13th November 2000

Office of the Telecommunications Authority 29/F Wu Chung House 213 Queen's Road East Wan Chai Hong Kong

Attention: Senior Regulatory Affairs Manager – Services Licensing syflam@ofta.gov.hk <u>BY FAX & BY E-MAIL</u>

Dear Sir

Subject: CLP Telecom – response to OFTA consultative paper on 3G

Introduction

This document represents the response of CLP Telecommunications Limited ("CLP Telecom") to the second consultation paper on the licensing framework for third generation mobile services which was issued on 3 October 2000.

Objectives of regulation and overall approach

In regulating mobile telephony, the most significant threat to the public interest arises from the prospect that network operators can extract monopoly rents by exploiting spectrum shortages. This threat was clearly a reality in the early days of 2G mobile telephony and the market only became truly competitive when 1800 MHz technology became available and additional operators were introduced to the market.

The threat to the public interest is far greater for 3G, however, because of the great variety of applications which are expected to be made available over 3G networks. Without suitable regulation, 3G network operators will be able to extract monopoly rents not just from airtime sales but also by extending their oligopoly into adjacent markets.

In European markets, there has been an unhealthy tendency to accept the inevitability of limited competition and to seek to capture the benefits of the monopoly rents for the taxpayer by seeking to auction the spectrum. CLP Telecom fully supports OFTA's approach of seeking to create the most open and competitive 3G services market, so reducing the scope for monopoly rents to arise in the first place.

CLP Telecom suggests that OFTA adopt the following objectives for the design of the regulatory regime:

- to promote competition at the wholesale and retail levels
- to reward competitors who invest in innovative applications and in customer service

 not to promote over-reliance on price-cutting, which will lead to unsustainable competition, limited innovation and a high-level of customer complaints about misleading promotions and poor service

CLP Telecom welcomes OFTA's recognition that service provision and network provision should be separated and that network providers should be required to:

- treat third party service providers on a non-discriminatory basis
- make available a minimum percentage of their network capacity to non-affiliated service providers.

In CLP Telecom's view, these principles provide a starting point for ensuring fair and open competition between network providers at the wholesale level and between service providers at the retail level. This will maximise the consumer surplus and minimise the opportunity for spectrum constraints to be used to generate monopoly rents.

Operator selection procedure

CLP Telecom welcomes the proposal that:

- network operators should be required to open their networks to MVNOs
- prospective operators should bid for licences in a competitive auction, following a pre-qualification procedure

CLP Telecom sees a potential shortcoming in the proposed arrangements and wishes to suggest an improvement. CLP Telecom welcomes the proposal that in the pre-qualification stage, prospective operators are asked to present their proposals for opening up their networks. However it is not clear what role these proposals will play in the subsequent process. It will cause great controversy if a potential bidder is excluded from the auction on the grounds that its proposals are inadequate; on the other hand, it is difficult to see how within the current arrangements it will be possible to give any advantage to the potential bidders who put forward the most procompetitive approach.

In order to overcome these defects, CLP Telecom suggests that OFTA consider the following approach:

- in the guidance notes for the pre-qualification phase OFTA should set out some preliminary views on the form that open network proposals should take and on the standards by which they would be judged and on the minimum acceptable standards
- to encourage pro-competitive proposals, OFTA should be empowered to award a prize (or prizes) for the most pro-competitive proposals: these prizes would take the form of a non-transferable voucher which could be used only in bidding for spectrum
- before the auction phase, OFTA should publish the network opening proposals and invite comments on them from prospective MVNOs
- to ensure a level playing field for MVNOs, OFTA should consider the comments received, determine the regime for network opening and impose it on all bidders before the auction phase begins.

Form of auction payment

CLP Telecom believes that if the arrangements for wholesaling of capacity to MVNOs result in a competitive wholesale market and low barriers to entry for MVNOs, then OFTA will have maximised the consumer surplus and that the prices paid for spectrum will be relatively low. Accordingly CLP Telecom believes it will not matter much what form the payment by bidders takes. In these circumstances, an up-front lump sum seems the preferred choice as it is the simplest.

