

31 May 2001

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Dear Miss Ng

PROPOSED REGULATORY APPROACH FOR 3G MOBILE VIRTUAL NETWORK OPERATORS (MVNOs)

Singapore Telecom Mobile Pte Ltd (SingTel Mobile) welcomes the opportunity to submit our views and comments to the Info-communications Development Authority of Singapore (IDA) in relation to the industry consultation paper on the proposed regulatory approach for 3G Mobile Virtual Network Operators (MVNOs) in Singapore.

Our comments and views are attached.

Yours sincerely

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for and on behalf of Singapore Telecom Mobile Pte Ltd

encl.

PROPOSED REGULATORY APPROACH FOR 3G MOBILE VIRTUAL NETWORK OPERATORS (MVNOs)

A. SUMMARY

1. Singapore Telecom Mobile Pte Ltd (SingTel Mobile) strongly supports a regulatory approach for 3G Mobile Virtual Network Operators (MVNOs) in Singapore where the development of 3G MVNOs is left to the unfettered operation of competitive market forces. The mobile market is already vigorously competitive and there is strong reason to believe that the provision of 3G services will only serve to further stimulate mobile market competition. We see no justification for regulatory intervention to support the development of 3G MVNOs.
2. SingTel Mobile would also highlight that, absent regulatory intervention, competitive market forces has already led to the emergence of a 2G MVNO in Singapore today. SingTel Mobile and Virgin Mobile (Asia) Pte Ltd successfully negotiated commercial arrangements for the provision of 2G MNO access. This serves to evidence that regulatory intervention is not necessary to direct mobile market development nor to determine the terms and conditions applicable to MVNOs.
3. In addition, it is unclear that the benefits of regulatory support for 3G MVNOs will be outweighed by the potential costs. Further, it is uncertain that 3G MVNOs will develop and deliver new and innovative types of services which would otherwise not be developed nor provided by the 3G MNOs. Given the degree of uncertainty surrounding 3G MVNOs, in our view there is a significant risk that any form of regulatory intervention to direct market development or intervene in the market will cause market distortion.
4. A “hands-off” regulatory approach to 3G MVNOs is consistent with the regulatory approach taken in most overseas jurisdictions such as the United Kingdom and Australia. We believe that a similar regulatory approach should be adopted for 3G MVNOs in Singapore.
5. SingTel Mobile contends that the development of 3G MVNOs should be left to the operation of market forces. Furthermore, the arrangements for the provision of access and services by 3G Mobile Network Operators (MNOs) to potential 3G MVNOs should be left solely to commercial negotiation. We see no justification for regulatory intervention even in circumstances where commercial negotiations fail.

B. GENERAL COMMENTS

1. SingTel Mobile supports a regulatory approach for 2G MVNOs and 3G MVNOs which is consistent with the following regulatory principles:
 - (i) primary reliance on market forces in competitive markets to promote and deliver consumer welfare.
 - (ii) regulatory intervention only where there is market failure and to the extent necessary to remedy that market failure.
2. Prior to contemplating regulatory intervention, market analysis and economic analysis should be performed to clearly and accurately identify market failure (if any) and to develop the appropriate market remedy. Where there is no evidence nor suggestion of mobile market failure, any regulatory intervention may have the effect of directing the market rather than responding to it. If such analysis is not undertaken, unnecessary regulatory intervention may itself be the cause of market failure and distort the operation of the market. We are unaware of any market analysis or economic analysis that identifies mobile market failure. As such, we do not believe that there are policy grounds for regulatory intervention to promote the development of MVNOs in Singapore (whether 2G or 3G). MVNO development in the competitive Singapore mobile market should be left to the operation of market forces.
3. Unnecessary regulatory intervention to support MVNOs (whether 2G or 3G) runs the risk of acting as a disincentive to MNOs to deploy network, invest in network improvements or to develop new and innovative features and functionality, if by doing so MVNOs could then receive the benefits without having undertaken the risks nor borne the investment costs that MNOs have taken and borne. This risk of dampening network investment and network based competition was recognised and accepted by OFTEL in its consideration of 2G MVNOs:

“OFTEL accepts that depending on the form of MVNO the incentives to invest in infrastructure may decline, diluting the benefits of infrastructure competition.”¹

“Investment in network coverage may decline as a result of MVNO entry; existing network operators will not face the same incentives to build out their network.”²

