ASIA TELEVISION LIMITED

April 28, 2008

The Communications and Technology Branch Commerce and Economic Development Bureau 2/F, Murray Building Garden Road Hong Kong

Dear Sir/Madam,

Second Consultation on Development of Mobile Television Services

We, Asia Television Limited and Television Broadcasts Limited, welcome the Government's second public consultation on the development of Mobile TV services in Hong Kong.

However we believe that the Government may not have sufficiently considered several fundamental issues that affect the public interest.

Therefore, before responding to the specific issues raised in the Second Consultation, we would like to draw the Government's serious attention to these vital public interest issues.

Important public interest issues relating to the proposed Mobile TV implementation framework

- (1) The risks to the successful implementation of DTT by taking a UHF multiplex away from DTT in the first half of 2009.
- (2) The need to provide for Free-to-Air Television ("FTA TV") in the Mobile TV platform to cater for the public interest and to ensure the survival of FTA TV.
- (3) The negative commercial impact on the FTA TV operators by introducing Mobile TV so soon after the introduction of DTT and the consequential impact on the public interest.

Issue No. 1: Risks to DTT success of taking away UHF spectrum

We believe the consultation thus far has failed to adequately assess two potentially very large risks to the DTT development should one of the remaining two UHF SFNs be taken away from the DTT platform in the first half of 2009.

The first risk relates to technical difficulties associated with SFN implementation and the second risk relates to the public's expectations of the amount and quality of content on the DTT platform.

Risk of causing significant public dissatisfaction due to insurmountable reception problems in the overlap areas of the SFN network

The key problem associated with implementing a Single Frequency Network (SFN) rather than a Dual Frequency Network (DFN) or a Multiple Frequency Network (MFN) is that reception problems may arise in certain geographical areas (known as overlap areas) where signals arrive at the same frequency from two or more transmission sites.

The Government has officially recognized this in its DTT implementation and therefore determined that the existing four analogue services must be put on a MFN rather that the riskier SFN. Furthermore, as alluded to in Paragraph 3.7 of the Second Consultation paper, the use of the remaining two SFNs can only be confirmed after the two broadcasters have confirmed the satisfactory implementation of the existing SFNs.

What has not been recognized, however, is that the reception problems associated with the SFN will increase rather than decrease over time as the number of households falling into the overlap areas will increase as more and more transmission sites are brought into service and as more and more buildings complete their In Building Coaxial Cable Distribution Systems (IBCCDS).

In view of the public being rather unforgiving if the authorities do not fully assess the impact of any consequential problems, it would be prudent that a decision on the satisfactory operation of the SFN be made only after the scale of the problem has been adequately and accurately assessed.

After the Government and the two broadcasters are satisfied that they have a fairly good estimate of the number of households in the overlap areas that are experiencing SFN reception problems, a decision will have to be made on whether the population of these problematic reception households justifies the use of a Dual Frequency Network, in which case both the remaining two multiplexes will have to be allocated to the existing SFN services.

We are of the view that a reasonable estimate of the number of problematic reception households can only be made when all the seven major permanent hilltop sites together with half of the currently estimated 22 gap fillers have been brought into service.

In assessing this risk, we would also like to point out that the only practical and effective way to solve SFN reception problems is by deploying additional frequencies. Building more gap fillers on the same frequency is more likely to compound the problem rather than reduce it.

Furthermore, it must be our aim in the public interest to ensure that DTT actually reduces the number of households in the problematic reception areas compared to analogue reception, which is still a cause of concern to the authorities.

Risk that reducing the available SFNs for new DTT programmes / HDTV from four to three may cause the amount of new content / HDTV to fall short of public expectations, making analogue switch off impossible except by forced regulation

The amount of spectrum currently allocated for new programmes / HDTV on the DTT platform to encourage DTT take-up is by no means large compared to markets where DTT has been a success.

The two broadcasters are already finding that their allocation of one SFN each does not fully meet their needs. One broadcaster has to switch off some of its SDTV services when HDTV is being offered. Another is not satisfied with the sacrifice to its SDTV picture quality necessitated by the provision of a high quality HDTV service. Also, no spectrum has been allocated for provision of HDTV for the English language service where there is ample supply of good quality HDTV content.

Adequate spectrum for new programmes / HDTV is the <u>only way</u> to ensure high DTT take up rate. No amount of promotion can convince the public to take up DTT if the amount of programmes / HDTV being offered on the DTT platform falls short of their expectations.

