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19 May 2000

Dear Mr Wong

I am writing to you on behalf of the Orange Group in reply to the Industry Consultation Paper on "Licensing Framework for Third Generation Mobile Services" published by OFTA on 21 March 2000. I attach to this letter our comments prepared by Orange International Regulatory team in response to each of the questions asked in the consultation document and trust you will find these useful.

However firstly I wish to draw your attention to who we are, our mission and our experience in developing 3G networks and services and to provide you with a very brief summary of our views on the regulation of third generation services and the method of awarding the licences.

Our Mission ...

Orange has clearly stated that its mission is to become the first global wirefree telecommunications brand. Wherever we operate, or our brand is licensed (such as in Hong Kong), we aim to be the first for service, first for quality and first for innovation.

Achieving this objective involves reinforcing Orange's position in those countries where it already has interests in mobile operators and entering other markets. These activities will include pursuing third generation mobile licences where such opportunities arise.

Orange is already in a leading position in the development of 3G networks and services and it is actively engaged in a significant number of UMTS projects in different markets.

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Orange intends to transfer its expertise in the UMTS arena to the market in Hong Kong. I personally believe that our already deep knowledge and experience of the Hong Kong market, which is where the Orange business first originated from, jointly with our history of success in other markets, will provide us with a leading edge over other groups in developing a thriving and healthy 3G market in Hong Kong. We are therefore keen to extend our market presence, today limited to the licensing of the Orange brand to Hutchison, and are currently looking into the possibility of taking part in the forthcoming beauty contest for one of the available UMTS licences.

Our experience and success ...

In the UK, where Orange already has over 6 million customers and has achieved 98% coverage in the UK with its GSM1800 network, Orange has also very recently won one of the 5 available UMTS licences. Preparation for the launch of the UMTS network and services is now far advanced and this includes large scale network and service trials with external partners (Fujitsu, Ascend and Cisco).

In Spain, Orange is a member of the Xfera consortium which has recently won the new entrant's UMTS licence and groundwork for the launch of its network and services is now underway.

Preparation is also underway in a number of other markets where UMTS licences have been announced. Orange has for instance already submitted a joint pre-qualification application with Sonera of Finland and Telefonica of Spain to participate to the forthcoming UMTS auction in Germany.

The Orange Group already provides a broad range of communications services. In addition to our GSM 1800 network in the UK, the Group operates Hutchison Cellular Services Limited, Hutchison Telecommunications (France) SA and Hutchison Telecoms GmbH, service providers in the UK, France and Germany respectively. The Group has also participated in successful international licence bids in Austria (Connect Austria), Switzerland (Orange Communications) and Belgium (KPN Orange), as well as extending its service into Northern Ireland. As well as Hong Kong, our brand is currently licensed to mobile operators in Israel, India and Australia. Today Orange has over 10 million customers worldwide.

Our views on the regulation of 3G services and the method of awarding the licences

...

In summary, Orange believes that, as a general principle, competition should be enhanced when new licences are awarded and there should be no artificial restriction of the level of competition in the market. Balanced against this is the need to ensure that dominant players, who in a future UMTS market may include content providers, do not abuse their position. Therefore any requirement for regulation that could restrict the market in any way should be focused only on those players who have the ability to unduly influence the market by way of their market power.



We welcome and strongly support the TA's preference for a selection process based on merit rather than an auction. The success of third generation mobile operators should and will be judged according to whether they can make available to consumers on a commercial basis a range of services that cannot be provided using today's second generation systems. The advances that are foreseen will not simply be technical advances but must also represent significant progress in terms of making a greater range of personalised mobile services available more widely to consumers and businesses of every kind.

I would be delighted to meet you and your colleagues at a later stage to discuss our views and share the results of the work the Orange Group has already done to date to develop 3G systems and services.

Yours sincerely

A handwritten signature in black ink that reads "Michael Latimer". The signature is written in a cursive, flowing style.

