



Proposed variation to the NBN Co Special Access Undertaking

Consultation paper

May 2022

Contents

1. Executive Summary	2
2. Background and context.....	5
2.1. NBN Co's current special access undertaking.....	5
2.2. Industry engagement	6
2.3. NBN Co's proposed variation to the special access undertaking.....	6
2.4. Consultation.....	7
2.5. Structure of this paper.....	10
3. Legislative framework	11
3.1. Telecommunications access regime	11
3.2. Assessment approach	12
4. Overview of SAU variation	16
4.1. Key elements of NBN Co's proposed variation to the SAU.....	16
4.2. How we expect the framework to operate in practice	18
5. Issues for consultation.....	23
5.1. Pricing and product constructs.....	23
5.2. Controls on prices and revenues.....	25
5.3. Building block model – general approach.....	28
5.4. Recovery of accumulated losses.....	29
5.5. Cost allocation	31
5.6. Expenditure criteria	33
5.7. Weighted average cost of capital	37
5.8. General regulatory structure and replacement module assessment process	40
5.9. Service quality	42
5.10. Service description	44
5.11. Service level reporting	46
5.12. ACCC functions and powers.....	47

1. Executive Summary

The proposed variation is significant to all households and businesses that use broadband

The ACCC is consulting on a variation that NBN Co has proposed to its Special Access Undertaking (SAU), which specifies the default rules by which NBN Co provides access to the NBN.

The ACCC can decide whether to accept or reject the variation that NBN Co has proposed. As explained further below, the SAU variation would materially change how NBN access is regulated by bringing a greater range of services within the SAU's scope as well as varying many of the rules that have operated to date.

Retail service providers (retailers) access the NBN to supply voice and broadband services to connected households and businesses. NBN access costs comprise a high proportion of total retail supply costs and NBN service levels over connections, fault handling and appointment keeping have a significant bearing on overall service quality.

Hence, with its 2040 expiry, the SAU has significant implications for competition and efficiency of communications markets over the long term. This in turn will dictate the price and quality of retail voice and broadband offers that will be available to households and businesses.

Market developments since the SAU was accepted

There has been significant change since the ACCC accepted NBN Co's SAU in 2013.

- The NBN comprises copper and hybrid-fibre based access networks in addition to the fibre, wireless and satellite networks that were then in use, resulting in roughly 75% of NBN access services not currently regulated under the SAU.
- The NBN is now a close-to-ubiquitous high-speed broadband network on a national scale that has been declared fully operational. This simplifies NBN Co's business as its broad scale build activities are far more limited to greenfield developments and allows a greater focus on the efficiency of its established operations.
- In 2018, NBN altered its pricing approach to incorporate large scale discounting rather than directly lower its pricing pursuant to the SAU. While these discounts have assisted in the supply of higher busy hour speed broadband and more competitive plans, they have caused significant cost uncertainty for retailers as the discounts are conditional and can be withdrawn.
- Demand for multicast and business grade (TC-2) services was lower than anticipated, with NBN Co entering competitive direct fibre and satellite market segments – as matters stand NBN Co is largely dependent on its residential grade broadband access services (TC-4) for its revenues and cost recovery.
- NBN Co has accumulated significant losses since the start of the NBN rollout that are forecast to continue into the next regulatory period. While initial losses were anticipated, they are at a very significant level and will potentially preclude the SAU's revenue controls becoming binding at any time over its remaining term in the absence of significant reforms being made to the prevailing rules.

The key proposals

In its proposed variation to the SAU, NBN Co is seeking to extend the scope of the SAU to incorporate all network technologies as well as make significant changes to key aspects of the SAU framework itself that responds to developments in NBN markets.

