresses that the current proposed methodology, principles and reporting framework is aligned with international best practice. No specific comments in support of the contrary were received.

One operator argued that the level of detail proposed was too high, however it did not provide examples or recommendations of the proposed granularity. It is common practice that separated accounts should reflect the structure of the relevant markets, in order to enable the Commission to monitor the compliance with the regulatory remedies and to identify anti-competitive behaviour.

Issue Error! No text of specified style in document.-32: Market based definition of accounting separation

Do you agree with the level of separation proposed by the UCC, based on the relevant markets?

The majority of the respondents either agreed or proposed a different granularity. Disagreement was expressed by the same operators that disagreed with the methodology and framework.

One of the proposed changes in granularity concerned a breakdown between Voice and Data. Assuming that the proposal referred to the retail business unit, the Commission recognises that this may be a pertinent proposal in particular for fixed and mobile voice, ensuring alignment with the relevant market structure, however it stresses that the Leased Lines is an important emerging market that the UCC is keen to continue to monitor, especially in the context of the significant market power identified in this market. The Commission, therefore, believes that merging the leased line segment with the Broadband and Internet sub-businesses would limit the ability of monitoring this market.

The Commission may update the separated accounts structure in the future, depending on the market developments and future market reviews.

Another respondent had a similar view to reduce the granularity, however it did not provide any specific recommendations.

Issue Error! No text of specified style in document.-33: Implementation timeframe

Do you agree with the timeframe envisaged the UCC for the implementation of accounting separation?

The respondents either fully agreed with the timeframe, or agreed subject to granularity clarifications, or recommended the Commission to consult with the operators that shall be placed under the obligation.

One operator proposed deferring the implementation by one year, where the decision on SMP would be published in 2009, first separation would take place in 2010 and first reporting in 2011.

Another operator proposed a three years timeframe to allow the company to budget and invest in a new reporting package and to tailor the current systems for compliance.

The Commission took notice of these proposals and shall publish the final methodology, reporting framework and timeframe at the time when the decision of implementing Accounting Separation shall be taken.

Issue Error! No text of specified style in document.-34: Updates of LRIC model

Do you agree with the UCC's view that the LRIC model should be updated on an annual basis and that the requirement to provide data for the LRIC model should be imposed on selected operators only (which ones)?

Most of the respondents agreed with an annual update of the LRIC model, with two exceptions. One of the two respondents proposed an update every two years, while the other respondent found the data request submitted as part of the current study inconvenient. Regarding the operators selection for data requirements, the majority of respondents expressed the view the all operators should be subject to the same data requirements.

The Commission proposed yearly updates of the cost model in order to address the dynamics of the market, especially having in view the emergence of new technologies, such as WiMAX, and the changes in the global markets which may have a significant impact on the cost of providing services. The Commission proposes to adjust the frequency of the updates depending on the evolution in the local market conditions.

The Commission proposes to issues data requirements to all operators having run a fixed or mobile network at least for the duration of the reporting year and that have reached a minimum market share (e.g. above 5%). The Commission believes that extending the data requirements to all voice operators in the market would incur costs that would outweigh the benefits of the inclusion of these small operators.

Issue Error! No text of specified style in document.-35: LRIC model

Do you agree with the UCC's view that the most practical and effective approach for interconnection costing is a forward looking bottom up LRIC model, based on the reasons provided above?

All respondents agreed with the LRIC model proposed by the UCC, being the most flexible approach for interconnection costing. One respondent proposed to consider a benchmark interim solution until the cost model exercise will be finalised, while another respondent suggested that a comparison with other methodologies would eliminate any doubts in relation to the outcome or model results.

The Commission is pleased with the unanimous agreement and wishes to ensure the respondents that the current study took into consideration the regional approaches and results for setting up the interconnection regime, and also alternative methodologies were assessed for applicability in the current environment in Uganda. Given that it was not feasible, time and cost wise, to proceed with several types of cost modelling methodologies, the Commission chose to implement a best practice LRIC approach, validated by high level reconciliations with operators' financial results and by comparison with operators' models results where these were made available. The Commission continues to invite operators to make alternative methodologies and results available to the Commission.

Issue Error! No text of specified style in document.-36: Model updates

Do you agree with the UCC's view that the LRIC model should be updated by the UCC with support from the operators in providing the necessary data? Do you agree with the framework, guidelines and standard data request forms appended to this consultation document?

The response was again positive, with one exception where the respondent found the data request submitted as part of the current study inconvenient. The Commission acknowledges that the data requirements are sometimes complex, however it strongly believes that subsequent reiterations should become easier as the operators familiarise themselves with the templates and data requirements.

One of the operators agreed that the UCC should update the model, but proposed that operators themselves should also update the model for comparison. The same operators provided a list of amendments to the model input fields, such as adding more network components and more services. The Commission welcomes the initiative of operators updating the model as well, as this would give them the opportunity of ensuring completeness of data and validating the inputs. The Commission will make the model available to the operators that will be required to submit LRIC data requirements. Regarding the proposal to amend the model, the Commission encourages the operators to customise the data input to their specific network components and services.