The open network requirement

In this section, CLP Telecom sets out its preliminary views on how the open network requirement should be developed. CLP Telecom believes that if this is left to commercial negotiations between network operators and service providers, this will delay the introduction of service provider competition and will tend not to maximise the extent of that competition.

Instead, CLP Telecom suggests that OFTA bring more clarity on this requirement before the selection process starts. As suggested above, preliminary views could be included in the guidance notes – these would be akin to the OFTA statements of policy on fixed network interconnection which were issued in 1995. More detailed rules can be developed later in the selection process.

Adopting this approach will have the following benefits:

- prospective network operators will be able to plan their businesses with greater certainty
- companies will be better able to evaluate alternative strategies of becoming an MVNO versus becoming a network operator – this will enable them to set a rational upper limit for auction bidding or possibly not to enter the auction at all

The areas which require clarity are:

- whether network operators will be permitted to pre-sell forward capacity to MVNO partners, or whether wholesale capacity will be required to be made available on a short-term basis as a tariffed service
- whether network operators will be required to open up their networks at the spectrum level or whether they will be permitted to fulfil the open-access requirements through allowing access to their mobile switching centres
- how MVNOs will be charged by network operators.

Forward capacity sales

CLP Telecom sees the following considerations:

• if the network opening requirement is satisfied almost wholly by forward sales to strategic partner MVNOs then there is a real risk that there will be long-term barriers to entry at the service level as well as at the retail level

• on the other hand, it is difficult for OFTA to define a tariffed wholesale service at this stage – and requiring operators to offer the "wrong" wholesale service could cause the MVNO sector to fail

CLP Telecom therefore suggests the following approach:

- network operators should be required to allocate their network capacity between service providers as follows:
 - at most 50% for themselves or associated companies
 - at most 30% for forward sales to non-associated MVNOs
 - at least 20% to made available on a short-term tariffed basis
- to promote competition, CLP Telecom suggests the following:
 - no anti-competitive arrangements should be permitted between network operators and MVNOs – in particular there should be no restrictions on resale of wholesale capacity by MVNOs (including capacity bought on forward contracts) nor should there be any resale price maintenance
 - network operators and their associated companies should be permitted to purchase capacity from other operators in case their 50% allocation is insufficient but they should not be permitted to claw back any of their own capacity.

Access at the spectrum level or via the switching centres

CLP Telecom sees no need in the interests of competition for network operators to be required to open up their networks at the spectrum level (though they should be permitted to do so if they wish). In CLP Telecom's view, MVNOs will be most effective in promoting competition if their management is focused on value-added applications, customer service and marketing rather than on replicating the switching and routing infrastructure of the network operators. If MVNOs have a network focus, they are more likely to adopt a less innovative, price-based, marketing strategy which could destroy industry returns, disincentivise network operators from further investment in network coverage and capacity and starve consumers of innovative applications.

In order achieve a fully competitive market access via access to the network operators' switching and routing centres, a careful design is necessary.

For instance, MVNOs need to be able to change their underlying network if the price or quality is unsatisfactory. They need to be able to do this in a way which is transparent to their customers. To achieve this, CLP Telecom suggests the following approach:

- MVNOs should issue SIM cards to customers which identify the customers as belonging to the MVNO rather than to any particular network operator
- MVNO agreements with network providers should take the form of roaming agreements
- MVNOs will be responsible for ensuring that their customers' terminals roam onto the network or networks with whom they have roaming agreements.

MVNOs need to be able to support real-time location-dependent applications in the same way that network operators can. One aspect of the roaming agreement should be the provision of access to location information (and other relevant information about the MVNO's customers) on the same basis as that information is provided to the network operator's own affiliated company service providers.

Finally, CLP Telecom suggests that all network operators be required to make available consistent real-time quality of service data to all MVNOs through electronic means. This will enable MVNOs to choose which network to use, either on a realtime basis or following periodic reviews. It will also enable network operators to compete effectively on quality as well as on price.