The key changes that NBN has proposed to the regulatory framework are to:

- extend the scope to cover its NBN ethernet broadband service as supplied over all NBN access networks
- discontinue its 'bundle discounts' pricing offers and replace these with direct product offers that are subject to maximum price and minimum connectivity virtual circuit (**CVC**) or shared network capacity inclusions. This includes zero rating the CVC charge as it relates to its higher speed access products, meaning that these can be accessed at a fixed monthly cost
- implement a different approach to assessing the efficiency of its expenditures and other aspects of its regulatory proposals as was provided for in the existing SAU, albeit with the addition of more-prescriptive rules about how the ACCC undertakes these assessments
- introduce a cost allocation framework to establish separate cost bases for 'core' regulated services (for which SAU price controls and other provisions would apply) and 'non-core' competitive services (for which prices and other key terms would be determined outside the SAU framework)
- revise the methodology by which its weighted average cost of capital would be set
- reform the process for recovering historical losses by incorporating defined amounts for the recovery of historical losses into the revenue controls

In addition to those long-lasting rules, NBN Co has also submitted the initial price control measures that would apply for the first regulatory period which NBN Co has proposed to include 2023-24 and 2024-25, and a price path that would set maximum allowable prices and CVC inclusions for lower speed offers until 2040.

NBN Co has proposed an initial price increase for its entry level broadband service in return for a higher speed inclusion of 25 Mbps down and 10 Mbps up. While a lower speed tier will remain on offer, it will be subject to the same prices and so would be expected to result in retailers incurring largely similar access costs and downstream prices. The prices for NBN Co's most popular speed tier of 50/20, and the 100/20 and 250/25 tiers, would also increase on commencement.

On the other hand, the access price for the 12/1 voice only product will decrease in price and the access prices for other higher speed products, used by only a small share of retail customers, will not change on commencement.

The maximum allowable prices for retailers to access all speed tiers would then increase each year until 2040, with retailers facing higher costs to access the NBN in line with changes in the Consumer Price Index and growth in busy hour demand for network capacity. The maximum cost to retailers of accessing the 50/20 speed tier would converge in the near term with the maximum cost to acquire the 100/20 speed tier, followed by the maximum cost to access the lower speed tiers also reaching this level towards the end of the SAU term.

NBN Co has not proposed to add any commitments into the SAU to maintain or increase the service standards or its performance against them. It has however proposed a rule that

would permit it to increase its maximum allowable prices and revenues for the extra expenditures that it would incur for any changes that it may subsequently agree to with access seekers or be required by regulation to offer.

ACCC assessment process

The ACCC must now assess NBN Co's proposed SAU variation against the relevant statutory criteria in section 152CBD(2) of the CCA, including whether the proposed variation promotes the long-term interests of end-users and whether the terms and conditions are reasonable.

In order to promote the long-term interests of end-users, the ACCC must be satisfied that they promote competition in markets for listed services, achieve any-to-any connectivity between end-users, and encourage economically efficient use of, and economically efficient investment in the infrastructure by which these services are supplied.

The ACCC will assess the SAU variation in its entirety and will consider whether it establishes a robust fit-for-purpose regime to apply until 2040. Following this assessment, the ACCC must decide whether to accept or reject the SAU variation.

Broadly, the ACCC considers that the LTIE assessment involves a balancing of costs and benefits to end-users over time, while the reasonableness assessment involves a balancing of potentially competing considerations. The matters the ACCC accounts for are often inter-related and involve trade-offs that will be weighed in our assessment.

This consultation paper sets out the key elements of the SAU variation and the issues the ACCC seeks stakeholder feedback on to inform its assessment. Stakeholder feedback on all elements of NBN Co's proposed framework is essential for the ACCC to best understand the likely impacts of the proposals and implications for competition and efficiency.

We are inviting submissions on NBN Co's proposed SAU variation until Friday 8 July 2022. While this consultation paper seeks to outline NBN Co's proposal and raise key issues for discussion, it is not intended to be exhaustive and stakeholders and members of the public are welcome to comment on any aspect of NBN Co's proposed SAU variation. In addition to formal written submissions, the ACCC will continue to engage directly with stakeholders in relation to the SAU variation.

2. Background and context

2.1. NBN Co's current special access undertaking

NBN Co's current SAU was accepted by the ACCC in December 2013. The SAU sets out principles for the regulation of wholesale access to the NBN until June 2040. It was intended to act as the overarching regulatory framework through which NBN Co would supply its services to telecommunications companies, including wholesale and retailers. The SAU was varied in April 2021 to extend the application of three non-price provisions,¹ which were originally set to expire after 5 years.

