Public Consultation Paper on Proposed Allocation of Spectrum for International Mobile Telecommunications ("IMT") and IMT-Advanced Services and Options to Enhance Mobile Competition

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1) Introduction

Phoenix Communications Pte Ltd (Phoenixcomms) welcome IDA's initiative to explore measures to encourage more MNOs and MVNOs enter the mobile market. It is our humble opinion that the critical success factor is to have a balanced fair play platform and lower the entry barrier for retailers and other smaller less technical savvy company to participate as MVNO. As a light MVNO, they will have the opportunity to enhance their retail product offering by leveraging on telecommunication services.

The local consumer market is deemed to be small and saturated. Potential new MNOs would be reluctant to invest substantially in the infrastructure to acquired market share. Existing MNOs are also reluctant to work with MVNOs to further dilute their market share and probably impact on their margin.

As per the IDA's recommendation and/or synopsis of what could be the potential MVNO segmentation for the market being the retailers, niche migrant communities and Internet Service Providers (ISPs), it will be critical to ensure that sufficient technical support for these new players and allow them to be creative in product packaging to bring about more benefits to consumers. We recommend IDA to look into the possibility of creating an independent platform to interface with all MNOs' network, and it also provide all the necessary core support components such as service provisioning, billing and other service management system to the MVNOs.

2) Problems faced by MVNOs with MNOs

There will always be priority to the MNO Business via their own marketing strategies and campaigns to capture the same market segments. As MVNO basically is also a competitor to the MNO, there will be sales and marketing restriction imposed by the MNO.

MVNOs will also have to manage their negotiating preferential wholesale rates with the respective MNOs, which will now be compounded with negotiating with the same MNO as a competitor for the same customers for which the technical delivery and implementation of the service provisioning remains in the firm control and hands of the MNO. This could result in the MVNOs not being able to manage their respective customer campaigns, change request, tariff plan adjustments, managing sales and commissions in real time for their own dealers and customer incentives.

3) Independent platform by Mobile Virtual Network Enabler (MVNE)

MVNE is a neutral party that operates the independent platform for hosted and managed services. The platform will have the capability to interwork with the existing MNOs' mobile network and service platform. The concept of MVNEs has already been adopted in France, UK, Brazil and Malaysia. It has proven that with an intermediary, we would able to speed up the offering on new services and promotions by by-passing all the current constraints and delays.

Advantages to the MNOs are:

- MNOs do not need to modify their existing service platform to accommodate the
 different service requirement by different MVNOs. MVNOs can then be more
 creative in their service offering.
- MVNE will act as a sales channel to MNOs to engage MVNOs in the various market segments.
- Lock-in aggregate minimum revenue commitment from MVNE

Advantages to the MVNOs are:

- Reduction of upfront Capex by using MVNE's platforms for service offering
- Reduced wholesales airtime costs achieved through economies of scale of hosting multiple MVNOs on a single platform
- A negotiating channel for smaller MVNOs to reach a wholesale agreement with the host operators (MNOs)

4) Comments to questions on options to enhance mobile competition and service innovation.

Below are our comments to the specific questions raised.

Q10a.

Views and comments from potential MVNOs on their level of interest to enter the mobile market and the target market segments of potential MVNOs (e.g. pre-paid or post-paid, niche or general consumer segments)

It is our opinion that if the entry barrier is low, ie minimum technical knowhow and cost. It can attract retail businesses, especially with large customer base, to become MVNO to enhance their product offering. Smaller MVNOs can also focus on the niche market if the startup cost is not too high for them.

Q10b.

Views from the industry on the interest and viability for a new MNO to enter the market, and whether the market environment, or technology or spectrum developments have changed since the 2013 4G spectrum auction that have made the business case attractive for a new MNO to enter.

The consumer market in Singapore is deemed to be saturated to warrant another MNO as their strategy for acquiring market share would be a price disruptive incentive. This may be one of factors that will discourage a fourth entrant to invest in the spectrum.

Q11.

The 'depth' of MVNO deployment envisaged by new entrants, in particular, the viability of a 'Heavy/Full' MVNO deployment model versus the other models, given that the former would have the most flexibility to differentiate its services to compete with the MNOs.

It is indeed the "Heavy/Full" deployment will give the freedom and flexibility to the MVNO to manage their own tariff plans, campaigns and customer relationship management inclusive specific and focused offers for festive, special occasion and etc. Our suggested independent platform takes away the burden of MVNO to become "Heavy/Full" MVNO and allow them to compete effectively.

Q12a

Possible mechanisms to implement an MVNO-hosting framework, and the relative merit and usefulness of each of these approaches.

One possible mechanism to implement a MVNO hosting framework would be the introduction of a neutral party with no vested interest in the mobile retail service sector.

This impartial and neutral party is ideal and recommended in order to ensure that there is no deliberate disadvantage towards the MVNO and gives the hosting party absolute control over all elements of critical service provisioning.