There is generally high confidence that the Beijing 2008 Olympics would be a major driver of DTT take-up, but based on market surveys and public feedback thus far, there is genuine concern that much more would be needed to encourage DTT take-up beyond the Beijing 2008 Olympics.

Taking away one of the two remaining SFNs is reducing by 50% the available undeployed resources to encourage further DTT take-up. This could be a fatal and irrecoverable public policy mistake as spectrum given away to Mobile TV cannot be taken back.

Analogue switch off frees up a tremendous amount of spectrum for DTT, Mobile TV and other services, all of which bring about much greater economic benefits to society when it has been achieved.

We urge the Government to earnestly consider whether, on balance, the benefit of being able to achieve analogue switch off in 2012 is greater than the benefit of being able to offer more Mobile TV services in the near future through allocating one of the precious DTT UHF multiplexes to Mobile TV before analogue switch off has been achieved.

Furthermore, in view of the public importance of achieving analogue switch off in 2012, we believe that it would be an unsafe public policy to make a decision to take away 50% of the remaining spectrum from DTT before the Government and the broadcasters are fully confident that high DTT adoption can be achieved with just three SFNs.

Issue No. 2 The need to provide for FTA TV in the Mobile TV platform to cater for the public interest and to ensure the continued survival of FTA TV in the highly competitive media world

Experience from actual implementation in South Korea clearly indicates that when the concept of Mobile TV is introduced, the public has an expectation that FTA TV would be available on Mobile TV.

This is likely to be even more so in Hong Kong because Hong Kong has probably the highest percentage share of total TV viewing concentrated on FTA TV among all the advanced economies in the world.

This is also to be expected because of the following reasons:-

- (a) Experience in all countries indicate that one of the key values that Mobile TV brings to the public is to be able to view news and major events as they are happening even if one is out-of-home and FTA TV is usually the public's most relied upon source of news and major event live coverage.
- (b) With today's busy lifestyles, the public want the convenience of being able to watch their home TV while they are out-of-home.
- (c) FTA TV is the public's largest and most preferred provider of local Cantonese language content.

Other than to satisfy the public's likely requirements, there is also another fundamental reason for ensuring that FTA TV has access to the Mobile TV platform.

We believe that Mobile TV has the potential to be a disruptive technology that brings about so many unique new benefits that it threatens services that rely entirely on older technology.

The main unique benefit of Mobile TV is its convenience and handy availability. The user is able to access Mobile TV everywhere (out-of-home, in home, while stationary or while moving) and to be able to have the receiving device at their side all the time. This is something that normal terrestrial TV cannot offer.

Secondary unique benefits associated with Mobile TV relate mainly to the possibility of integrating Mobile TV into existing Mobile phone devices, thus bringing about much more convenient interactivity (due to easy availability of the return path) and enhanced on-demand services thus enabling catch-up TV for example.

Hong Kong is a small market, yet the public demands very high quality locally produced content in the Cantonese language. To provide high quality locally produced content for a small market based on advertising revenue alone is extremely challenging.

Furthermore, the advertising market is becoming more competitive due to expansion of media choices particularly the Internet. Thus the FTA TV business model is extremely fragile in Hong Kong.

If a potentially disruptive technology like Mobile TV is introduced without ensuring that FTA TV's participation is justifiably provided for, this could threaten FTA TV's survival or at the very least result in the degradation of FTA TV services due to the diminished economic ability of FTA TV operators to invest in its content. This scenario would be detrimental to the public interest.

Thus, it is our view that giving away part of a very scarce public resource (spectrum) without ensuring availability of Free TV is against the immediate public interest (availability of their most frequently watched FTA TV) and also the long term public interest (survival and quality of FTA TV).

Even in larger markets such as Japan and South Korea where the survival of FTA TV is not so precarious due to small market size, these technologically advanced jurisdictions have recognized the public interest and provided for FTA TV to exist on Mobile TV before or at the same time as Mobile TV is introduced for Pay TV.

In fact the potential value to the public of Mobile TV has been recognized in the DTT implementation process, because mobile reception was one of the assessment criteria used when evaluating the various DTT standards.

Unfortunately, none of the DTT standards have provided satisfactory mobile performance compared to a proper Mobile TV standard.

Therefore, it is necessary to provide for the availability of FTA TV on Mobile TV in the Mobile TV implementation framework.