Basis of charging MVNOs

OFTA has sought views on whether it should adopt a cost-plus or a retail-minus approach to determining wholesale prices:

CLP Telecom sees merits in both approaches:

- a retail-minus approach ensures that network operators who wish to sell at a loss to promote usage cannot use this strategy to keep MVNOs out of the market
- a cost-plus approach guards against monopoly rents being achieved as a result of the necessarily-limited competition amongst network operators

CLP Telecom believes that the best of both worlds can be achieved by adopting the lower of the two measures.

CLP Telecom also suggests that OFTA consider a more market-based approach by encouraging the development of a 3G bandwidth exchange along the lines of Band-X or the Asia Capacity Exchange for the pricing and trading of the short-term capacity – a standard 3G capacity contract would be defined and network operators would be required to offer their short-term capacity on such an exchange and sell it to the highest bidder; the exchange would also serve as a secondary market for the trading of capacity between MVNOs.

A more sophisticated version of the bandwidth exchange would be to permit variations on the standard contract based on different levels of quality on defined metrics.

Regulation of MVNOs

CLP Telecom believes that there should be no limit on the number of MVNOs but that there is a need for some regulation to avoid anti-competitive behaviour. The mechanism of a class licence seems ideally suited to this situation.

The main provisions of such a licence might be:

- registration with OFTA
- prohibition on anti-competitive practices including:

- the acceptance of any arrangement from a content provider that access to the content should be made available exclusively to the customers of the MVNO or made available to them on unjustifiably favourable terms
- provision of converged fixed/mobile services by a fixed network operator unless that operator permits the equivalent of MVNOs to access its fixed network on an open non-discriminatory basis.

Number of operators, spectrum width and treatment of new entrants

Provided that the open network arrangements are effective in promoting market entry and open competition at the retail level, CLP Telecom considers it acceptable for all successful bidders should be awarded 2 x 15 MHz even though this will result in only 4 licences. Additional licences should be issued if further spectrum becomes available however.

Equally, CLP Telecom accepts that there is no need for special treatment for new entrants and no need to reserve spectrum for new entrants – again because the public interest can better be served by ensuring opportunities for market entry and open competition at the retail level.

CLP Telecom agrees that 3G services should be allowed in 2G spectrum but suggests that 2G operators should be subject to a network opening requirement in exchange for widening the scope of their licences in this way

CLP Telecom also supports mandatory roaming between 3G and 2G networks.

Regulatory framework

CLP Telecom believes that it is important for the regulatory regime to reflect the forthcoming convergence between fixed and mobile services. However, it is clear that a full review of the regulatory regime should be the subject of a separate exercise.

Convergence will be supported by OFTA's proposals as it will be possible for fixed network operators to become MVNOs on 3G mobile networks. To ensure a level playing field, fixed network operators should be required to open their networks to fixed network MVNOs if they (or an affiliated company) becomes a 3G operator or a 3G MVNO.

Pending a full review of convergence regulation, CLP Telecom believes that OFTA should recognise that the fibre backbone is as much part of a 3G network as base stations and switching centres. As a step towards convergent regulation, OFTA should permit the laying, leasing and use of dark fibre to support 3G networks. This will enable 3G operators to achieve a low cost base and will ensure that 3G operators associated with local FTNS operators are not given any undue advantage.

The right to build a 3G backbone network should be given both to 3G operators themselves and to any supplier of fibre backbone to the 3G industry. To distinguish this right from a full local FTNS licence, the right should not include general road-opening rights prior to the end of the moratorium. Road-opening rights should be restricted to road openings for the purpose of constructing short lengths of fibre (eg less than 500m) to connect buildings which house 3G equipment to an existing core network.

Conclusion

CLP Telecom believes OFTA is to be congratulated on identifying the real issues as:

- how to ensure open and effective competition between service providers
- how to prevent network providers from enjoying undue monopoly rents.

In CLP Telecom's view, the open network provision is absolutely key to this. However, many of the details need to be settled before licences are issued, otherwise there is a risk that the four licensees will use their oligopoly position to delay and subvert the policy objectives. CLP Telecom has put forward its views on how these details might be addressed and hopes that OFTA will put forward its own views in a policy statement accompanying the licensing guidelines.

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