¹ OFTEL Statement on Mobile Virtual Network Operators, October 1999, page 9

² Ibid

4. SingTel Mobile strongly support a “hands-off” regulatory approach to MVNOs. This approach is consistent with the regulatory principles of reliance on market forces in competitive markets where intervention occurs only where there is market failure. In the context of 2G, no 2G MNO is dominant. Vigorous competition amongst the 2G MNOs has continued to aggressively drive mobile penetration in Singapore and resulted in the development of new and innovative products and services as MNOs compete for new customers and look to retain existing customers.
5. In relation to 3G, we strongly believe that it is premature for IDA to be considering regulatory intervention for 3G MVNOs. The 3G licenses have only just been awarded and the 3G MNOs have recently paid a significant amount for the right to deploy 3G mobile networks and provide 3G services in Singapore. The 3G business case is in many respects uncertain and unknown. There is no reason to think that the introduction of 3G services in Singapore will reduce or lessen the level of competition in the mobile market. To the contrary, there is every reason to believe that mobile market competition will be enhanced as 3G MNOs will deploy networks and commence providing 3G services in the market at approximately the same time. No 3G MNO will have any significant first mover advantage. In addition, we would also note that there remains the possibility of the entry of a fourth (4th) 3G MNO to further stimulate mobile market competition.
6. A “hands-off” regulatory approach to MVNO access to MNO networks is consistent with the regulatory approach taken in most overseas jurisdictions. As far as we are aware, no regulator has mandated access to 2G MNO networks for 2G MVNOs. The right of access to 2G MNO networks and the price for such access have been left to commercial negotiation. In the UK, OFTEL has not mandated access for MVNOs to 2G MNO networks or 3G MNO networks. Similarly, in Australia, the ACCC has not sought to declare access to 2G MNO networks or 3G MNO networks. The proposed approach of OFTA in Hong Kong represents the exception rather than the rule. We believe the OFTA approach is in part driven by the fact that there are six (6) existing 2G MNOs but only four (4) 3G MNO licenses available. By providing regulatory support to MVNOs, a lifeline is provided to the existing 2G MNOs who may not be successful in obtaining a 3G MNO license.
7. It should be highlighted that in the current 2G environment, there is already a 2G MVNO and this emerged without regulatory intervention or determination. Virgin Mobile (Asia) Pte Ltd and SingTel Mobile successfully concluded commercial negotiations for the provision of 2G MNO access and this is evidence that regulatory intervention is not a necessary precondition to a vibrant market development.

8. It is also interesting and relevant to note the approach taken and some of the conclusions reached by OFTEL in its deliberations on the issue of MVNOs and access to MNO networks in October 1999. Issues similar to those raised by IDA in its industry consultation paper on the proposed regulatory approach for 3G MVNOs in Singapore were considered by OFTEL albeit in the context of 2G MVNOs. OFTEL took the following approach:

“The consultation on MVNOs was designed to aid OFTEL in exploring what possible benefits MVNOs could offer consumers *in a mobile market that is not yet effectively competitive*. These possible benefits must be weighed against the costs associated with significant regulatory intervention, in particular with the risk that if regulatory action is disproportionate it may deter investment and discourage innovation. *Intervention must be justified on the basis that MVNOs would contribute to the development of competition in the mobile market or bring net benefits to consumers that would not otherwise be achieved.*”³ (emphasis added)

9. In light of the above, SingTel Mobile strongly urges the IDA not to intervene in relation to 3G MVNOs. SingTel Mobile supports a regulatory approach for 3G MVNOs where the development of 3G MVNOs is left to the unfettered operation of competitive mobile market forces. Should market forces result in the development of 3G MVNOs, the arrangements between the 3G MVNO and the 3G MNO should be left to commercial negotiation. We also see no justification for a regulatory policy whereby the regulator will intervene in an event where commercial negotiations break down because such a policy will effectively disincentivise the parties involved to bring forth a commercially negotiated outcome.

C. COMMENTS ON SPECIFIC QUERIES RAISED BY IDA

1. *IDA seeks comments on possible types of services a 3G MVNO might offer, the role that they might play to promote competition, the benefits they would bring to consumers and consequently the scope of network access and services that 3G MNOs should offer MVNOs.*

- 1.1 In relation to 3G MVNOs, we feel that it is unlikely that a 3G MVNO will offer a type of service that a 3G MNO would not or could not itself offer to the market. It is noticeable that in the 2G mobile environment, there was intense competition and innovation in service offers even before the emergence of

³ OFTEL Statement on Mobile Virtual Network Operators, October 1999, page 5

MVNOs. In the 3G environment, the possibility/threat of a 4th 3G MNO will further drive service innovation and differentiation amongst the 3G MNOs.