Michael Latimer
COO & Group Director, of International Activities

Cc: Paul Franklin
Group Director of Carrier Services and Regulatory Affairs



**Orange Response to the
Industry Consultation Paper on the Licensing Framework for Third Generation
Mobile Services in Hong Kong,
issued by The Telecommunications Authority**

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Q1 - The TA intends to open to prospective operators to use any IMT-2000 standards within their assigned 3G frequency bands for 3G mobile services, subject to the TA being satisfied that the various technical standards are compatible with each other from the users' point of view. The main consideration is to ensure that customers can easily switch from one network to another to obtain similar services and to maximise convenience in using roaming services without having to change the mobile terminals. The TA invites views from the industry on his proposal.

Answer - We strongly believe that operators should always be free to adopt any of the standards falling under the IMT 2000 family so as to abide by the recent WTO decision.

Orange is confident that market forces will drive interoperability between 3G and 2G standards as well as between different 3G technologies as happened with GSM 900 and GSM 1800.

Interoperability is not the final target but the basic vehicle to ensure that switching from network to network can be performed. Orange believes that regulatory support is required to ensure that this can take place through the removal of critical barriers for consumer choice. Above all Orange is supportive of Mobile Number Portability (MNP). MNP is essential to remove the fundamental barrier for free consumer choice that the numbering system would otherwise impose upon mobile customers. This is important for all mobile customers as mobile phones become more and more people's primary point of contact. Without MNP, customers may be reluctant to switch to another service provider and this can act as an unnecessary and restrictive brake on free competition. Hong Kong represents a role model for the market on MNP already following the recent successful implementation of this service on 2G networks. We therefore welcome the TA's decision to set out MNP as a mandatory requirement also for 3G networks.

We also believe that particular attention should be placed by the industry on the integration of operating systems and applications within UMTS terminals.

Today's mobile telephones and terminals include an operating system and a basic user interface, but these are closed and proprietary and not able to support third party applications.

Orange believes that UMTS terminals will have open operating systems for which the industry will be free to develop evolving de-facto standards for multimedia protocols, codecs, services and user interfaces, and that these de-facto standards will effectively guarantee end-to-end interworking.



Q2 – Taking into consideration paragraphs 3.9-3.11, the TA is of the view that Hong Kong should adopt a 3G band plan that is in compliance with the ITU IMT-2000 allocation. Any comment on this issue is welcome.

Answer – We agree with the TA that Hong Kong should adopt a 3G band plan which is in compliance with the ITU-IMT allocation and make sure that the implementation of its 3G band plan does not affect the development of seamless provision of services throughout the Asian region.

We also agree with TA that any decision to accommodate the US PCS allocation into the Hong Kong 3G band plan will lead to the reduction of the available spectrum for 3G systems. This may affect the ability of Hong Kong to deploy the necessary resources for the development of a fully competitive and healthy 3G market. We also agree that the above will lead to further fragmentation of the spectrum which may increase the need for regulatory intervention in the short term by amplifying spectrum management difficulties. It may also unnecessarily increase in the longer term regulatory tension associated with the transition from 2G to 3G.

Q3 – Based on the considerations in paragraphs 3.13-3.18, the TA is of the view that a new 3G operator will need 2x15 MHz paired spectrum in order to allow the implementation of three-layer hierarchical cell structure and the provision of full range of 3G services including high speed multimedia services at 2Mbps in an indoor environment. For incumbent 2G operators, the TA considers that less spectrum would be required because they can upgrade their 2G systems and use them to provide the macro layer. In this case, the minimum spectrum per existing operator is 2x10 MHz. If the foregoing spectrum allocation is adopted, between four to six licences can be issued for 3G services, depending on the licensing model adopted (see paragraph 4.5 below). The TA invites comments from the industry on the proposed minimum 3G spectrum allocation to new and existing operators.

Answer - Orange believes that the allocation of 2x15 MHz of paired spectrum and 5 MHz of unpaired spectrum would be sufficient for a new entrant. This would allow the new operator to offer a full range of services as well as the necessary coverage for UMTS to succeed in Hong Kong. We agree that existing 2G operators would require less spectrum and that the TA's proposal to allocate 2 x 10 MHz of paired spectrum will therefore be sufficient.