The current SAU contains regulated terms for wholesale access to NBN Co services. It only applies to FTTP, fixed wireless and satellite services, which are the technologies that were included in the initial NBN rollout. As such, multi-technology mix (**MTM**) services are not covered by the current SAU. The SAU specifies price and non-price terms and conditions for Layer 2 bitstream services provided by NBN Co. These terms and conditions offer a baseline for commercially negotiated access agreements.

The SAU has a modular structure which 'locks in' matters for different periods of time. This structure provides a degree of flexibility, allowing for some changes to the regulatory settings over the term of the SAU. The current SAU contains three modules numbered from 0 to 2.

Module 0 applies for the whole term of the SAU and provides the overarching structure and context for the SAU. Specifically, Module 0 describes the services the SAU covers and establishes the requirements to publish and maintain Standard Form Access Agreements, which can form the basis of the commercially negotiated wholesale broadband agreements (WBAs). Module 0 also contains fixed principles terms and conditions for NBN Co's long-term cost recovery.

Module 1 contains comprehensive terms and conditions that have applied during the initial regulatory period, which covers the period from the start of the SAU through to 30 June 2023. Module 1 includes the commitment to supply initial NBN offers, initial prices for NBN offers and methods for changing prices over time, the Long Term Revenue Constraint Methodology, non-price terms and conditions and product development and withdrawal provisions.

Module 2 starts on 1 July 2023 and sets out long term arrangements for determining NBN Co's required revenue for the remainder of the SAU. The mechanism for assessing NBN Co's required revenue changes will be based on forecast costs rather than the actual costs (as in Module 1). Additionally, Module 2 contains the mechanism for NBN Co to submit 'replacement module applications', which seek to vary the SAU to incorporate replacement modules that will operate for 3-5 years. Replacement module applications are subject to ACCC acceptance. Replacement modules will include forecasts of NBN Co's expenditure and other detailed terms and conditions proposed by NBN Co. Module 2 also contains some other provisions that are similar to Module 1 of the SAU. These include the commitment to supply NBN offers, the annual price cap on price increases and the ability to rebalance prices. Also included are product development and withdrawal provisions.

Under both Module 1 and Module 2, there is no contemporaneous link between the Long Term Revenue Constraint Methodology and prices so long as there are historical losses that NBN Co is yet to recover, as reflected in the initial cost recovery account.

¹ NBN Co's SAU variation and the ACCC final decision on the variation are available on the ACCC [website](#).

2.2. Industry engagement

In June 2021, the ACCC hosted an industry roundtable with NBN Co, broadband retailers, industry groups, consumer representatives and government to discuss the regulatory framework for wholesale access to the NBN.² This included canvassing those stakeholders for views to help inform a revision to the SAU following NBN Co notifying the ACCC that it intended to lodge a proposed variation to its SAU within the next 12 months.³

Following the roundtable discussion, the ACCC chaired a series of industry working groups to discuss different aspects of the NBN regulatory framework.

The key issues discussed by the working groups included NBN service products and pricing, NBN Co's building block model and the general regulatory framework and approach. The ACCC published a report summarising matters arising in the working groups on 22 December 2021.⁴ This report identified the following five key outcomes from the working groups to guide NBN Co's development of the proposed variation:

- NBN Co has the opportunity to earn the minimum revenues it needs to meet its legitimate financing objectives, including to transition to a stand-alone investment grade credit rating.
- NBN end-users are protected from price shocks and from prices that are higher than necessary in later years.
- The regulatory framework provides incentives for NBN Co to operate efficiently and promote use of the NBN.
- Retailers have greater certainty over the costs that they will face when using the NBN.
- There is a clear and robust quality of service framework so retailers and end-users know what to expect from NBN services, including a review mechanism so that service standards remain fit for purpose.

NBN Co has now submitted a proposed variation to the SAU and materials in support of that variation, and the ACCC is seeking stakeholder views on that proposal.

2.3. NBN Co's proposed variation to the special access undertaking

On 29 March 2022, NBN Co lodged a proposed variation to its SAU with the ACCC pursuant to section 152CBG(2) of the CCA. A key part of this variation is the incorporation of MTM services into the formal SAU regulatory framework. Additionally, NBN Co has proposed substantial changes to the pricing and revenue constraints in the SAU.

