

SINGNET PTE LTD

RESPONSE TO JOINT IDA/MDA INDUSTRY DIALOGUE PAPER - PROJECT NIMS NIMS-CONNECT REQUIREMENT

1. INTRODUCTION

- 1.1 SingNet Pte Ltd (**SingNet**) refers to the Info-communications Development Authority of Singapore (**IDA**) and the Media Development Authority of Singapore (**MDA**) Industry Dialogue on the NIMS-Connect Requirement issued on 30 November 2010 (**Industry Dialogue Paper**).
- 1.2 SingNet is a leading Internet service provider (**ISP**) in Singapore and has been at the forefront of Internet innovation since 1994, being the first ISP to launch broadband services in Singapore. It is licensed to offer IPTV services under a nationwide subscription television licence granted by the MDA.
- 1.3 SingNet welcomes the opportunity to make this submission on the Industry Dialogue Paper and the various issues identified by the IDA and MDA.
- 1.4. SingNet would be pleased to clarify any of the views and comments made in this document, as appropriate.

2. EXECUTIVE SUMMARY

Key points

- 2.1. SingNet generally considers that the desired policy outcome that the proposed measure seeks to achieve is reasonable. However, SingNet has serious concerns about the means by which the IDA and MDA have proposed to achieve this outcome.

- 2.2. SingNet has three main concerns about the Industry Dialogue Paper:
- a. in accordance with the outcome-based approach previously proposed by the IDA and the MDA, it should be open to each retail service provider (**RSP**) that offers IPTV to select their own technical standards for the delivery of IPTV services. To the extent that RSPs wish to make their IPTV service offering available over a NIMS CF-STB, the only obligation on RSPs should be to ensure that their IPTV service can be provided over the NIMS CF-STB – the means by which RSPs achieve that outcome should be beyond the scope of regulation;
 - b. mandating nationwide subscription TV licensees (**Nationwide RSPs**) that offer IPTV services on the NGNBN to ensure that their services can also be supplied over a NIMS CF-STB will increase costs and strand existing investment - the proposed measures should not unfairly penalise Nationwide RSPs that have been market leaders and made their own investments in IPTV infrastructure, systems and platforms – these investments remain relevant in the context of the NGNBN and will be stranded if the proposals of the IDA and MDA are adopted in their current form;
 - c. any measures should seek to facilitate competition at the lowest layer in the technology stack that is technically feasible – to this end, the proposed measures should support inter-device competition at the RSP layer, (i.e. competition between set-top boxes), rather than using regulation to effectively force the displacement of existing set-top boxes and associated back-end infrastructure, systems and platforms and to create a ‘captive’ RSP market for the NIMS CF-STB.

Technical standards should not be “recommended” by the IDA and MDA

- 2.3. SingNet does not consider that the IDA and MDA should “*recommend*” technical standards for compliance with the NIMS CF-STB.
- 2.4. There is currently a multitude of competing IPTV standards and technologies available to RSPs to deliver IPTV services.

- 2.5. The recommendation of a particular IPTV standard is likely to ‘lock-in’ that standard for all industry players, notwithstanding the fact that such a standard may be superseded by another standard or such a standard does not represent the preferred choice of an RSP.
- 2.6. To the extent that RSPs wish to make their IPTV service available over a NIMS CF-STB, the only obligation on such RSPs should be to ensure that their IPTV service can be provided over the NIMS CF-STB – the means by which RSPs achieve that outcome (and the standards and technologies that they adopt in the design of their back-end systems and platforms) should be beyond the scope of regulation.

Mandating Nationwide RSPs to ensure that services over the NGNBN can be supplied over a NIMS CF-STB will increase costs and strand existing investments

- 2.7. By requiring Nationwide RSPs that offer IPTV to ensure that the service over the NGNBN can be received by consumers with a NIMS CF-STB in a non-discriminatory manner, the IDA and MDA proposal raises serious issues for Nationwide RSPs that currently provide IPTV services.
- 2.8. In particular:
- a. such a proposal effectively requires Nationwide RSPs that offer IPTV services on the NGNBN, such as SingNet, to either abandon existing investments to focus on service delivery over the NIMS CF-STB or to invest two (2) competing platforms (i.e. the existing set-top box platform and the NIMS CF-STB);
 - b. the pursuit of the former option will result in stranded investment whilst the pursuit of the latter option would result in economically inefficient duplication by existing licensees and will effectively require the deployment of an entirely new IPTV system (including service platform, middleware, video servers, OSS, BSS, network infrastructure, datacenter);
 - c. the IDA and MDA appear to be conflating the provision of IPTV services over ‘last mile’ infrastructure (which is technology specific) with back-end