Having said that we would like to point out to the TA that

**although it is desirable to support the provision of 2Mbit/s services, in reality the launch and the wide commercial availability of these will happen at a much later stage while lower capacity services will play a key role
new entrants may still be disadvantaged in receiving a de facto smaller amount of spectrum than those existing 2G operators in Hong Kong which should successfully take part in the forthcoming 3G beauty contest. This anomaly could be corrected by allowing the new entrant additional spectrum when it becomes available.**

Q4 – The TA therefore considers that there may be no immediate need to make a decision on the allocation of the TDD spectrum. However the TA will reserve the TDD spectrum in the 3G band for use by the licensed operators and will further consult these operators when it is timely to allocate this spectrum. The TA invites views from the industry on the proposed allocation of TDD spectrum.

Answer – It is true that, due to delays in the standardisation process and the development of the required equipment, the use of the TDD spectrum will probably become feasible at the beginning of 2004 at the earliest. That said we disagree with TA that the above should justify a delay in the allocation process for this portion of the spectrum.

As far as Europe is concerned it is important to stress that in all key markets the unpaired spectrum

has already been allocated to 3G licensees (e.g. in Finland, Spain and UK where the 3G licences have now been awarded) or is to be allocated to successful bidders for 3G networks (Germany, France and Italy for instance).

Q5 – In view that 3G technologies may provide the scope for innovative service developments and, as a new entrant would not be constrained by any legacy network elements, it would have more flexibility in developing its network for new service applications and providing new input to the benefit of the industry and consumers. The TA therefore considers that the introduction of new entrants to the 3G market will be beneficial to market development and consumers ...

... The TA is therefore of the preliminary view that there are benefits in allowing incumbent operators to bid for the 3G services, but they should not be given any priority over new entrants in the bidding process. Views and comments are sought on this issue.

Answer – We welcome the decision of the TA to position itself in favour of the introduction of new entrants into the mobile market in Hong Kong and share the TA's view that this will prove highly beneficial to both market developments and consumers. A selection process truly based on merits should be as open as possible (on this please see our answer to Q7 below).

Orange also believes it is appropriate not to provide incumbent operators with a priority over new entrants in the bidding process. Any preferential access will limit the ability of the regulator to truly base the selection process on merits only, with potential detrimental effects for market developments and consumers.

Q6 – The TA has not yet formed a view on the preference for any one of the suggested licensing options (see consultation paper pages 13 to 14) and would like to seek comments from the industry prior to making a final decision.



Answer – Orange believes that option 4¹ is the best available among those put forward by TA. This option will provide Hong Kong with

the opportunity to drive new fresh investments and additional competition into its mobile market
a manageable process which balances the demands of both incumbents and new entrants.

Q7 – The TA invites comments from industry on his intention to select 3G licensees by evaluation based on merit.

Answer – We welcome the TA's intention to select 3G licensees by evaluation method based on merit (so called beauty contest). We believe this will allow the TA to select the best applicants for the UMTS licences.

As also stressed by the TA in its consultation paper, high up-front fees associated with an auction would increase investor uncertainty and could have a detrimental effect on the development of UMTS services in Hong Kong. The licensees would want to recoup the fees as soon as possible and this is likely to be at the expense of speedy roll-out of networks and development of new services. It could also lead to increased costs to consumers.

In contrast, the beauty contest method will allow the TA to choose its own selection criteria and will favour technically and commercially proficient operators, rather than just those with deep pockets. In order to achieve this, the selection criteria must be well thought through, proportionate and non-discriminatory. These criteria should also be published in advance and the industry consulted on them in order to ensure the full transparency of the selection process.

A large number of applications can be expected if a truly open beauty contest is to be launched. In this case, a pre-selection phase would be critical to allow a smoother functioning of the selection process. The pre-selection criteria could be limited to financial strength and technical abilities of the applicants.