NBN Co has provided the ACCC with several documents in support of its proposed variation. These include:

- a covering letter, which provides additional context for the submission, including a description of each of the documents
- a public and confidential version of NBN Co's supporting submission. This seeks to explain the rationale behind its proposed changes to the SAU
- a supplementary submission that was provided by NBN Co on the 20 May
- some expert reports from Frontier Economics commissioned by NBN Co

² A summary of the industry roundtable is available on the [ACCC website](#).

³ <https://www.accc.gov.au/media-release/accc-seeks-industry-views-on-future-nbn-regulation>

⁴ A public summary of working group meetings is available on the [ACCC website](#).

- a confidential building block model⁵ to assess essential variables and the effect that the proposed SAU variation would have on NBN Co's revenue constraint going forward until 2040
- a set of forecasts in support of NBN Co's replacement module application. These forecasts include estimates for revenue, demand and other metrics.

The SAU variation and the public versions of the supporting documents are available on the ACCC website.

Since NBN Co first lodged the proposed SAU variation and supporting materials, we have worked with NBN Co to resolve issues associated with NBN Co's confidentiality claims to ensure that information required to enable effective public consultation and to allow the ACCC to perform its statutory function of assessing the SAU variation is published. The ACCC has published the majority of the supporting documents. A small portion of material remains redacted as the subject of confidentiality claims by NBN Co. The ACCC will continue to work with NBN Co and assess whether any further information is required to be published for the ACCC to perform its statutory function of assessing the variation is published.

Section 3 of this consultation paper provides the legislative framework for the SAU. Section 4 provides an overview of the variation while section 5 contains a discussion of the issues and questions to stakeholders on specific topics.

2.4. Consultation

The ACCC plans to consult with interested parties at several stages before deciding to either accept or reject the SAU variation. The ACCC published the SAU variation and supporting documents on the ACCC website on 23 May 2022 and invited submissions by 8 July 2022. The ACCC has released this consultation paper to assist interested parties in preparing their submissions.

The ACCC plans to release its draft decision on whether to accept or reject the variation in September 2022. Following its consideration of submissions to the draft decision, the ACCC will then release its final decision. The ACCC's draft and final decision will be published on the ACCC's website.

ACCC approach to handling information received during this consultation

The ACCC/AER Information Policy⁶ sets out the general policy of the ACCC on the collection, use and disclosure of information.

The ACCC considers that, for the consultation process to discharge the ACCC's procedural obligations and allow the ACCC to effectively assess the variation in accordance with the relevant legislative framework, it is necessary for that consultation process to be public and transparent. This is to enable effective participation by all stakeholders. Public consultation is particularly important in this matter, given the significance of the matters contained in the SAU variation, the duration and extent of the proposed changes and the range of stakeholders potentially impacted, including Australian consumers.

Given the importance of the participation of all stakeholders in the public consultation in this matter, the ACCC does not consider it appropriate to manage confidentiality claims by NBN Co or any stakeholders by making that information available to third parties only through

⁵ NBN Co, Confidential building block model, 29 March 2022.

⁶ The [ACCC-AER Information Policy](#) is available on the ACCC website.

limited individual non-disclosure agreements. The ACCC has therefore formed the view that it is not appropriate to apply the ACCC's Confidentiality guideline for submitting confidential material to ACCC communications inquiries⁷ in relation to its review of NBN Co's SAU variation.

The ACCC has published the SAU variation in full. The ACCC has also published NBN Co's Supporting Submission with only minimal redactions. As the redactions in the published documents are confined to the supporting documents and are limited in scope, the redacted information will only be available to the ACCC and at this stage the ACCC does not intend that it will be made available to any interested parties through bilateral confidentiality arrangements.

The ACCC is continuing to engage with NBN Co to release further details of the information that is subject to these redactions. As this consultation and the ACCC's assessment of NBN Co's SAU variation progresses, the ACCC will consider further what information in NBN Co's Supporting Submission is of significance to the consultation process, necessary to understand the variation and should therefore be published, in full or in part.