We would propose that this is achieved through a "Must Offer" provision whereby the Mobile TV licencee must offer on reasonable terms (to be arbitrated by OFTA if necessary) sufficient access to Mobile TV spectrum to cover at least the existing two Cantonese FTA TV services or at least one-third of the available spectrum, whichever is greater.

Other than the public interest issues mentioned above, this is only fair as existing FTA TV operators must also offer access to their hilltop transmission sites to the future Mobile TV operator.

<u>Issue No. 3 Negative commercial impact on FTA TV operators and consequential public interest impact</u>

The two FTA TV operators have invested or will soon invest in total more than one billion dollars in developing DTT in Hong Kong. There is no immediate economic return

of significance. This investment enables analogue TV to be eventually switched off and huge economic benefits to accrue to the Government (via spectrum utilization fees). The public will also benefit from new / improved services.

Mobile TV (even with FTA TV provided for) will inevitably introduce more competition for eyeballs and advertising dollars thus impacting the revenue of FTA TV. Furthermore, the FTA TV operators' ability to invest in Mobile TV is greatly diminished by having already invested so much money in DTT. Finally, the public has yet to fully grasp the meaning of DTT. The introduction of another new technology like Mobile TV may create difficulties in public comprehension and cause confusion.

Thus, the timing of Mobile TV launch in the infancy of DTT development has potentially detrimental effects on FTA TV and as pointed out earlier, this has long term damaging effects to the public interest.

We therefore urge the Government to consider to introduce Mobile TV only when at least 50% of households have taken up DTT.

SUMMARY OF ISSUES AND BROADCASTERS' POSITION

In summary, we urge the Government to seriously consider the three public interest issues that we have raised above and consequentially, revise its Mobile TV implementation framework as follows:-

- (1) Not to allocate any of the UHF spectrum (ie. any of the two remaining SFNs) to Mobile TV until a formal review of the problem areas of SFN operation and of the progress of DTT adoption in 2011.
- (2) If spectrum is released in Band III, or any other band other than UHF (such as L band or S band) to make a "Must Offer" provision covering at least the two existing FTA TV Cantonese services or one third of available spectrum, whichever is greater.
- (3) To consider to launch Mobile TV only after DTT take up rate has reached at least 50% of households.

We will now respond to the specific issues raised in the Second Consultation

RESPONSE ON SPECIFIC ISSUES IN SECOND CONSULTATION

Chapter 3: SPECTRUM AVAILABILITY

Key point:

We welcome your views on the allocation of one multiplex in UHF Band and two multiplexes in Band III for the development of Mobile TV services. We also welcome your views on the release of frequency spectrum on L Band and S Band for the purpose.

As stated above, we are of the view that spectrum in the UHF band should NOT be released for Mobile TV until a formal review in 2011.

This review should consider the following issues:-

- (1) Whether the extent of SFN reception problem areas justifies the use of a DFN.
- (2) Whether by deploying just three SFNs, Government and the broadcasters are fully confident of achieving sufficiently high DTT penetration to be able to announce an analogue switch off date in 2012.
- (3) Whether the use of a UHF multiplex for Mobile TV can be effectively coordinated with the mainland authorities as higher Effective Radiated Power may be deployed for Mobile TV.

Band III may be used for Mobile TV without affecting DTT adoption. We support the use of Band III for Mobile TV as an interim solution before any UHF spectrum is released for Mobile TV, subject to the following considerations:

- (1) Mobile TV even on Band III should only be launched when DTT take up rate reaches 50% of all households in order to allow sufficient time for DTT to be fully understood and accepted by the public.
- (2) A "Must Offer" condition must be attached to the Mobile TV license requiring the licensee to offer on reasonable terms (to be arbitrated by OFTA if necessary) sufficient spectrum to carry the 2 existing Cantonese FTA TV services or one third of the total available Mobile TV Spectrum, whichever is greater.

Regarding the use of L Band, we agree that it should be reserved subject to further market studies and responses.

As for S Band, we believe that its use together with the UHF band (when and if it is released after the appropriate reviews in 2011) could enable the Hong Kong Mobile TV network to integrate with the Mainland's national Mobile TV network which appears to be based on using the S Band, provided the same standard as the Mainland is deployed.

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S Band would work hand-in-hand with UHF Band to achieve excellent coverage in both sub urban / rural areas and urban areas.

