

RE: Response to Public Consultation

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Summary of Major Points

The followings are a summary of the major points in our submission.

1. Not to mandate any particular standard for MTVS in Singapore (Section 2.3)

It is agreed that too much regulation on the industry may not be beneficial to the industry. However, Innoxius feels that an "invisible" hand approach may be necessary.

2. To impose minimum network coverage requirements of 95 per cent on multiplex operators (Section 2.4)

In addition to the network coverage requirement, Innoxius suggests that MDA should require multiplex operators maintain a minimum total bandwidth be available on their networks.

3. Not to mandate any QoS on picture quality and indoor coverage at this instance but will reserve the right to do so when necessary (Section 2.4)

Innoxius suggests that a timeline for indoor coverage be determined during the initial licensing process.

4. To issue 10-year multiplex licences, with an option to renew for a further five years, via a comparative tender process. To issue five-year niche broadcasting service licences (Sections 3.2 and 3.3)

Innoxius feels that MDA should mandate that multiplex operators should not be allowed to apply for service licenses. This will ensure that there will not be a conflict of interest situation if the multiplex operator also operates as a service provider on its network.

5. To require all multiplex licensees to offer capacity to third-parties on fair, reasonable and non-discriminatory conditions (Section 4.4)

Innoxius feels that there should be a guideline on the pricing for such capacity. MDA can setup an independent network and offers bandwidths for non-commercial FTA broadcast.



Statement of Interest

Innoxius is grateful for the opportunity to comment and to provide feedback on the proposed policy and regulatory framework for mobile broadcasting services in Singapore.

Innoxius, being a participant in the mobile television ecosystem, welcomes the public consultation and the upcoming commercial licensing.

Comments and Major Issues

1. Not to mandate any particular standard for MTVS in Singapore (Section 2.3)

It is agreed that too much regulation on the industry may not be beneficial to the industry. However, Innoxius feels that an "invisible" hand approach may be necessary.

Innoxius believes that if operators are not guided into a certain common standard, fragmentations within the industry will materialize. Operators will introduce their preferred standard and consumers will not be able to switch operators after having invested in a device. (e.g. CDMA phones will not work in a GSM network) There will be high switching cost for consumers and this will discourage competition at the service quality level.

Instead, if all service providers were on the same standard, consumers will be able to switch service providers easily. At this level, there will be price, service quality and content competitions. Economy of scale will lower the price of the handsets devices as manufacturers will mass produce standard devices for Singapore market regardless of operators. Operators will not need to commit to a large volume for devices upfront (as in the case of a fragmented market .) The industry will be efficient and consumers will benefit.

Instead of dictating a standard out front, MDA can provide a market share analysis of the standards available to operator candidates. During the tendering process, MDA can use the standard the operator is proposing as part of the determining factor. At this level, it makes good sense for all potential operators to have a common consensus and choose a common standard. No one will want to be the odd one out and be eliminated.

At this stage, Innoxius would like to propose that all 4 potential licenses be on the same frequency band. (Instead of 2 on VHF and 2 on UHF) The reason for this is to maintain the economy of scale for the market. Having 2 different frequency bands require manufacturers to produce 2 types of devices for the Singapore



market. This will increase the cost of the phones, network and services. Because it is not clear which operator will emerge the winner of the "frequency/ standard" race, consumers will wait on the side line before determining which service/ network to sign up for. This will result in a delayed take up and eventually adversely affect the successfulness of Singapore mobile television services.

2. To impose minimum network coverage requirements of 95 per cent on multiplex operators (Section 2.4)

In addition to the network coverage requirement, Innoxius suggests that MDA should require multiplex operators maintain a minimum total bandwidth be available on their networks.

The success of the service is determined by the content available on the broadcast. Multiplex operators rely on the broadcast service operators for business and revenue.

Even if there is 95% outdoor coverage, but only limited bandwidth available, this will result in very few channels being available for consumer (e.g.4 channels). Broadcaster will not be profitable if there are only a few channels available - consumers want choices and variety. Furthermore, multiplex operator will not be able to maintain broadcaster customers as the entire bandwidth is allocated to a single customer. Limited bandwidth equals bad service quality and low take ups leading to the industry's collapse.

On the other hand, by ensuring that a certain amount of bandwidth be available on the multiplex (e.g. at least 15 channels), broadcaster will have a service that is marketable. Consumer will have a greater variety of choices. In addition, the multiplex operator will have more bandwidth to sell – resulting in more customers and revenues. The industry will be vibrant and more likely to be successful.

3. Not to mandate any QoS on picture quality and indoor coverage at this instance but will reserve the right to do so when necessary (Section 2.4)

Innoxius suggests that a timeline for indoor coverage be determined during the initial licensing process.

Innoxius feels that at the tendering process, there should be timeline on the expectation for indoor coverage. This can set at a certain time frame into the 10 years. (e.g. 20% indoor coverage at 5th year, etc. . .)

If the tendering process is done this way, multiplex operator can better plan the investment and operation. Consumers can be assured of how the service quality



will improve over time. This will be better then having consumers/ subscribers complaint and operators rushing to do damage control.

Instead of mandating indoor coverage, MDA can give bonus points for proposal with indoor coverage commitment during the tendering process. Let the operators propose the indoor coverage rollout they are comfortable in committing to.

4. To issue 10-year multiplex licences, with an option to renew for a further five years, via a comparative tender process. To issue five-year niche broadcasting service licences (Sections 3.2 and 3.3)

Innoxius feels that MDA should mandate that multiplex operators should not be allowed to apply for service licenses. This will ensure that there will not be a conflict of interest situation if the multiplex operator also operates as a service provider on its network.

If the separation of the multiplex and service operating license is to ensure that the industry is not controlled, then the multiplex operator should not be allowed to compete with its customers.

In addition, there should be milestones in place during the 10 years for the operators to achieve. For example, by 5th year ,the multiplex operator should have achieve certain bandwidth quantity target. This is to discourage frequency or license "hogging".

Alternatively, MDA should issue more licenses and allow market factors to consolidate the industry. The objective is to create a vibrant industry. Having a limited number of licenses available will limit competition and discourage efficiency and innovation – especially if it is a duopoly.

If there are many licenses available, the entire ecosystem will benefit as content creator have more distribution options. The vendors will have more customers, devices manufacturers have more potential customers thus encouraging them to make more devices, translating to lower devices pricing. Competition among the multiplex operators will drive the capacity price down and this translate to a lower cost for service operators. This lower cost will be passed on to the consumers. The entire ecosystem will benefit as the competitions among the operators will encourage efficiency and innovation within the industry.

5. To require all multiplex licensees to offer capacity to third-parties on fair, reasonable and non-discriminatory conditions (Section 4.4)



Innoxius feels that there should be a guideline on the pricing for such capacity. MDA can setup an independent network and offers bandwidths for non-commercial FTA broadcast.

In addition to licensed multiplex operation, MDA should setup another multiplex for FTA/ industry promotion use. By having this platform available for budding content creators, MDA can promote the local ecosystem. Consumers will be able to tune into this free service and perhaps help to encourage consumers to buy mobile television enabled handsets. The objective is to let this free service drive the devices sales and help licensed operators by increasing their potential market size.

This platform can also act as a benchmark for service quality for the licensed operations.

Conclusion

Innoxius welcomes the opportunity to participate in the public consultation exercise. We have posted several feedbacks on how the mobile television industry should be regulated. We hope that our comments will be taken into consideration by MDA.