infrastructure, systems and platforms that support such services (which is access technology neutral) – it is not the case that existing licensees will simply continue to operate a separate IPTV service over legacy infrastructure, while using the NIMS CF-STB as the means of delivering IPTV services over the NGNBN – SingNet’s mio TV platform is scalable and designed to also operate on the NGNBN using a prevailing set-top box platform. Indeed, SingNet is delivering its IPTV service over the NGNBN via its own set-top box. The proposed measure would effectively strand these investments.

The proposal requires existing Nationwide RSPs offering IPTV to subsidise other RSPs providing services over the NIMS platform and undermines inter-device and inter-platform competition

- 2.9. The proposed measure is likely to entail a degree of cross-subsidisation in favor of the NIMS CF-STB platform at the expense of other competing set-top box platforms - in doing so, the IDA and MDA are effectively seeking to establish a nationwide serviceable market for the NIMS CF-STB by effectively forcing all Nationwide RSPs offering IPTV over the NGNBN to use this platform – such a measure is likely to undermine inter-device and inter-platform competition and effectively displace the potential for competition from existing set-top boxes and platforms;
- 2.10. The proposed measure is inconsistent with the approach adopted by the IDA in respect of other aspects of the NGNBN – despite government funding being provided to OpenNet and Nucleus Connect, these entities have not been protected against the prospect of competition from existing platforms, such as SingTel’s DSL network and StarHub’s HFC network. RSPs are not compelled to buy from OpenNet or Nucleus Connect and are free to deploy their own passive and / or active infrastructure. Accordingly, OpenNet and Nucleus Connect are not guaranteed a ‘captive’ RSP market but need to compete against existing platforms with attractive offerings to secure end-users. The IDA and MDA proposal is inconsistent with this approach, as it artificially seeks to establish a ‘captive’ RSP market for the NIMS CF-STB. If the NIMS CF-STB platform is commercially attractive for RSPs, then RSPs will voluntarily use it (as is the case with the

NGNBN) – the IDA and MDA should not use regulation as the means of requiring RSPs to use the NIMS CF-STB.

- 2.11. Notwithstanding the above, SingNet has proposed a range of measures that are likely to allow the IDA and MDA to meet their stated policy objectives but in a manner that does not give rise to the problems identified by SingNet above.

Availability of content rights is likely to be varied

- 2.12. It may not always be possible for RSPs to use their content, applications and services to support the provision of services on a NIMS CF-STB.
- 2.13. While an RSP may have the rights to broadcast content (whether on an exclusive or non-exclusive basis) in a specific territory, their rights may be limited to delivering the content over specific platforms with proven digital rights management capabilities.
- 2.14. There is likely to be a need for RSPs to negotiate some of these arrangements with content owners and copyright holders to meet this proposed requirement. It may also be the case that content owners seek higher fees as a consequence of the requirement for RSPs to make the content available on another platform.

3. BACKGROUND

- 3.1 In 2009, the IDA and MDA identified Next Generation Interactive Multimedia, Applications and Services (**NIMS**) as a potential new ecosystem, with a possible focus on interactive IPTV. The IDA and MDA sought views on the strategy to develop a vibrant NIMS ecosystem.
- 3.2 In 2010, the IDA and MDA formed the NIMS panel to recommend IPTV standards and consulted on the adoption of NIMS standards. As a consequence of this process, the IDA and MDA decided that an outcome-based approach was to be preferred.

- 3.3 Under such an approach, the IDA and MDA would not impose a mandatory standard on industry participants but would leave it to the market to determine the technical standards that would need to be put into place to achieve the desired outcomes for a successful Project NIMs.
- 3.4 To this end, in October 2010, the IDA and MDA issued the NIMS Platform Operator Request for Proposal (**NIMSCo RFP**) based on an outcome-based approach. The objective of the NIMSCo RFP is to select an operator to design, finance, build and operate a platform for the delivery of video-based services (**NIMS Platform**) over the Next Generation National Broadband Network (**NGNBN**) and provide services on a wholesale basis to RSPs.
- 3.5 In December 2010, the IDA and MDA issued its Industry Dialogue Paper on NIMS-Connect Requirements (**Industry Dialogue Paper**).
- 3.6 The IDA and MDA indicate that RSPs that are nationwide subscription TV licensees have to ensure that the services they provide over the NGNBN can be received by end-users on the NIMS Common-Featured Set Top Box (NIMS CF-STB) in a non-discriminatory manner.¹
- 3.7 It is proposed that this measure should only apply to Nationwide RSPs that provide IPTV services over the NGNBN.² In practice, this will mean that nationwide subscription TV licensees providing IPTV will need to make available to any end-user with a NIMS CF-STB the full suite of content, applications and services provided by a nationwide RSP.

