

**PROJECT NIMS INDUSTRY DIALOGUE ON  
NIMS-CONNECT REQUIREMENT**

**Submission by the StarHub Group to the  
Info-communications Development Authority of Singapore**

**6 January 2011**

**STATEMENT OF INTEREST**

StarHub Ltd is a Facilities Based Operator (“FBO”) in Singapore, having been awarded a licence to provide public basic telecommunication services (“PBTS”) by the Telecommunications Authority of Singapore (“TAS”, the predecessor to IDA) in May 1998.

Nucleus Connect Pte Ltd, a wholly-owned subsidiary of StarHub Ltd, incorporated in April 2009, is the appointed Operating Company of the Next Generation Nationwide Broadband Network.

StarHub Mobile Pte Ltd is a wholly-owned subsidiary of StarHub Ltd. StarHub Mobile Pte Ltd was issued a licence to provide public cellular mobile telephone services (“PCMTS”) by the TAS on 5 May 1998. StarHub launched its commercial PBTS and PCMTS services on 1 April 2000.

StarHub Ltd acquired CyberWay (now StarHub Internet Pte Ltd) for the provision of Public Internet Access Services in Singapore on 21 January 1999.

In July 2002, StarHub Ltd completed a merger with Singapore Cable Vision Limited to form StarHub Cable Vision Ltd (“SCV”). SCV holds a FBO licence and offers broadband and cable TV services.

StarHub Online Pte Ltd is a wholly-owned subsidiary of StarHub Ltd. StarHub Online Pte Ltd was issued a licence to provide Public Internet Access Services in Singapore on 22 February 2005.

This submission represents the views of StarHub Ltd, StarHub Mobile Pte Ltd, StarHub Internet Pte Ltd, StarHub Online Pte Ltd, and StarHub Cable Vision Ltd.

## EXECUTIVE SUMMARY

StarHub welcomes the opportunity to provide comments on the Industry Dialogue on the NIMS-Connect Requirement (the “Industry Dialogue”).

The Industry Dialogue proposes that Retail Service Providers (“RSPs”) who are Nationwide Subscription TV licensees (“Nationwide RSPs”) will have to “*ensure that the services which they provide over the Next Gen NBN can be received by consumers on the NIMS CFSTBs, in a non-discriminatory manner.*” As an RSP, StarHub is generally supportive of the approach, as it benefits consumers, allowing them to receive services on the NIMS Common Featured Set-Top Box (“CFSTB”) in a non-discriminatory manner.

However, there are a number of uncertainties in regard to the proposed obligation, which would impact on the RSPs. These uncertainties include:

- The additional costs associated with providing such services over the Next Gen NBN;
- The lack of visibility as to the technical standards for the NIMS CFSTB, which could have a wide-ranging impact on the ability of RSPs to provide differentiated services;
- The lack of visibility as to the cost and services to be offered by the (yet-to-be appointed) NIMSCo;
- The methods that will be used to address the complexity of operating over the multi-layered Next Gen NBN;
- The technical feasibility and interoperability issues associated with NIMSCo, and other IPTV RSPs, as the NIMSCo platform and NIMS CFSTB standard are not yet confirmed, and IPTV standards are still evolving; and
- The legal issues associated with the rights in making content available over the Next Gen NBN and the NIMS CFSTB.

StarHub would also suggest that RSPs should be given incentives to moving customers to use the NIMS CFSTB, given the additional costs and complexity of such a move.

We would also emphasize that the regulatory obligations referred to in the Industry Dialogue will have a significant impact on NIMSCo and the bids made under the Project NIMS RFP. It is therefore critical for the regulatory issues discussed in the Industry Dialogue to be resolved well before the submission of RFP bids (and for

RFP bidders to be able to take the regulatory decisions into account in their RFP bids).

StarHub's detailed comments on the Industry Dialogue are set out below.

#### **DETAILED STARHUB COMMENTS:**

***Clause 2.2.2: "Respondents also suggested that the common environment should be extended to the mobile platform as well, allowing content and applications to be displayed on mobile devices."***

Great care would be needed with such a move. Unlike the Next Gen NBN – which is largely funded by the Government - the mobile networks in Singapore were funded by private shareholders, operating in a free market. These networks have every right to structure their networks and services as they see fit. Denying these operators the ability to run their networks as they see fit would represent a major disruption to Singapore's economic environment.

We would also note that the cellular mobile market is open and competitive. There are no indications of any market failure; and no barriers to an individual mobile operator adopting a common environment, should it so wish.

***Clause 2.2.3: "most respondents highlighted concerns over OTT and DTT. Respondents cited that OTT support would add cost and complexity to the NIMS CFSTB. In addition, support for unmanaged OTT services will likely cause a diversion of revenue streams from the NIMS Ecosystem."***

Given this feedback, StarHub would respectfully suggest that the Authority should take this opportunity to remove OTT and DTT from the NIMSCo RFP. Such a move would remove cost and complexity from the RFP, and would be welcomed by NIMSCo bidders. As a minimum, StarHub strongly believes that the NIMSCo RFP should be amended to specify the DVB-T standard to be adopted as part of Project NIMS.