Issue Error! No text of specified style in document.-37: Operational reporting

Do you agree with the UCC's proposed changes to the quarterly operational requirements for NTOs, CTOs, and PIPs based on the template provided in the annex?

Half of the operators agreed with the proposed changes. One respondent disagreed with the proposals without mentioning any reasons for its view, while another respondent considered that the current level of reporting was sufficient and some operators' systems may not support the level of detail required by the proposals. Yet another operator proposed an annual frequency rather than quarterly frequency.

The Commission wishes to underline that most of the requirements remained unchanged compared to the framework currently in place. The fixed and mobile traffic reporting has been slightly adapted to match the structure in the LRIC model, which should actually facilitate the reporting process. An additional data set was included for leased lines, because this is one of the relevant markets the Commission shall monitor. Some of the network data request was also enhanced to facilitate and match the data in the LRIC model. Finally, the revenue breakdown by service is intended to assist the Commission in market analysis, however the Commission believes the service breakdown should be available from the financial records of the operators.

Regarding the reporting frequency, the Commission believes that a quarterly reporting framework is required to monitor market trends on a timely basis and to enable the Commission to perform its regulatory duties. Especially in the light of the speed at which the Ugandan market currently evolves an annual reporting frequency would not be satisfactory.

Issue Error! No text of specified style in document.-38: Retail price regulation for special services

The Commission seeks stakeholders' views on the need to regulate retail charges for the above services. Please provide a rationale for your views.

The operators believe that overall the retail voice market should not be subject to price regulation, given that it is competitive on a forward looking basis. The respondents fully agree with the view that calls to emergency services should be free of charge, however they do not support the proposal of an upper price limit for premium numbers to be imposed by the UCC. The respondents agree though with the transparency principle, where the charges or maximum charges would be notified by the operators.

The Commission took note of the views submitted. The Commission has a responsibility to ensure that end users are protected and are provided with the required visibility of the charges they bear for special services.

Issue Error! No text of specified style in document.-39: Retail price regulation for other services

The Commission seeks stakeholders' views on whether there is a need to limit retail prices of any other services (i.e. other than calls to emergency services and calls to special numbers) to be limited through regulatory intervention. Respondents are requested to provide a rationale for their views.

The respondents agreed that no further regulation is necessary for the retail services, however two of the responses indicate that a shorter than 5 days timeframe would be welcomed. The argument is built around the fact that tariff information is competitive and can be commercially sensitive - competitors or other players in the market should not have the opportunity to know about tariffs too far in advance before they have had an impact on the market.

The Commission agrees that further price regulation is not necessary at the moment.

The requirement for shortening the 5 days approval timeframe shall be analysed for feasibility and a notice shall be published if this shall be deemed possible.

Issue Error! No text of specified style in document.-40: Wholesale charges

The Commission seeks stakeholders' views on the proposal to use the MIO to specify charges and/or charging principles for wholesale services (including interconnection services).

The majority of operators endorsed the proposal of using the MIO to specify charging principles and generally supported cost based charging principles.

While some of the respondents embraced the idea of having a MIO specifying the level of acceptable charges, some of the larger operators stated that the terms and charges should be agreed between operators on cost-oriented terms. One of the new entrant operators proposes that once the results of the benchmarking study (short term) and the LRIC analysis (long term) are completed, a separate annexure to the MIO or the Interconnection Regulations, applicable only to operators with SMP, should be developed and published setting actual prices.

The Commission underlines that charges published in MIO would be referential in nature, thus would not be enforced by the Commission to the operators. While the current Regulations are in place the commercial agreements would continue to be based on negotiation between operators, while the MIO shall reflect the Commission likely position in case of disputes.

Several respondents commented on the retail-minus approach for leased lines (the Commission stresses that transmission links are not proposed to be placed under a retail-minus approach, but will be subject to cost based charging). The respondents argued that a retail-minus approach may create the conditions for price squeezing anticompetitive behaviour, where big operators may reduce their retail prices to a level that would price out a smaller operator from the market. In practice, it is common for any wholesale charging mechanism to create the potential for anti-competitive behaviour including margin squeeze. The regulators carry out periodical market reviews and maintain on-going reporting requirements in order to have visibility to the developments in all relevant markets and identify signs of market failures. For example accounting separation is a typical tool facilitating regulatory review and identification of anti-competitive behaviour. Leased lines in particular are commonly regulated under a retail-minus regime, because the focus is not merely on the absolute level of charges but on the margins, to ensure efficient entry in the respective market. It should be noted that a retail-minus regime is designed to limit the risk of a price squeeze. However, should a price squeeze still occur (e.g. through retail price changes or mechanisms implemented after the wholesale prices are set) then this should be investigated under an ex-post competition review in the context of suspected anti-competitive behaviour.