4. SUBSTANTIVE COMMENTS

Technical standards should not be “recommended” by the IDA and MDA

- 4.1 The IDA and MDA proposal to “recommend” technical standards for compliance by NIMS CF STBs is contrary to the stated approach of the IDA and MDA in previous consultation documents, which had through the adoption of an outcome-based approach moved away from an approach that involved the specification or recommendation of technical standards.

¹ IDA and MDA, *Industry Dialogue Paper*, paragraph 6.1.2.

² *Ibid*, paragraph 7.1.1.

- 4.2 In August 2010, the IDA and MDA released an industry dialogue paper that decided that standards should not be adopted in favor of an outcome-based approach, focusing primarily on technology neutrality and achievement of key outcomes. The Industry Dialogue Paper marks a departure from this approach.
- 4.3 SingNet is concerned that an approach that “recommends” a specific technical standard is likely to effectively ‘lock-in’ that standard, notwithstanding the fact that such a standard may become superseded by another standard or such a standard may not represent the best technology option for the industry.
- 4.4 As SingNet has previously stated, while the Microsoft Mediaroom platform had the largest middleware market share worldwide in 2009, there was still a variety of different standards used.
- 4.5 While it is appropriate for operators (e.g. SingNet mio TV) to make technology and standard choices for their own solutions at a time when IPTV standards remain in a state of flux (given that operator bears the risk associated with such decisions), such an approach is not appropriate in a NIMS CF-STB context, given the use of public funds and the fact that such a standard would need to effectively be implemented by all industry participants based on the IDA and MDA proposal.
- 4.6 Further, even if the recommendation of a specific technical standard by the IDA and MDA did not necessarily preclude the adoption of another standard, it is likely that such an approach would increase the costs associated with the development, testing and implementation of the NIMS CF-STB.
- 4.7 Accordingly, SingNet does not consider that the IDA and MDA should recommend IPTV standards for adoption by the NIMS CF-STB and industry participants that wish to participate (or are effectively obliged to participate) in this project.
- 4.8 In accordance with the outcome-based approach previously proposed, it should be open to each RSP to select their own standards for the delivery of IPTV services over the NGNBN. To the extent that RSPs wish to make their IPTV service offering available over a NIMS CF-STB, the only obligation on RSPs should be

to ensure that their services can be provided over the NIMS CF-STB – the means by which RSPs achieve that outcome should be beyond the scope of regulation.

- 4.9 Such an approach will ensure that RSPs have flexibility in how they design and deliver their IPTV services, while ensuring interoperability with the NIMS CF-STB if RSPs wish to make their IPTV service available over a NIMS CF-STB. In doing so, such an approach provides greater scope for service differentiation and innovation.

Mandating Nationwide RSPs to ensure that services over the NGNBN can be supplied over a NIMS CF-STB will increase costs and strand existing investments

- 4.10 SingNet is concerned about the implications that aspects of the IDA and MDA proposal will have for existing investments undertaken in IPTV services by existing licensees, as well as the model for competition that the advent of the NIMS CF-STB will establish.
- 4.11 As an overriding principle, the implementation of the NIMS CF-STB should not strand existing investments in existing IPTV infrastructure, systems and platform. Nor should such an initiative undermine business models that rely upon the provision of a separate set-top box and which would establish competition between RSPs based on separate set-top box deployments.
- 4.12 While it is claimed that the IDA and MDA “do not intend for the proposed measure to affect proprietary STBs or niche subscription TV licensees” and “do not intend...to affect Nationwide RSPs to the extent that such Nationwide RSPs are delivering content, applications and services over legacy telecommunications networks”, it is clear that these proposals will have significant cost implications for existing licensees and potentially strand existing IPTV investments.
- 4.13 Indeed, despite these statements, the IDA and MDA have proposed to require Nationwide RSPs offering IPTV:

- a. to ensure that services provided over the NGNBN can be received by consumers with a NIMS CF STB;³
 - b. to have NIMS-compliant video head end / backend system and for the technical implementation of their infrastructure to be NIMS compliant.⁴
- 4.14 This raises a significant issue for Nationwide RSPs such as SingNet, as it effectively requires existing licensees:
- a. to abandon its existing investment(s) to focus on delivering services over a NIMS CF-STB; or
 - b. to invest in two (2) sets of infrastructure to support the delivery of IPTV services over the NIMS CF-STB and any existing set top box platform.
- 4.15 The additional investment required to deliver content on the NIMS CF-STB is likely to be significant for existing licensees and will effectively require the deployment of an entirely new IPTV (including service platform, middleware, video servers, OSS, BSS, network infrastructure, datacenter).
- 4.16 Such an obligation would apply, even if there is only one (1) customer who requests for the IPTV service(s) to be delivered over a NIMS CF-STB from that licensee over the NGNBN.
- 4.17 It is clear from the Industry Dialogue Paper that the IDA and MDA have sought to differentiate between IPTV services provided over the NGNBN and legacy networks. In particular, the Industry Dialogue Paper refers to networks like DSL and cable as ‘legacy networks’ and indicates that so long as a Nationwide RSP continues to deliver services over these networks, the proposal will not affect them.⁵
- 4.18 However, in doing so, the IDA and MDA have failed to appreciate that SingNet’s TV service is network-agnostic, the mio TV network is scalable and designed to

³ Ibid, paragraph 6.1.2.

⁴ Ibid, paragraph 7.3.2.

⁵ Ibid, paragraph 7.1.2.

- be future proof. As a consequence, it is not the case that existing licensees will simply continue to operate a separate IPTV service over legacy infrastructure, while using the NIMS CF-STB as the means of delivering IPTV services over the NGNBN.
- 4.19 SingNet has designed its mio TV platform to operate across multiple broadband access technologies, fixed and wireless, including the NGNBN. The mio TV set-top box is NGNBN compliant.
- 4.20 The IDA and MDA positions appear to be based on certain assumptions that do not accurately reflect the nature of investments that have been undertaken in IPTV infrastructure – the IDA and MDA appear to be conflating the provision of IPTV services over ‘last mile’ infrastructure (which is technology specific) with back-end infrastructure, systems and platforms that support such services (which is access technology neutral).
- 4.21 SingNet’s investments in back-end infrastructure, systems and platforms are largely future proof in the sense that they can support the provision of IPTV services over different types of fixed and wireless broadband access networks, including the NGNBN. It would not have made sense for SingNet to build a network that was not scalable and was not capable of delivering services over different types of technology.
- 4.22 The implications of the IDA and MDA proposal is that existing licensees that have sought to future proof back-end infrastructure, systems and platform to support IPTV services over multiple access technologies are effectively being penalised for doing so.
- 4.23 The IDA and MDA proposal effectively forces SingNet to develop additional NIMS CF-STB compliant services, thereby potentially stranding its existing IPTV investments or otherwise requiring SingNet to run two (2) sets of systems and infrastructure concurrently to deliver a single IPTV service. Therefore, while the NIMS CF-STB is intended to facilitate a higher degree of competitive entry by reducing the capital outlay associated with the delivery of IPTV services, it is being done in a way that potentially undermines existing IPTV investments and the prospect of inter-device or inter-platform competition from existing players.

- 4.24 If SingNet was to abandon its existing investments in mio TV to focus on delivering IPTV services over a NIMS CF-STB, SingNet estimates that the stranded investment cost would exceed approximately [CONFIDENTIAL].
- 4.25 Alternatively, if SingNet was to invest in two (2) concurrent systems / networks, to deliver an IPTV service, ie continue investment in its existing IPTV system and also invest in an additional set of infrastructure (i.e. to support its existing IPTV services and to also deliver content over the CF-STB), the initial set up cost for the additional new system or infrastructure is likely to be no less than approximately [CONFIDENTIAL]. This does not include the NIMSCo related costs, costs of CF STBs, costs of truckroll to replace STBs, IT costs, data centre costs, costs of replicating content, application(s) and services throughout the lifespan of the mio TV service offering.