Submissions to the consultation

The ACCC encourages industry participants and other interested parties to make submissions to this consultation paper, including detailed reasons to support their views, with reference to the relevant statutory criteria in Part XIC of the CCA. To enable an informed and consultative process, all submissions will be published on the ACCC's website.

Interested parties wishing to make a submission are encouraged to make a public submission. The ACCC's approach to any claims of confidentiality in this matter is set out below.

Disclosure of information

The ACCC considers that full public engagement on all relevant information in this matter is necessary. The ACCC will therefore only agree not to disclose information that is the subject of a confidentiality claim made by NBN Co or third parties in limited circumstances.

The ACCC will assess any confidentiality claims on a case-by-case basis and in doing so will consider whether or not it is required to publish information having regard to its statutory and common law duties and functions in each instance and in accordance with s 155AAA of the CCA.⁸

The ACCC will consider whether publication of the information is required to enable effective public consultation and to allow the ACCC to perform its statutory function of assessing the variation in accordance with the relevant statutory criteria. The ACCC will assess whether this requirement outweighs any significant commercial harm a party submits may result from publication. The ACCC will take into account procedural fairness considerations for all relevant stakeholders.

As this consultation and the ACCC's assessment of NBN Co's SAU variation progresses, the ACCC will continue to consider whether any information that has been redacted is of significance to the consultation process, necessary to consult on the variation and should therefore be published, in full or in part.

⁷ The guideline is available on the ACCC [website](#).

⁸ The ACCC notes in this regard paragraph 3.1 of the [ACCC-AER Information Policy](#).

The ACCC's decisions to publish information will be subject to the process described in paragraph 6 below.

Process for claiming confidentiality

If NBN Co or stakeholders wish to make any claim of confidentiality over material provided to the ACCC during this consultation, they should follow the process below:

1. Please submit two versions of the submission:
 - a) a **public** submission that can be published on the ACCC's website, in which all confidential material has been removed and replaced with 'c-i-c'. Please ensure that redacted information is not searchable or otherwise able to be viewed.
 - b) a **confidential** version that clearly identifies the information over which confidentiality is claimed by bookending the confidential material with a marking of 'c-i-c'. Please also highlight for ease of reference the material over which confidentiality is claimed.
2. Information over which a party claims confidentiality must be limited to ensure full consultation on all relevant material.
3. Please provide a supporting submission that specifically substantiates the confidentiality claim for each item of information over which confidentiality is claimed. Confidentiality claims need to detail why the information is competitively sensitive or otherwise confidential, or why disclosure of the information would be likely to cause significant commercial harm to the person to whom the information is confidential. 'Blanket' claims of confidentiality will not be accepted. The ACCC will notify parties of any additional information required to assess a confidentiality claim.
4. Where the ACCC proposes to publish information the subject of a confidentiality claim, it will provide a right to be heard and to amend or withdraw the information before proceeding to publication with redactions removed.
5. Where the ACCC proposes to not publish information the subject of a confidentiality claim and publishes a redacted submission, it may reconsider that claim at a future date if it becomes evident that the redacted information is important to the ACCC's consultation on the SAU variation and needs to be tested with third parties. The ACCC will notify with the relevant party and engage with them in relation to how this information can be disclosed.

Format for submissions

The ACCC prefers to receive submissions in electronic form, in either PDF or Microsoft Word format which allows the submission text to be searched.

Please email submissions by 5pm on 8 July 2022 to nbn@acc.gov.au and copy to:

Sean Riordan
General Manager, Communications Markets
and Advocacy
ACCC
Sean.Riordan@acc.gov.au

Scott Harding
Executive Director, Communications
Markets and Advocacy
ACCC
Scott.Harding@acc.gov.au

2.5. Structure of this paper

This structure of this consultation paper relating to NBN Co's proposed variation to the SAU is as follows:

- Section 2 sets out the background and context of the NBN Co SAU and the consultation itself.
- Section 3 sets out the legislative framework covering the SAU variation process.
- Section 4 provides an overview of the SAU variation given to the ACCC by NBN Co.
- Section 5 considers the key issues for consultation.