- 1.2 In a 2G context and where 2G MVNOs have emerged, services offered by 2G MVNOs were similar to those offered by 2G MNOs. 2G MVNOs typically and largely rely upon MNO networks and differentiate themselves via marketing, branding, customer care, customer billing, tariff structures etc. Whilst some 2G MVNOs have installed value added platforms (e.g. voicemail, prepaid) the types of services provided by 2G MVNOs are essentially same as or equivalent to the types of services of the MNO.
- 1.3 We believe that competition amongst the 3G MNOs will drive service innovation and we believe that if 3G MVNOs emerge, they will provide types of services that will not vary from or be enormously different from those to be offered by the 3G MNOs through the unfettered operation of the mobile market.
- 1.4 In terms of 3G MVNOs promoting competition, in our view, it is premature to consider the issue. It is certainly not clear that market cannot be competitive without the need for regulatory intervention for 3G MVNOs. In fact, there is no reason to think that the introduction of 3G services will reduce or lessen the level of competition in the mobile market. In fact, we believe that given the fact that the mobile market is already vigorously competitive with 3G MNOs deploying networks and commence providing 3G services in close proximity with each other, all indications would suggest that the mobile market will already be more competitive.
- 1.5 Again, it is worth noting OFTEL's conclusions with respect to 2G MVNOs:

“OFTEL takes the view that many of the benefits attributed to MVNOs by respondents could be achieved by market developments in the absence of MVNOs. These limited benefits could be outweighed by the costs arising from establishing MVNOs, namely the potential adverse impact on infrastructure investment and network costs.”⁴

- 1.9 SingTel Mobile stresses that we do not support any form of mandated access to 3G MNO networks. Should market developments result in the emergence of 3G MVNOs, each 3G MVNO will be different in terms of its business model and the extent of the access and services it will seek to acquire from a 3G MNO. It is not possible to predict in advance what form or shape a potential 3G MVNO will take nor the type of access and services that it will need to acquire. Any access and services provided by a 3G MNO to a 3G MVNO

⁴ OFTEL Statement on Mobile Virtual Network Operators, October 1999, page 10

should be solely the result of commercial negotiations between the 3G MNO and the potential 3G MVNO. Even where commercial negotiations break-down, we do not believe that regulatory intervention should occur – where negotiating parties are aware that a commercially negotiated outcome is the only outcome, there is increased likelihood of reaching a commercial agreement. The potential for regulatory intervention will only act as a disincentive for the potential 3G MVNO to reach a commercially negotiated outcome.

2. *IDA seeks comments on whether a distinction should be made of the different types of MVNOs, and if certain "maximalist" MVNOs should more appropriately be licensed as FBOs.*
- 2.1 As we have indicated above, SingTel Mobile does not support any form of regulatory intervention with respect to 3G MVNOs. Should the natural development and competitive market forces in the mobile market result in the emergence of 3G MVNOs, the shape and form of those 3G MVNOs (minimalist/maximalist) should be left to the market and commercial negotiation between potential 3G MVNOs and the 3G MNOs.
- 2.2 Given the breath and scope of possible types of potential 3G MVNOs, it is unlikely that a single license (e.g. SBO (Individual), FBO) category would be appropriate.
- 2.3 SingTel Mobile would be concerned if a 3G MVNO obtains all the benefits of a 3G MNO without the benefits being balanced by license obligations. If the licensing framework does not balance the 3G MNO license obligations and the 3G MVNO license obligations, this would have a distorting effect on the mobile market. For example, a maximalist 3G MVNO which in many respects may be indistinguishable from a 3G MNO, will be subject to a lower level of risk and if they were not subject to the same level of regulation as 3G MNOs.
- 2.4 The existing licence categories might not be totally applicable to 3G MVNOs. For example, the existing SBO (Individual) licence may not apply to all 3G MVNOs who, by virtue of ownership of their own value added platforms such as voicemail, prepaid, SMS etc start to show some resemblance to a partial Facilities-Based Operator (FBO) but are clearly still not an FBO. In such a case, 3G MVNOs do not qualify as FBOs but the scope and breadth of the existing SBO (Individual) licence cannot sufficiently cover their scope of activities either.