The proposal requires existing Nationwide RSPs offering IPTV to subsidise other RSPs providing services over the NIMS platform and undermines inter-device and inter-platform competition

- 4.26 The proposed imposition of a requirement on Nationwide RSPs offering IPTV to ensure that services provided over the NGNBN can be received by consumers with a NIMS CF STB⁶ is also likely to entail a degree of cross-subsidisation that favors the NIMS CF-STB platform at the expense of other competing set-top boxes.
- 4.27 In doing so, the IDA and MDA are effectively seeking to establish a nationwide ‘captive’ RSP market for the NIMS CF-STB by effectively forcing all Nationwide RSPs that provide IPTV services over the NGNBN to use this platform.
- 4.28 The proposed approach is inconsistent with the approach adopted by the IDA in respect of other aspects of the NGNBN. For example, while government funding has also been provided to OpenNet and Nucleus Connect, these entities have not been protected against the prospect of competition from existing platforms, such as SingTel’s DSL network and StarHub’s HFC network.

⁶ Ibid, paragraph 6.1.2.

- 4.29 RSPs are not compelled to buy from OpenNet or Nucleus Connect and are free to deploy their own passive and / or active infrastructure in competition with OpenNet and Nucleus Connect. Accordingly, OpenNet and Nucleus Connect are not guaranteed a ‘captive’ RSP market but need to compete against existing platforms through attractive offers to secure end-users. This is the hallmark of competition.
- 4.30 The IDA and MDA proposal is inconsistent with this approach, as it artificially seeks to establish a ‘captive’ RSP market for the NIMS CF-STB. If NIMS CF-STB platform is commercially attractive for RSPs, then RSPs will voluntarily use it (as is the case with the NGNBN). Regulation should not be used as the means of requiring RSPs to use the NIMS CF-STB.
- 4.31 [CONFIDENTIAL]
- 4.32 While the underlying objective of giving end-users the ability to receive the widest possible spectrum of content service offerings available in the market⁷ is a reasonable one, the means by which the IDA and MDA have sought to achieve this end is less than desirable from a competition perspective.
- 4.33 In particular, such an approach will effectively undermine the prospect for inter-device and inter-platform competition and will enshrine a limited number of business models in the marketplace all of which are dependent on the NIMS CF-STB.
- 4.34 Most of these business models will not be sufficiently differentiated to support more vigorous forms of competition that typically exist when industry players have the flexibility to compete at lower levels of the value chain through the use of their own set-top boxes and platforms.
- 4.35 While the IDA and MDA have stated that the proposed model will “*allow Nationwide RSPs to continue to distinctly brand themselves, and differentiate themselves from other service providers...*”⁸, and that Nationwide RSPs can deploy NIMS CF-STBs with operator specific hardware and software capabilities

⁷ Ibid, paragraph 5.1.1.

⁸ Ibid, paragraph 7.5.1.

to encourage service innovation⁹, it is unclear to SingNet how such a proposal will work in practice and sit with competition from IPTV platforms that use their own set-top box solutions.

- 4.36 Nationwide RSPs offering IPTV services have made their investment and marketing decisions based on their own business needs and will not necessarily need to purchase services from the NIMSCo or use a separate NIMS compliant set-top box to deliver IPTV services effectively.
- 4.37 Nationwide RSPs should be allowed to make their own choice(s) as to whether they wish to incur those additional costs to deliver their content to end-users using a NIMS compliant set-top box, rather than their own set top box.
- 4.38 The IDA and MDA proposal therefore discourages more vigorous levels of competition, leads to possible stranded investment(s) and seeks to artificially establish a nationwide ‘captive’ RSP market for the NIMS CF-STB by effectively forcing all Nationwide RSPs that provide IPTV services over the NGNBN to use this platform.

The proposal specifically targets and discriminates Nationwide RSPs offering IPTV

- 4.39 The IDA and MDA unfairly targets Nationwide RSPs offering IPTV services.
- 4.40 There is no justification for this treatment of Nationwide RSPs offering IPTV.
- 4.41 In fact, the proposal constitutes specific discrimination against Nationwide RSPs offering IPTV and ensures that these RSPs suffer a cost disadvantage in the delivery of their services whilst Nationwide RSPs that do not currently deliver IPTV services are given the ability to enter the IPTV segment in a way that is partially devoid of the capital outlays typically associated with market entry.

⁹ Ibid, paragraph 7.6.1.