We would be happy to provide the TA with additional views on this issue if required.

Q8 – The 3G mobile systems have the capability of providing broadband multimedia services. It is expected that the scope of services that will be provided by 3G platforms will be substantially more extensive than that of the 2G platform. As the operation and the scope of the 3G services are significantly different, the TA would like to seek the views of the industry on whether the 3G services should be regulated under a similar regulatory framework as that for the mobile telephone services at present. In particular, the TA invites views on whether any safeguarding measures should be introduced or strengthened to preserve effective competition in the 3G market.

¹ Option 4 : Like Option 3, the TA will reserve part of the 3G spectrum to new entrants only. However, instead of giving the same width of spectrum to each of the new and existing operators, an incumbent operator who is successful in its bid for the licence will be allocated 2x10 MHz paired spectrum whereas a new entrant will be allocated 2x15 MHz paired spectrum. Another 5MHz unpaired spectrum will be reserved for allocation to each operator at a later stage. The number of 3G licences that can be issued will be increased to five, whether the mix is 2 new entrants plus 3 incumbents, or 1 new entrant plus 4 incumbents.



Answer – This question touches on a number of different issues such as

the future of the existing regulatory frameworks in the light of convergence whether the market for 3G services is already a separately identifiable market (with all the potential regulatory consequences associated with this) need of asymmetric regulatory measures to support the development of effective competition in the emerging 3G market.

We understand that the TA's main focus is, however, mainly on the issue raised in the last bullet point and we therefore provide our views on this below. That said, we would be happy to provide the TA with our views on the other issues at a later stage if required.

As already mentioned in the opening section of this response, Orange believes that, as a general principle, competition should be enhanced when new licences are awarded and there should be no artificial restriction of the level of competition in the market. Balanced against this is the need to ensure that dominant players, which in a future UMTS market may include content providers, do not abuse their position. Therefore any requirement for regulation that could restrict the market in any way should be focused only on those players which either have the ability to unduly influence the market by way of their market power.

Mast sharing and National Roaming are the most critical regulatory requirements which we believe should be imposed onto incumbent 2G operators in order to ensure a fair development of the market for 3G services in Hong Kong and fair effective competition between incumbent operators and new entrants.

Mast Sharing

Mast sharing we believe will be extremely critical for a new entrant to succeed in Hong Kong. It will also match increased environmental protection needs and efforts. The TA must therefore ensure that this is not constrained. We acknowledge that mast sharing is partially covered by the new section 14 of the Telecommunications (Amendment) Bill on access to shielded public places and the TA's power to issue directions to operators on the sharing of certain facilities in the public interest. That said, we strongly believe that condition 31 of the FTNS licences (i.e. fixed telecommunications network services) for FTNS licensees to satisfy reasonable requests from other telecommunications licensees for sharing of facilities should be extended to mobile operators.

National Roaming

In general Orange believes that:

a sunset clause should be included in any regulated national roaming obligations in order not to disincentivise the new entrant to complete its network build-out national roaming should be based on commercial negotiations in order for the market to decide whether or not it is a requirement and on what cost basis.

It may be useful to differentiate between different types of national roaming which should be provided by incumbent operators.

(a) Temporary national roaming on existing 2G networks to support new entrants

Orange believes that some sort of entry assistance for an operator with only a 3G licence would be applicable in order to level the playing field for all licensees and allow the new entrant to start service provision while still building the network. This could take the form of mandated national roaming, on a commercially agreed basis, on the GSM networks of the other operators.

(b) National roaming on 2G networks in rural areas

National roaming is also critical as a method for ensuring coverage of rural areas where five or six (pending the adopted licensing option) full UMTS networks may not be necessary or commercially viable. Most examples where national roaming on 2G networks has been successful have been based on networks which do not overlap. This could also take the form of mandated national roaming, on a commercially agreed basis, on the 2G networks of the other operators. In this specific case the roaming should not be subject to time limit. We believe that this type of roaming may however have very limited use in Hong Kong.