- 2.5 We stress, however, that the 3G MNO regulatory framework should ensure that the 3G MNO is in a competitively neutral position vis-à-vis a potential 3G MVNO. A 3G MNO cannot be in a position which is worse-off than a 3G MVNO.
3. *IDA seeks comments on the benchmark and parameters that IDA should use to determine the competitiveness of the 3G markets; and hence, on when and how it should intervene where commercial negotiations between MNOs and MVNOs fail.*
- 3.1 SingTel Mobile does not support regulatory intervention for 3G MVNOs. We strongly support a regulatory approach for 3G MVNOs in Singapore which relies on competitive market forces and emphasises commercial negotiation between 3G MNOs and potential 3G MVNOs. We see no justification for regulatory intervention for 3G MVNOs even in circumstances where commercial negotiations break down.
- 3.2 There is no evidence to suggest that the mobile market is not competitive or that there is market failure. To the contrary, the mobile market is currently competitive with no 2G MNO dominant. Given the fact that the mobile market is already vigorously competitive and that 3G MNOs will deploy networks and commence providing 3G services in close proximity with each other, all indications would suggest that the mobile market will be even more competitive. There is certainly nothing to suggest that the level of competition in the mobile market be lessened.
- 3.3 We note that IDA refers to a 3G market, this implies that there are at least two distinct mobile markets i.e. 2G market and a 3G market. Prior to undertaking any analysis as to the level of competitiveness in a market, there is first a need to define the relevant market. In relation to the mobile market in Singapore, there is first a need to determine whether there is a single mobile market or a distinct 2G mobile market and/or a distinct 2.5G mobile market and/or a distinct 3G mobile market. There is first a need to establish criteria necessary to define a market.
- 3.4 This issue has been addressed in many jurisdictions where typically, when defining a market, the regulator looks at the following dimensions of a market: product, geographical, functional and temporal. In terms of the criteria for assessing the level of competition in the relevant market, regulators in other jurisdictions have developed well established criteria that include the level of entry barriers, number of competitors, trends in market concentration and pricing trends too. Without such criteria and definitions, it would be difficult to even discuss the stage at which the market could be considered competitive.

4. *IDA seeks comment on charging framework and principles that MNOs should base their charges for network access and other services they offer to MVNOs. Under what circumstances and conditions should the charging framework and principles be applicable? Should there be variations depending on the circumstances and conditions and as the market develops? what are the non-price terms and conditions that should be set?*
- 4.1 SingTel Mobile strongly believes that any terms and conditions (including price) for 3G MNO access and services to 3G MVNOs should be left solely to commercial negotiation between 3G MNOs and potential 3G MVNOs. We do not support regulatory intervention in determining the terms and conditions. As we indicated above, even in circumstances where the 3G MNO and the potential 3G MVNO are unable to reach commercial agreement, we do not believe that regulatory intervention should occur. Further, we believe that the mobile market is competitive and the deployment of 3G services is likely to increase the already vigorous level of competition between the MNOs.
- 4.2 Regulatory intervention to impose a particular 3G MVNO pricing methodology on access and services is complicated by the fact that it is unclear what access and services a particular 3G MVNO may require. We have already expressed above, that 3G MVNOs may take many different shapes and forms and it cannot be the case that a particular pricing methodology applies irrespective of the access or service sought.
- 4.3 Notwithstanding the above, a cost-plus methodology for determining pricing for 3G MNO access is entirely inappropriate. Cost-plus does not appropriately recognize the level of investment or risk undertaken by the 3G MNOs. Cost-plus may damage investment incentives for 3G MNOs.
- 4.4 Whilst we believe that a retail-minus methodology is more appropriate than a cost-plus approach, there is the risk that in the context of 3G it may not necessarily be appropriate for a number of reasons one of which will be the need to price 3G services at level that consumers in the market will be prepared to pay.
- 4.5 In light of the above, we would urge IDA not to intervene to determine pricing. The terms and conditions (including price) should be left solely for commercial negotiation between the 3G MNO and the potential 3G MVNO. There is a high risk that intervention to establish a pricing approach will distort the market. In any event, a 3G MNO should be able to price access and services at a level which reflects the risk and which delivers a commercial rate of return.