Other issues raised in relation to MIO

Issue 1: Article 9 – Timeline should be established for the provision of information in interconnection negotiation process. Also establish a timeline within which UCC will approve any interconnect agreements; avoid commercial uncertainty for involved parties. Suggest following best practice, cites South African example of 20 working days.

UCC response:

The MIO is an example of an interconnect offer that the UCC would regard as reasonable, but the MIO in itself does not impose anything on operators. The interconnect regulations are the appropriate place to impose timescales on operators and the items identified will be addressed in the proposed, revised Interconnection Regulations.

Issue 2: Annex 2 – reduce timeline for interconnection feasibility study from 45 days to 20 days to allow for agreement on interconnection to be reached within 45 days of request being made.

UCC response: The timescale set in Annex 2 will be considered again in the light of the overall timescales being included in the proposed, revised Regulations.

Issue 3: Annex 3 – Interconnections links description should be amended to include reference to a wider range of standards, specifically RFC and IETF.

UCC response: While recognising the importance of IP to the telecoms industry, the UCC believes it would be inappropriate at this stage to be too specific about the standards to be adopted. However, the UCC has proposed the establishment of an industry working group to address the details, and would expect the resulting standards to feed back into the MIO once broad agreement is reached.

Issue 4: Annex 3 – Detail on type of interconnection link (eg. Physical through copper or fibre, virtual through media gateway controller) should be available to all parties, as should ownership and maintenance responsibility. UCC should change required availability of interconnect links from 99% to 99.5%. Seeks consistency with annex 4.3.1 which required 99.5% on quality of service parameters.

UCC response: The MIO is, of necessity, general in its approach. The particulars of whether copper, fibre or radio are available at any specific point in an operator's network is a matter for that operator. It would not be appropriate for the UCC to mandate any particular method as each has its merits and each may be appropriate depending on the specific circumstances. While fibre may be the preference in the longer term, radio may be quicker to implement, and copper may be more cost effective for low capacities. Annex 4.3.1 is the basic transit service. The 99.5% applies to the transit service and has been specified at this level to ensure the service quality of the overall end to end call is not overly compromised by introduction of a third network providing the transit service. The 99% figure for the interconnect links is a minimum and operators are free to agree to a higher level of quality of service.

Issue 5: Annex 3 – Term “signalling” should include definition of RFC and IETF standards, to provide more detail on IP based interconnection. Lack of clarity on meaning may lead to misunderstandings between operators and potential voiding of interconnect agreements. Comments also apply to basic transit conveyance of IP calls and basic transit conveyance of SMS messages.

Responses to consultation document 2 – UCC draft summary and reply

UCC response: This is an example interconnect offer, which has to be general in its approach. Any actual RIO would need to reflect the actual capabilities of the specific operator, and any actual interconnection agreement would capture the details in sufficient clarity for both parties to be in no doubt.

Issue 6: Annex 4.6.1 – request that same terms regarding space sharing in buildings should be applied to base stations.

The proposed terms apply to buildings. If a base station is housed in a building then this would apply.

Issue 7: Annex 4.6.1 – Request that time limit of 45 days to install a rack with 1kW each of power and cooling be reduced to 30 days.

Reducing the time limit could require the provider to invest in necessary equipment such as air handling, power etc in advance of any orders for such space. The UCC believes 45 days is a reasonable compromise allowing an operator time to upgrade equipment following an order to make the space usable.

Issue 8: An operator points out that that the MIO does not include a specific section on negotiation procedures for interconnection. A section setting out the procedure for initiating and conducting negotiations over interconnection is made, to whom it is sent, information that should be included in the application, how long it should take and the like.

UCC response: The UCC will consider adding a section to the MIO setting out in general terms the need to include details of how to initiate interconnect negotiations.

Issue 9: Further a standard application form for an interconnection request (which the applicant should complete) should be included.

UCC response: The range of interconnect services is quite extensive, and will continue to grow as the telecoms market expands. It is not appropriate for the UCC to impose on operators specific application forms, though operators may include these in their own RIOs. Each operator need to develop its own processes for handling interconnect requests, within the requirements set in the regulations, and should be free to decide how to implement these processes taking into account their organisational capabilities.

Issue 10: The MIO should also include guideline timings for the completion of negotiations. This would streamline the interconnection process and make it easy to determine if an operator were deliberately stalling or not.

UCC response: The MIO does not place any obligations on operators. Timelines are more appropriately set in the Regulations and are being addressed in the revised Regulations currently being drafted.

Issue 11: On Annex 1.9: One operator believes that we should maintain the 5% currently in place (it is not documented but is the industry practice.)

UCC response: The UCC will look at this again in the context of practice in other countries.

Issue 12: Warid feels that in all dispute resolution it should be made clear that the parties shall have recourse to the courts of law.

UCC response: The UCC will look at this again and seek legal advice on the necessity to include such clarification.