Q12b

The viability of a regulatory and/or voluntary commitment approach for MVNO-hosting, and the kinds of regulatory or incentives required and which spectrum bands to tie-in the MVNO-hosting incentives.

The regulator needs to view carefully the opportunity for an independently hosted MVNO via a neutral platform and architecture to ensure fair play and level technology and or hosting playing field.

Regulatory considerations could include a regularized and single party and or hosted architecture interconnected to all three MNOs simultaneously which functions purely as the hosting management company.

The model is simple in that a process is ratified to select a suitable, experienced and neutral platform or architecture supplier to then act as the bridge between the three MNOs and their respective MVNOs. This way, the interconnect and related areas of billing, rating, publishing, mediation, reconciliation etc is managed outside the MNO system entirely, allowing the MVNO to focus on their core business of brand, market and sales without any MNO bias.

Q13a

The output/outcome indicators to be imposed on MNOs that would be relevant for MVNOs

After the commencement of services by an MVNO, the MNO shall continue to provide its services to that MVNO without any interruption and shall not suspend / terminate its services without prior approval which must be in conjunction with regulatory sanctioned framework for such termination.

Even in the advent of such termination of service, the MNO responsibility shall extend to continuing services to the same customers despite terminating the MVNO, based on specific infractions, which then results in the MNO migrating those customers onto their own network ensuring no disruption to the customer experience.

Q13b

The level of wholesale pricing to the MNO's access network (in unit rates) that would justify the business case for market entry

The ability to evaluate the impact of wholesale rates on the MVNO business plan is essential for effective planning and negotiation. Any evaluation tool must be capable of examining different types of traffic and their associated wholesale rates in order to assess the impact on the financial performance of the business.

Q13c

The non-price terms and conditions imposed by MNOs, such as minimum volume or revenue commitments that would be acceptable for a positive MVNO business case

The established case studies for MNO contracts with MVNOs are always standard in relation to minimum contributions in terms of revenue contribution per annum or volume of minutes for on and off net voice, SMS and data services. The mode of collections on the minimum contributions ranges from taking deposits to receiving banker guarantees.

As for air time, this deposited amount can be used as upfront purchase of minimum airtime which is then deducted against the deposits collected. A top up is then called upon when the said airtime deposit is depleted up to say 70% of the deposit amount.

Q13d

Details of the business and financial model of potential MVNOs

The business model plays a number of essential roles in the planning and creation of a successful MVNO. The roles of the business model are as follows:

- Allows the entrepreneurs, founders or sponsoring business to assess whether the creation of an MVNO will create value for their own shareholders
- Identifies potential target host networks and facilitates the engagement and negotiation process with potential MNOs.
- Provides the MVNO network architecture and the starting point for developing an equipment vendor Request for Proposal and supporting subsequent vendor negotiations
- Provides the essential marketing program in managing the creation and launching of the MVNO
- Allows reseller model for MVNO to expand its business via multi tiers channel.
- Provides the information required to prepare an Information Memorandum to support the raising of the finance required to implement the project
- Provides grants and incentives for potential MVNOs to reduce their financial burden.
- Avoids high pre-payment to MNOs in executing the implementation of MVNOs.

Q13e

The ability of MNOs to differentiate classes of service and allow priorities to cater to the needs of government demand or other MNVOs

Assuming an incumbent operator or MNO sells their infrastructure to an MVNO, there could be different business models and agreements between incumbent and MVNO. Following are the most commonly used:

- MVNO can brand their services and sell them in the market and MVNE will help in providing those services to the end customer. Here, a fixed percent of commission will go to the MVNE.
- MVNO can buy products and services in bulk at special discounted prices and then brand them with their name and sell in the market.
- MVNO sells the products and services, and based on the usage generated by the end customers, MVNO pays an amount to the MVNE.

In all the cases, MVNO may be required to pay some amount of security deposit to the MVNE and then monthly settlement happens using simple reports generated by the MVNE.

Most of the MVNOs provide pre-paid services, which are handled in Pre-Paid system. In such case, MVNO functionality is achieved either using MVNE built-in functionality in the pre-paid system or by simply defining a separate service class. All the usage CDRs and other information is dumped into data warehouse from where reports can be generated to prepare invoice.

Q13f

Any other relevant considerations that IDA should take into account in structuring a framework to encourage the hosting of MVNOs

Regulatory fair play in wholesale pricing and management. Reducing the upfront burdens of the MVNO cash outlay. Provision of a centrally hosted and managed platform to enable the fair and equitable deployment of continued services throughout the MVNO life cycle.

5 Conclusion

We have interest to enter the mobile market either as MVNE or MVNO depending on IDA's guidelines for the technical platform and architecture for MVNO hosting. We strongly recommend the concept of MVNE that would able to speed up the offering on new services and promotions by MVNOs with minimum constraints. The viability of MVNE or MVNO is very much depend on the regulations and policy to be adopted.