5. *IDA seeks comments on whether there should be a moratorium before MVNOs should be allowed to enter the market; and if yes, how long such moratorium should be and under what circumstances and conditions such moratorium should be reviews and removed or extended.*
- 5.1 SingTel Mobile does not believe that there are policy grounds for regulatory intervention directing the development of 3G MVNOs. We believe that competitive market forces should drive market development.
- 5.2 Notwithstanding the above, should the IDA seek to intervene in the mobile market or seek to review the issue of 3G MVNO, a moratorium period should apply which recognises the significant investments of the 3G MNOs and the need to protect and promote network based competition.
- 5.3 The moratorium should be at least for a period of three (3) years after the 3G MNOs have met their network roll-out commitments and commenced providing commercial 3G services to the market, ie 3 years from 31 December 2004. At the end of the moratorium period, IDA should conduct a review of the mobile market to assess the level of competitiveness and whether there is a need to provide regulatory support for the development of 3G MVNOs. The future approach to 3G MVNOs can then be considered in that context.
- 5.4 Again, we stress that SingTel Mobile does not believe there are reasons nor rationales for regulatory intervention to determine the development of 3G MVNOs. This development should best be left to the market forces.
6. *IDA seeks comments on whether 3G MVNOs should be required to offer number portability services; whether IDA should impose minimum quality of service standard on 3G MVNOs; and if so whether the requirements and standards should be different from that imposed on MNOs.*
- 6.1 The issue of number portability raises a number of issues. This serves to illustrate the concern expressed above with respect to 3G MVNO licensing and the need to ensure that there is no market distortion. 3G MNOs should not be in a worse position than 3G MVNOs. To the extent that a 3G MNO has an obligation with respect to number portability, 3G MVNOs should equally have the same obligation.
- 6.2 In terms of giving effect to a customer number port request, it will be necessary for the 3G MNO to be involved and to undertake certain porting activities. The 3G MNO should be entitled to recover for providing such services to 3G MVNOs.

- 6.3 However, we would draw a distinction between a customer request for number portability and the “porting” of the entire customer base by a 3G MVNO from one 3G MNO to another 3G MNO. 3G MVNO “porting” is purely a commercial matter to be dealt with in the commercial negotiations between the 3G MNO and the 3G MVNO.
- 6.4 With respect to Quality of Service (QoS) standards, as a general statement, SingTel Mobile does not support the imposition of QoS standards on 3G MNOs particularly in the initial years of 3G network deployment and 3G service development. The imposition of QoS standards on 3G MNOs will serve only to further increase the cost of 3G network deployment and 3G service provision. This is in addition to the significant costs of acquiring the 3G spectrum and of deploying 3G network. We believe that the operation of competitive market forces will deliver 3G services to customers at a quality which meets their needs.
- 6.5 Notwithstanding the above, should IDA impose QoS obligations on 3G MNOs, 3G MVNOs should similarly be subject to QoS standards. However, we would stress that if QoS standards are imposed on 3G MVNOs, 3G MNOs cannot be held responsible for meeting the 3G MVNO QoS standards simply because the 3G MVNO relies on the 3G MNO for access and services.
7. *IDA seeks comments on the technical issues that should be addressed, in particular, any potential technical issues from MNOs technical operations perspectives that might arise that could potentially impede or restrict the MVNO operations and services offering and how these may be resolved satisfactorily, taking into account the concerns of both parties and yet allow the development of fair and sustainable competition.*
- 7.1 3G MVNOs may take many and varied shapes and forms. The type of technical issues will depend largely on the “flavour” of the 3G MVNO. It is impossible to predict specific technical issues, however, in terms of some broad categories some examples include:
- (i) network coverage and quality;
 - (ii) forecasting and provisioning;
 - (iii) sim card issues;
 - (iv) activation and de-activation of 3G MVNO customers;
 - (v) activation and de-activation of features and functionality;
 - (vi) 3G MVNO customer porting;
 - (vii) interconnection and interoperability between the 3G MVNO and 3G MNOs (other the host);
 - (viii) network integrity;

- (ix) network security;
- (x) fault handling;
- (xi) customer billing;
- (xii) inter-operator billing and settlement;
- (xiii) will depend on the MVNO and the commercial negotiations between the MNO and the MVNO;
- (xiv) demarcation and responsibility between the 3G MNO and the 3G MVNO.

7.2 These are but some of the issues that would arise in commercial negotiations between the 3G MNO and the potential 3G MVNO. The issues would largely vary from one potential 3G MVNO to another.