January 17th, 2008

Ms. Ling Pek Ling
Director (Media Policy)
Media Development Authority
Email: MDA_MTVS_Comment@mda.gov.sg

Dear Ms. Ling Pek Ling,

The FLO Forum would like to congratulate the Media Development Authority (MDA) for releasing such a comprehensive consultation paper on the topic of Mobile TV and thank the MDA for offering the industry the opportunity to provide comments on its *Policy and Regulatory Framework for Mobile Broadcasting Services in Singapore.* The FLO Forum is pleased to provide our comments on behalf of its 90+ industry members.

The FLO Forum is a contribution-driven international consortium of ninety-five (95) global industry members who span the entire mobile multimedia value chain. The FLO Forum mission is to promote the global open standardization of the MediaFLO™ system; to achieve the certification and testing of MediaFLO-based products and services; and to support legislative, regulatory and spectrum activities internationally for the wide adoption of mobile multimedia broadcasting services. Our global member companies are headquartered in Greater Asia (38), Europe (25), and in North America (32). Nearly every company pursues a technology neutral strategy towards the global mobile multimedia broadcasting market meaning that their products and service offerings support not only MediaFLO, but also, in various combinations ISDB/T, DVB/H, DMB.

MediaFLO is a mobile broadcast platform designed for the delivery of high-quality entertainment and information, including streaming video and audio, Clipcasting™ media, IP datacasting and interactive services. Invented for mobility, MediaFLO provides increased capacity and coverage, as well as reduced costs for the mass market delivery of multimedia content to mobile devices.

MediaFLO is build-upon an open and global set of standards supported by a large industry ecosystem and published by the Telecommunications Industry Association (TIA)[1]. MediaFLO is also included as Multimedia System M in an ITU-R Recommendation approved by the International Telecommunication Union Radio Communication Sector[2]. Finally, MediaFLO specifications are in the approval process at the European Telecom Standards Institute (ETSI) with the support of the TIA[3].

---

[1] TIA-1009 (Radio interface), TIA-1102 (Receiver minimum performance specification), TIA-1103 (transmitter minimum performance specification), TIA-1104 (Test application protocol) and TIA-1120 (transport specification), TIA-1132 (Repeater minimum performance specification), and TIA-1130 (Media Adaptation Layer specification) See https://www.tiaonline.org/standards/technology/tm3/.
[2] ITU-R Recommendation BT.1833 "Broadcasting of multimedia and data applications for mobile reception by handheld receivers" http://www.itu.int/rec/R-REC-BT.1833/en
[3] In May 2007, ETSI approved a new work item, "Forward Link Only Air Interface Specification for Terrestrial Mobile Multimedia Multicast," aimed at the publication of an ETSI technical specification for MediaFLO http://webapp.etsi.org/WorkProgram/Report_WorkItem.asp?WKI_ID=25905

The FLO Forum members support a variety of mobile broadcast technologies and stand in favor of the technology neutrality principle and therefore support the MDA position. The Mobile TV market has shown already that multiple technologies can co-exist and that market driven policies benefit the introduction of such a new market. As rightly pointed out by MDA in its consultation paper, future MTVS service provider will require new investments in terms of network, services and devices as well as a multitude of innovative multimedia content offerings in order to favor and accelerate market adoption by consumers.

The purpose of this letter is to encourage MDA to pursue its considerations toward the successful introduction of new mobile broadcasting services and to highlight the importance of technology neutrality along with a light touch regulatory environment and a flexible though predictable spectrum licensing process. These conditions will ultimately determine incentives for players to make the investments necessary for the adoption of Mobile TV as it is still a nascent service requiring the industry to commit to its success.

The FLO Forum overall agrees with MDA views especially with regards to technology neutrality and the availability of two UHF spectrum multiplexes. Both proposals will allow for a high level of competition and provide choices of multimedia services at reasonable costs for the consumers. This will help favor the rapid adoption of the MTVS market in Singapore.

The regulatory and licensing framework will be essential and minimum constraints should be set for the MTVS to evolve in a conducive and competitive environment. Experience internationally shows significant market interest in Mobile TV but it should be noted the general concern from industry that bottlenecks could arise from an overly restrictive regulatory environment. The FLO Forum therefore encourages MDA to continue seeking and taking the views of the wide range of industry players in the market, in particular service providers (e.g. existing audiovisual service providers and wireless carriers) as they are the stakeholders that will need to invest in this new service. We believe that such feedback will be useful to clarify and finalize the policy and regulatory framework for mobile broadcasting services in Singapore.

Finally, the FLO Forum would welcome the opportunity to provide MDA with further insight and input regarding regulatory issues via a face-to-face meeting in Singapore at your convenience.

Respectfully,

Kamil A. Grajski, Ph.D.
President, FLO Forum