***Clause 3.4.1: "Currently, the local IPTV market is experiencing some degree of fragmentation as each RSP has chosen to adopt an operator-specific platform and STB."***

StarHub would respectfully note that this statement can be made of almost every IPTV market in this world. This can be partially attributed to the fact that IPTV standards are still evolving. We would highlight that allowing operators to choose their own IPTV standards can lead to more vibrant customer choice and innovation. Such an arrangement also ensures that, if a particular standard does not become widely-adopted, the entire country is not locked into the wrong standard, thereby requiring the entire country to make a costly change to its standards. Having a single mandated standard carries significant risks (particularly given the nascent stage of IPTV development), and we believe that this point must be kept in mind when considering Project NIMS.

***Clause 3.4.1: “If left unaddressed, this situation would result in consumers having to choose between RSPs or having multiple STBs within the home.”***

We note that this statement does not take into account the cross-carriage regime being implemented by the Media Development Authority (“MDA”) in regard to exclusive content. MDA has stated that the cross-carriage regime is intended to avoid customers having to choose between RSPs or to have multiple STBs. We respectfully suggest that the NIMS-Connect Requirement must be considered in light of MDA’s cross-carriage regime.

***Clause 4.2.1: “IDA and MDA are in the process of considering regulatory options to enhance the value proposition that NIMS CFSTBs would bring to consumers.”***

The Authority has issued its RFP for the establishment of NIMSCo. It is clear that the regulatory options referred to in this paragraph will have a significant impact on the business of NIMSCo. StarHub therefore strongly submits that:

- (i) The regulatory options referred to in the Industry Dialogue must be clarified and resolved well before the closing of the NIMS RFP; and
- (ii) Bidders in the NIMS RFP must be given sufficient time to factor the finalised regulatory obligations into their proposals.

***Clause 5.1.3: “Each consumer will be provided greater flexibility to obtain his/her desired content, applications and services from a single NIMS CFSTB.”***

We would respectfully note that, if the functionality of the NIMS CFSTB is limited by the standard, this would lead to limited service differentiation among the RSPs and choices for customers. This would also stifle innovation.

***Clause 6.1.1: “IDA and MDA envisage that there may be a need to recommend technical standards for compliance by NIMS CFSTBs.”***

It is unclear from this statement:

- Who would recommend the technical standards (and it is conceivable that the NIMS Infrastructure Provider or the NIMS Panel could carry out this role);
- How the formulation of the recommended technical standard would be carried out; and
- Whether compliance with the recommended technical standard would be mandatory by all IPTV operators.

We respectfully submit that these issues need to be clarified.

*Clause 6.1.2: “there may also be a need to require RSPs who are Nationwide Subscription TV licensees (“Nationwide RSPs”) to ensure that the services which they provide over the Next Gen NBN can be received by consumers on the NIMS CFSTBs, in a non-discriminatory manner.”*

StarHub understands the intended objective of the proposed obligation – to ensure that customers are able to receive services on the NIMS CFSTB, in a non-discriminatory manner. As an RSP, StarHub is generally supportive of the objective.

However, StarHub has considerable experience with the content market, and also with the issue of cross-carriage. On this basis we would highlight the uncertainties that exist in regard to the proposed obligation, which would impact on the RSPs. These uncertainties include:

- The Industry Dialogue highlights that there will be additional costs in repurposing content for display over the NIMS CFSTB. It is likely that Nationwide RSPs would also have to incur additional costs in complying with the proposed obligations, in establishing a NIMS-compliant video headend / backend system (or acquiring services from a party holding such infrastructure). It is unclear what those costs would be, or how they could be recovered by Nationwide RSPs.
- Bids have yet to be submitted as part of the Project NIMS RFP, and technical standards for the NIMS CFSTB have not been specified in the NIMS RFP. Nationwide RSPs therefore lack visibility as to the technical standards for the NIMS CFSTB. This impedes the RSPs’ ability to plan and introduce new services. It is unclear how the technical standard chosen by the NIMSCo for the NIMS CFSTB would impact on the commercial and technical viability of Nationwide RSPs, who have to comply with such as yet unknown standards. There is also a lack of clarity on timelines of when the standard would be finalized and adopted.
- Bids have yet to be submitted as part of the Project NIMS RFP. Nationwide RSPs therefore lack visibility as to the services to be offered by NIMSCo (and the charges for those services). Again, it is unclear how this will impact on the commercial viability of Nationwide RSPs.
- Operating through the different layers on the Next Gen NBN can create some delays and inefficiencies (given the number of different entities involved in delivering a single service). Creating NIMSCo has the potential to create an additional layer, with the disadvantages noted above. It is currently unclear what methods will be used to address the complexity of operating over the multi-layered Next Gen NBN.