The benefits of integrating with the Mainland would be very significant both for network operators and content providers and the value to both Mainland and Hong Kong users of such integration would be greater content portability and utility of their Mobile TV devices.

Chapter 4: SPECTRUM ALLOCATION

Key Point:

We welcome your views on whether the pro-Mobile TV approach should be adopted, whereby at least 50% of the transmission capacity should be used to carry Mobile TV content.

It is our view that the spectrum to be released should be allocated primarily for the development of Mobile TV services and the spectrum usage policy should be consistent with the DTT spectrum usage policy, whereby at least 75% of the transmission capacity should be used to carry the primary service for which the spectrum was allocated in the first place. Thus for the spectrum allocated for Mobile TV, at least 75% should be used to carry Mobile TV content. The remaining capacity can be used for ancillary services.

However, it is our view that the TA should specify the permissible types of ancillary services and furthermore such ancillary services must not include DTT. In addition, any ancillary services should be subject to their respective applicable licensing regimes.

Chapter 5: SPECTRUM ASSIGNMENT

Key Point:

We welcome your views on the adoption of market-based approach for the development of Mobile TV services and the assignment of spectrum and the levy of Spectrum Utilization Fee through auction.

We agree that the spectrum allocated for Mobile TV should be assigned through auction. We endorse the market-based approach and support the TA stance that simple pre-qualification criteria should be adopted and that ownership or cross-holding restrictions should not be imposed on Mobile TV operators in line with the light-handed approach.

Chapter 6: LICENSING ARRANGEMENTS

Key point:

We welcome your views on the above two light-handed regulatory approaches, and your suggestions on which approach should be adopted for development of Mobile TV.

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Of the proposed two light-handed approaches, we prefer the self-regulatory approach versus the BO approach.

Under the self-regulatory approach, the contents of Mobile TV services should be subject to regulation by general laws (as opposed to under the BO) and by an industry code of practice for voluntary compliance which should include access control mechanism for adult content and general principle of good practice in conducting business and providing content.

The trend of media technology development is so rapid that many inconsistencies and flaws in existing media regulations have been exposed. For example, the freedom accorded to Internet services means that it is possible to offer a complete Pay TV service (as an operator is currently doing) without requiring a Pay TV licence. The prevalence of unregulated 3G and Wireless services has rendered it inappropriate to regulate Mobile TV like traditional broadcasting, thus calling for a light-handed approach.

Likewise, a light-handed approach applied to Mobile TV would necessitate a similarly light-handed approach to be applied to terrestrial TV broadcasting. It is hoped that the Government will learn the lessons from the inconsistency between the Pay TV regulations and the freedoms accorded to the Internet and thus have the foresight to also begin the process of making the terrestrial TV broadcasting regulations as light-handed as the Mobile TV regulations are proposed to be.

<u>Chapter 7:</u> ACCESS TO HILLTOP TRANSMISSION SITES AND GEOGRAPHICAL COVERAGE FOR BROADCAST-TYPE MOBILE TELEVISION

Key point:

We welcome your views on the requirement that Mobile TV services should provide the same geographical coverage as free-to-air broadcasters.

It is our view that Mobile TV services should provide at least the same geographical coverage as existing DTT fixed reception services.

Mobile TV will require a higher signal level than current DTT services to provide similar coverage as that of existing mobile phones. Such coverage should accommodate rural, urban and suburban locations including country side and remote island areas, closed areas (basements, shopping malls, MTR), ferryboats, etc.

Consumers of Mobile TV will also expect and require similar or improved quality of service to that currently provided by the existing cellular 3G mobile phones services if the Mobile TV service is charged for.

The use of existing television hilltop transmission sites is supported and is considered essential for Mobile TV operators in the UHF band to ensure protection of reception to current analogue and DTT services from possible interference and to minimize the number of gap filler sites required.

We would however like to point out that the existing hilltop infrastructure is only able to accommodate the remaining two unallocated UHF multiplexes. The use of Band III multiplexes

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would require additional infrastructure upgrade to allow these services to be accommodated at the existing hilltop sites.

Chapter 8: WORK PLAN

Given all our comments above including particularly the need for careful review in 2011 before any UHF spectrum is allocated and the need to delay Mobile TV introduction until DTT adoption has reached at least 50%, the currently proposed Work Plan would have to be considerably pushed back.

Yours sincerely

On Behalf of Asia Television Limited

On Behalf of Television Broadcasts Limited

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