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Ms. Aileen Chia
Deputy Director General (Telecoms & Post)
Infocomm Development Authority of Singapore
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Dear Ms Chia,

ALLOCATION OF AN ADDITIONAL 2 X 5 MHZ OF 1800 MHZ SPECTRUM

We refer to the consultation paper "Allocation of an Additional 2 x 5 MHz of 1800 MHz Spectrum", issued by the Authority on 3 December 2010 ("the Consultation Paper"). The views of StarHub Mobile Pte Ltd ("StarHub") on this matter are set out below.

BACKGROUND:

The last comprehensive allocation of cellular mobile spectrum took place in March 2008. StarHub supports the manner in which that spectrum allocation took place: the objectives of the allocation were clear; a number of different spectrum blocks were made available to operators; and there was sufficient spectrum for all of the mobile industry.

However, since the March 2008 spectrum allocation, there has been less certainty in the Authority's spectrum allocation policy. In December 2008, the Authority put out for allocation one lot of 1800 MHz spectrum. In June 2010, the Authority released a consultation paper in regard to the "Spectrum Framework for Fourth Generation (4G) Mobile Communication Systems", and a decision on this consultation is still pending. In October 2010, the Authority allocated three lots of 3G spectrum. In its recent Consultation Paper, the Authority has proposed releasing an additional lot of GSM1800 spectrum.

StarHub submits that care is needed in spectrum allocation decisions, given the long-term impact of such decisions, and the costs associated with spectrum. Allocating spectrum in an ad-hoc manner, in small quantities, has a number of potential disadvantages, including:

 It creates confusion as to what the Authority's longer-term policy is in regard to spectrum allocation;



- It may mean that spectrum is allocated in a manner that is inappropriate for new and emerging technologies; and
- Releasing spectrum in small quantities can creates an artificial "shortage" of spectrum, potentially driving up the cost of acquiring spectrum.

StarHub therefore submits that spectrum allocations should take place as part of a longer-term plan, with sufficient quantities of spectrum being made available to meet the needs of the mobile industry.

QUESTION 1: IDA INVITES VIEWS AND COMMENTS ON WHETHER IDA SHOULD MAKE AVAILABLE ONE 2X5 MHz ADDITIONAL 1800 MHz SPECTRUM FOR PCMTS FOR ALLOCATION:

During the March 2008 spectrum allocation, the Authority stated that "to cater to future demand, IDA will reserve 3 lots of 1800 MHz spectrum, as well as the remaining 1 lot of EGSM spectrum, for allocation after this Auction if it deems necessary. The reserved spectrum may also be made available for other uses, such as technical or market trials, research and development, mobile equipment testing, etc."

It is unclear why the Authority is now moving away from this position.

Given the emergence of mobile data, mobile applications and mobile entertainment, StarHub believes that it is necessary to reserve at least 2 lots of 1800 MHz spectrum for such uses as technical or market trials, research and development, mobile equipment testing, etc. We are concerned that, with the allocation proposed in the Consultation Paper, sufficient spectrum would no longer exist in the 1800 MHz band for these uses.

In addition, as outlined above, StarHub would respectfully suggest that releasing spectrum in a piecemeal and ad-hoc manner may drive up the cost of acquiring spectrum, and may also create problems for future spectrum allocations. We would also note that the value of the 1800 MHz spectrum will be strongly influenced by the Authority's final decision in regard to the Spectrum Framework for 4G Mobile Communication Systems.

StarHub would therefore propose that the allocation of the 1800 MHz spectrum should be delayed, pending the final decisions about the allocation of 4G spectrum. We further submit that any allocation of spectrum should also involve the allocation of the remaining one lot of EGSM spectrum.

This approach would have a number of advantages:

• It would provide clarity on the Authority's longer term policy in regard to spectrum allocation. This would, in turn, facilitate operators' planning of future spectrum needs;



- It would enable operators to value the GSM1800 spectrum in light of the Authority's decision on 4G spectrum;
- It would avoid a piecemeal allocation of spectrum; and
- It would avoid creating an artificial shortage of spectrum, by allowing a wider allocation of spectrum.

We propose this approach for the Authority's consideration.

QUESTION 2: IDA SEEKS VIEWS AND COMMENTS ON THE PROPOSED ALLOCATION PARAMETERS:

As noted above, StarHub has some concerns with the proposed allocation of an additional 2×5 of GSM1800 spectrum. We believe that it would be more appropriate to allocate this spectrum:

- (i) Following the conclusion of the Authority's consultation on the "Spectrum Framework for Fourth Generation (4G) Mobile Communication Systems"; and
- (ii) As part of a wider spectrum allocation, that includes the allocation of the remaining one lot of EGSM spectrum.

We believe that this process would be more effective than an ad-hoc and piecemeal allocation of spectrum.

In this response, StarHub has limited its comments to the issues highlighted in the Consultation Paper. Should the Authority decide to release an additional lot of GSM1800 spectrum (as the Consultation Paper proposes), StarHub would decide – at that time – whether it wished to participate in the allocation.

StarHub is grateful for the opportunity to comment on this matter.

Yours Sincerely, For and on behalf of StarHub Mobile Pte Ltd

Tim Goodchild

Head (Government & Strategic Affairs)