

Business & Legal Affairs (Southeast Asia & Greater China)

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19 June 2014

Ms. Aileen Chia
 Deputy Director General (Telecoms and Post)
 Infocomm Development Authority of Singapore
 10 Pasir Panjang Road
 #10-01 Mapletree Business City
 Singapore 117438

Dear Ms Chia,

Consultation paper issued by the Infocomm Development Authority of Singapore entitled: Proposed Allocation of Spectrum for International Mobile Telecommunications (“IMT”) and IMT-Advanced Services and Options to enhance mobile competition -- 22 April 2014 (“Consultation”)

Viacom International Media Networks (“**VIMN**”) is a division of Viacom Inc. (NASDAQ:VIA, VIAB), a global media entertainment company best known for creating and operating many diverse entertainment media brands, including the MTV music channel, Nickelodeon kids and family channel, VH1, BET, Comedy Central and Paramount Pictures. VIMN represents all of Viacom’s international brands and businesses outside of the USA.

VIMN makes the following submission in respect of **Question 8** (3.5GHz band) of the Consultation.

Statement of Interest

Singapore has served as VIMN’s Asia regional headquarters for nearly two decades, encouraged by a generally open and transparent business climate and strong governmental support which is vital to promote growth of the media and infocomms industry. In Asia, VIMN owns and/or is authorized to distribute the following channels: MTV Asia, Nickelodeon Asia, Comedy Central Asia, MTV Live HD and Nick Jr. The MTV brand was first established in Singapore over 19 years ago, and quickly captured the imagination of our youths; while Nickelodeon has been in Singapore for over 16 years and today counts as a leading edutertainment offering for kids and preschoolers. Today, our channels and content are carried across the foremost pay TV operators in Singapore, including SingTel Mio; StarHub TV and Mediacorp Toggle.

The Authority is aware that the C Band satellite frequency is currently extensively used for the conduct of region-wide broadcasting activities throughout Asia. Huge numbers of Asians depend on C-band for their information and entertainment. In countries studied by CASBAA and Paris-based technology consultancy Euroconsult¹, it is found that as many as 30 million individual consumer households are estimated to watch TV through their own C-band dishes, and around 2,375 TV channel signals are transmitted on the C Band – a significant increase from around 950 in 2005.

¹ Copies of the full Euroconsult report “Assessment of C-Band Usage in Asia Countries” available here: www.casbaa.com/CBandAssessment

In particular, it should be noted that that our VIMN channel broadcast operations currently require the use of the extended C Band (further details below). We strongly believe it is important the Authority fully understands and assesses the local and regional implications of re-farming this frequency band to further the interests of the IMT industry; but is clearly to the detriment of the broadcast industry.

To this end, we would like to refer the Authority to the detailed and comprehensive submission made by the Cable and Satellite Broadcasting Association of Asia (CASBAA), of which VIMN is a constituent member. VIMN re-affirms the points set out in the CASBAA submission, which we trust presents a balanced and well-researched position on the collective concerns of the media industry at large.

Importance of satellite transmission via extended C band to Viacom's business

VIMN currently has two 24-hr programme channels, **MTV Live** and **Nick Jr**, which are transmitted to all regional Pay TV operators via the **ABS-2** satellite, utilizing a transponder bandwidth frequency that falls within 3,500-3,700 MHz frequency range. These channels are currently broadcast to various territories in the Southeast Asia region (including neighboring countries Malaysia and Indonesia), and are downlinked in Singapore by both SingTel and StarHub. Based on current findings and assessment made together with our satellite service provider ABS, we are concerned that some of the satellite transponders are 72 MHz wide, carrying dozens of channels, all of which may possibly be affected by interference so long as a single signal interference issue occurs anywhere within the transponder frequency band.

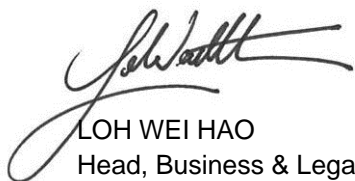
Accordingly, any action by the Authority to re-farm the extended C-band frequency will produce a real risk of interference to signal integrity and stability, potentially hurting our operations and business in Southeast Asia. Due to ongoing contractual and commercial arrangements, we have assessed it to be infeasible to move to another frequency in the short term. We are also informed of the increased incidence of rain fade and signal unreliability at higher frequencies, and other associated costs in moving above 3,700 MHz.

Further, the Authority is cognizant that the extended C-Band (3,400-3,600MHz) has traditionally been used for and is still very much in use for video broadcasting purposes. Any reduction in spectrum will limit channel providers' options as an international broadcaster and will ultimately restrict the capacity available to channel providers to launch new and compelling channels within Singapore and the region.

We seek the Authority's kind reconsideration before any decision is made in respect of re-farming the extended C band frequency. Meanwhile, in the absence of clear evidence showing the effectiveness of mitigation technologies (such as filters, and the impracticality of confining IMT systems to only "in-building" operations – please refer to CASBAA submission), we respectfully urge the Authority to continue reserving this 3,400-3,600 MHz band for use by satellite broadcast operations.

VIMN thanks the Authority for the opportunity to hear and consider industry players' legitimate concerns. We seek continued and open dialogues between the Authority and industry sectors which are affected by this proposed spectrum re-farming initiative.

Yours sincerely,



LOH WEI HAO
Head, Business & Legal Affairs (Asia)
Viacom International Media Networks