- As noted above, the NIMS Infrastructure Provider has yet to be appointed. Therefore the technical feasibility and interoperability issues associated with NIMSCo and other Nationwide RSPs, and the NIMS CFSTB cannot be assessed. This creates a significant risk element.
- Content providers will typically licence an operator to carry content within a particular territory, over that operator's network, to that operator's own customers. It is unclear whether content providers will allow operators to deliver content via NIMSCo and/or another operator's IPTV Infrastructure and the NIMS CFSTB. Alternatively, content providers may charge an additional amount for these additional rights. Again, this could impact on the Nationwide RSPs' commercial viability or lead to increase in charges to the end consumer

StarHub would respectfully submit that these matters need to be clarified, in order to allow operators to consider the potential impact of the proposed obligations.

StarHub would also suggest that RSPs should be given incentives to encourage customers to use the NIMS CFSTB, given the additional costs and complexity of such a migration. We respectfully suggest that such incentives would be more effective than imposing regulatory obligations on operators.

***Clause 7.1.1: "It is envisaged that the proposed measure will be applied on all NIMS CFSTBs and Nationwide RSPs providing IPTV services over the Next Gen NBN."***

If there is a proliferation of niche IPTV licensees (who – by definition – would not be subject to this regime), this would defeat the objectives on the Authority's regime. It is unclear what would happen in these circumstances.

***Clause 7.2.1: "some degree of repurposing of content, applications and services would be required of Nationwide RSPs to make these content, applications and services available on NIMS CFSTBs, insofar as the NIMS CFSTBs are able to technically support these services or features."***

This repurposing would require the Nationwide RSPs to incur additional costs, and would increase the level of commercial uncertainty surrounding the delivery of IPTV services. In addition, as noted above, a Nationwide RSP may not have sufficiently broad rights to legally repurpose content (which will almost certainly belong to a third-party content provider). It is unclear from the Industry Dialogue what would happen in this event.

***Clause 7.2.2: "IDA and MDA may allow Nationwide RSPs to apply for exemptions for content, applications and services for which the repurposing process would pose significant technical challenges."***

If exemptions are to be granted to content, applications and services, this could well lead to uncertainty as to the exact obligations on Nationwide RSPs from the technical, legal and commercial perspectives. If this regime is to be implemented, StarHub

would strongly encourage the Authority to detail the basis on which such exemptions will be granted.

***Clause 7.2.3: “IDA and MDA envisage that these technical challenges will be mitigated as the capabilities of NIMS CFSTBs are upgraded over time.”***

StarHub would respectfully note that there is no *a-priori* reason why technical challenges will decrease over time. It is as equally likely that, over time, the increasing sophistication of services and STBs will increase the technical challenges involved in repurposing content.

***Clause 7.3.2: “for the NIMS CFSTB to receive services from Nationwide RSPs, these Nationwide RSPs will need to have a NIMS-compliant video headend / backend system.”***

StarHub would respectfully note the need to establish a NIMS-compliant video headend / backend system. Given that the NIMS standard has yet to be set, the cost implications of this obligation are unclear.

***Clause 7.3.3: “Nationwide RSPs are not required to procure services from the NIMSCo in order to comply with the proposed measure. Nationwide RSPs may choose to build their own NIMS-compliant infrastructure or buy any required service components from the NIMSCo or other service providers that operate NIMS-compliant infrastructure as they deem fit.”***

StarHub understands that Nationwide RSPs would not necessarily have to procure services from NIMSCo. However, requiring Nationwide RSPs to either build their own NIMS-compliant infrastructure or to buy services from a NIMS-compliant infrastructure operator would: (i) create additional costs for Nationwide RSPs; and (ii) generate uncertainty, as the level of costs to be incurred, given that the technical standards for NIMS CFSTB are yet to be determined.

***Clause 7.4.1: “it is envisaged that the NIMSCo RFP will put in place a neutral NIMSCo that would be able to provide open and transparent commercial arrangements to RSPs intending to connect to the NIMS CFSTB.”***

Unfortunately, in the absence of an appointed NIMSCo, it is unclear what the “commercial arrangements” would be for RSPs intending to connect to the NIMS CFSTB.

***Clause 7.5.1: “The NIMS CFSTBs will be designed in such a way as to allow Nationwide RSPs to present their respective content and service offerings in their entirety, preserving their unique end-user experience.”***

We would respectfully note that the greater specificity in the NIMS CFSTB standard, and the greater the degree of regulation on the Nationwide RSPs, the less differentiation there will be. In such an environment, it would be very difficult for Nationwide RSPs to preserve their unique end-user experience.

**CONCLUSION:**

StarHub understands the objectives of the Industry Dialogue. However, we believe that greater clarity is needed in regard to how these obligations would be imposed, given the impact they could have on IPTV operators in the market.

We also strongly believe that the proposed obligations would have a significant impact on NIMSCo and Project NIMS overall. It is therefore critical for the regulatory issues discussed in the Industry Dialogue to be resolved well before the submission of RFP bids (and for RFP bidders to be able to take the regulatory decisions into account in the RFP bids).

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