Mitigating measures

- 4.42 Without prejudice to our views above, if the IDA and MDA consider that there is a need for Nationwide RSPs delivering IPTV services over NGNBN to also deliver these services over NIMS CF STB (at the request of an end-user), SingNet believes that the following conditions should first apply:
- a. RSPs should be allowed to opt-in to delivering their IPTV service over a NIMS CF-STB: under this approach, Nationwide RSPs offering IPTV services will have a choice as to whether to use their own IPTV platform or to offer IPTV services over the NGNBN using the NIMS CF-STB. This will provide Nationwide RSPs with greater control over any potential stranding risk;
 - b. Nationwide RSPs should only be required to provide IPTV services over a NIMS CF-STB where there is a sizeable demand: Nationwide RSP delivering IPTV services should not be required to incur cost(s) where the demand is not sufficiently substantial or the cost(s) to deliver the content, applications and service is exorbitant). For example, given that an RSP would incur substantial costs of up to [CONFIDENTIAL] just to set-up a new system or infrastructure, the requirement should only apply when there is a reasonable and sizable level of established demand for the IPTV service of an RSP that merits the deployment of a new system or infrastructure;
 - c. the requirement should only apply to premium linear channels (i.e. channels for which there is a sizeable demand from the market): SingNet considers that this requirement should not apply to other content, such as video-on-demand and any other applications or non linear / non-premium channels. This ensures that end-users who genuinely wish to avail themselves of the highly demanded channels can obtain these (as long as the requirement in (a) above is met) and at the same time, provide Nationwide RSPs with the ability to still differentiate themselves from other RSPs; and

- d. level the playing field: the requirement should apply to all RSPs providing subscription television services to end-users, whether or not they are Nationwide RSPs and regardless whether they offer IPTV as long as they choose to deliver services over the NGNBN.

Availability of content rights is likely to be varied

4.43 The proposal largely presupposes that Nationwide RSPs have the necessary rights to deliver their content over different platforms and set-top boxes.

4.44 In particular, the IDA and MDA have stated:¹⁰

“the proposed measure would require the full suite of existing content, applications and services provided by Nationwide RSPs to be configured in a manner which is NIMS-compliant and made available to any end-user with a NIMS CF STB, upon the request of that end-user”.

4.45 A key assumption behind this statement is that content providers have enabled their Digital Rights Management (**DRM**) or access control(s) in such a way that the same content can seamlessly be delivered over different platform and set-top box.

4.46 DRMs are used by content providers or copyright owners to limit or inhibit the use of their content and prevent unauthorized duplication of their work.

4.47 Generally, DRM technologies attempt to control use of digital media by preventing access, copying or conversion to other formats and across technologies. For example, while a content provider may allow an RSP to broadcast the content over its own platform and set-top box, which has been proven to comply with the content providers own DRM technologies, there may not be a corresponding right to broadcast that content over any other platform and set-top box.

¹⁰ Ibid, paragraph 7.2.1.

- 4.48 This means that whilst an RSP may have the rights to broadcast content (whether on an exclusive or non-exclusive basis) in a specific territory, their rights may be limited to delivering the content over specific platform and set-top boxes.
- 4.49 The IDA and MDA proposal would mean either of the following:
- a. the RSPs have to acquire DRM rights to any / all NIMS CF-STB - given that there can be no lack of the number / type of NIMS CF – STB, the RSPs have to renegotiate the rights to all their content – it is not clear whether the content providers permit this or would agree to this;
 - b. content providers may charge premium for negotiating the new rights; such costs add to the cost burden to be borne by RSPs and end-users; and /or
 - c. without those DRM rights, the RSPs still cannot deliver the content over platforms and set-top boxes other than their own.
- 4.50 While the IDA and MDA have suggested that exemption may be allowed for content, applications and services for which repurposing would propose significant technical challenges, we would request that the IDA and MDA undertake further consultation with the industry on these issues.
- 4.51 SingNet also proposes the adoption of an alternative approach under which:
- a. the IDA and MDA establish a list of upfront exemptions that could be relied upon by licensees to deal with specific issues identified by SingNet above; and
 - b. requires licensees when negotiating new content arrangements to make provision for content to be made available over any proprietary platform operated by the RSP and the NIMS CF-STB.

5. CONCLUSION

- 5.1. SingNet submits that the IDA and MDA should consider revising certain aspects of the Industry Dialogue Paper to address the concerns identified by SingNet in this submission.
- 5.2. In particular, SingNet considers that the IDA and MDA should:
 - a. not recommend any technical standard for compliance with the NIMS CF-STB;
 - b. not require Nationwide RSPs that provide IPTV services over the NGNBN to ensure that services can also be acquired on a NIMS CF-STB, except in the circumstances set out by SingNet in this submission
 - c. consider undertaking further consultation with the industry to better understand the implications that the NIMS CF-STB would have for existing content arrangements, as well considering the adoption of the alternative approach put forward by SingNet for dealing with content right issues.