(c) National Roaming as a remedy against lack of spectrum

National roaming could also be mandated for regions where spectrum has not been fully freed up and has been made available to some operators and not others. In such a case, the operators who have been given the spectrum should be obliged to offer national roaming to those operators who do not yet have spectrum, on a time limited basis (i.e. subject to new spectrum being made available to roaming operators).

Orange believes that - with the exception of national roaming requirements for rural area coverage - it may be welcome to forebear from applying national roaming rules once they prove to be unnecessary and/or effective competition has been achieved (i.e. network has been built in the first case or spectrum has become available to roaming operators in the last case). As already mentioned Orange also favours the introduction of specific automatic self-terminating conditions (sunset clauses) for a more time efficient removal.

Q9 – The TA would like to seek views and comments from the industry on the necessity to maintain a regulatory distinction between the fixed services and the mobile services and whether there is a need to maintain separate forms of licences for the FTNS and mobile telephone services.

Answer – We haven't formed our views on this issue at the moment apart from the above comments on the mast sharing issue. We will however be looking in detail into the existing structure of the telecommunications regulatory framework in Hong Kong and its licensing regime at a later stage and assess whether the current differentiation makes sense vis-à-vis market developments and the level of competition achieved in each of the relevant markets.

That said, we in general believe that regulatory reform should be an on-going process and that at any point in time any regulatory framework should always make clear why any specific rules still exist (i.e. what underlying goals justify them). This rule should also apply to existing differences within the licensing regime in Hong Kong. We are in general fully supportive of the need to simplify licensing regime across the globe and make wider use of so called general authorisations, i.e. requiring operators at most to notify or register with the regulators. Exceptions to this rule should be limited in the case of access to scarce resources, i.e. access to radio frequencies and numbers.

Q10 – Domestic roaming between 2G and 3G networks - The TA invites views from the industry before deciding on whether such an obligation should be imposed on the 2G network operators if they are successful in obtaining 3G licences, and if so, whether such an obligation should be a short term one and the applicable charging principles.

Answer – Please see above our answer to question 8.

Q11 – Domestic roaming on 3G networks – The TA invites views from the industry on whether such a roaming arrangement from 2G networks (which have not been able to obtain a 3G licence) to 3G networks should be implemented. The TA would also like to seek views on the technical and commercial implications of such a roaming arrangement and whether there are technical and operational difficulties in roaming from 2G to 3G networks.

Answer – We acknowledge that given the current structure of the mobile market in Hong Kong national roaming arrangements from 2G networks to 3G networks may become a necessity as the number of existing mobile operators is potentially higher than the number of available UMTS licences.

The same principles that we have mentioned above in our reply to question 8 should also be applicable in this case. It is however important to stress that requirements to offer national roaming should only be applicable to those 2G network operators that successfully take part in the 3G beauty contest. New entrants should not be subject to any regulatory pressure in this regard.

National roaming arrangements should have a limited life-span also in this case and be removed once equipment for the provision of 3G networks on the spectrum allocated for 2G networks becomes commercially available, i.e. once 2G network operators have the ability to deploy their own 3G facilities.

Q12 – The TA invites views and comments from the industry on the concept of separating service provision from network operations (MVNO) and whether it should be implemented in the 3G mobile services.



Orange believes that MVNOs are likely to emerge overtime (e.g. please see the recent agreement in the UK between mobile operator One2One and Virgin and the launch of Virgin Mobile and a similar agreement also signed between One2One and the Carphone Warehouse) and that such developments are welcome. It is however important to stress that the development of the MVNO model should be left to market forces such as in the UK case and not mandated by the regulator. In general, Orange believes that:

Access by MVNOs should be based on commercial negotiation in order for the market to decide whether or not it is a requirement and on what cost basis concerns about availability of spectrum (as a reason for mandating access to MVNOs) do not amount to an indication of market failure, and regulatory intervention cannot be justified on this basis
mobile markets are evolving at a rate which is meeting consumer service expectations and which allows, without regulation, the development of mobile network resale and innovative mobile services.