3. Legislative framework

3.1. Telecommunications access regime

Object of the telecommunications access regime

Part XIC of the CCA sets out the telecommunications access regime. The object of the telecommunications access regime is to promote the long-term interests of end-users (**LTIE**) of carriage services and services provided by means of carriage services.

Regulation of terms and conditions of access to NBN Co services

NBN Co must only supply services that are declared services. Part XIC of the CCA provides three means by which services that are supplied by NBN Co, or are capable of being supplied by NBN Co, may become declared services:

- NBN Co can provide the ACCC with an SAU in relation to a service or proposed service
- NBN Co can publish a standard form of access agreement that relates to access to a service, or
- the ACCC can declare an NBN service following a public inquiry.

The NBN access service was declared when the current SAU was accepted by the ACCC in December 2013.

Once an NBN service is declared, NBN Co is required to comply with the category B Standard Access Obligations (**SAOs**) specified in the CCA. The category B SAOs include the obligations to supply the declared service if requested by a service provider and to permit interconnection of facilities. An SAU must state that NBN Co agrees to be bound by the category B SAOs and undertakes to comply with the terms and conditions specified in the undertaking in relation to category B SAOs.

Terms and conditions of access to NBN services

While the SAU forms an important part of the regulatory framework for the NBN, the terms and conditions of access and on which NBN Co is required to comply with the category B SAOs may be specified in one or a combination of different instruments. These include:

- access agreements - commercial contracts between the access provider and an access seeker which set out negotiated terms and conditions of supply
- special access undertakings given by the access provider and accepted by the ACCC - documents given by the access provider proposing the terms and conditions on which it will offer access to its services
- binding rules of conduct - written rules made by the ACCC where there is an urgent need to make such rules, specifying any or all the terms and conditions for compliance with any or all the SAOs, or requiring compliance with any or all the SAOs as specified in the rules, and
- access determinations - written determinations made by the ACCC relating to access to a declared service after conducting a public inquiry, specifying any or all the terms and conditions for compliance with any or all the SAOs.

Part XIC of the CCA establishes a hierarchy between these instruments to allow parties to identify which terms and conditions are to apply, particularly in the event of inconsistency between the instruments. Part XIC also provides for NBN Co to formulate and publish open

offers for access to its services, known as a standard form of access agreement. A standard form access agreement itself is not an access agreement and does not form part of the Part XIC legislative hierarchy. Rather, retailers can request NBN Co to enter into an access agreement on the terms of a standard form access agreement and this agreement is an access agreement for the purposes of the hierarchy. WBA4 is the current standard form access agreement and NBN Co has entered into a number of access agreements based on this current standard form access agreement.

Essentially, terms and conditions about a particular matter in an instrument that is higher in the above list will prevail over inconsistent terms and conditions about the same matter specified in an instrument that is lower in the list. For instance, commercially negotiated and agreed terms and conditions (set out in an access agreement) between NBN Co and retailers will prevail over regulated terms in a varied SAU, binding rules of conduct and access determinations that are made by the ACCC, to the extent of any inconsistency between these terms. In other words, a varied SAU, binding rule of conduct and an access determination would have no effect to the extent of any inconsistency with the access agreement.

In addition, the Statutory Infrastructure Provider (SIP) regime established by Part 19 of the *Telecommunications Act 1997* commenced on 1 July 2020. Under the regime, the Minister may determine minimum service standards, benchmarks, and performance standards for nominated SIPs. With NBN Co considered as the default SIP, the terms contained in any SIP instrument will prevail over all other terms in the regulatory hierarchy, including terms in commercially negotiated access agreements. However, an important aspect of the approach that has been proposed in the Minister's draft SIP determination is that it will only set out 'baseline' service standards and will not limit a SIP from offering better service standards.

The ACCC assessment of the SAU variation is important in the context of the legislative hierarchy. Once the ACCC accepts a variation from NBN Co, there is no provision under Part XIC of the CCA for the ACCC to vary or set aside the varied terms of the SAU. Any binding rules of conduct or access determination made by the ACCC in respect of access to the NBN and compliance by NBN Co with the Category B SAOs will have no effect to the extent of any consistency with the SAU as varied.

3.2. Assessment approach

The ACCC is required to decide to accept or reject an SAU variation after assessing it against the legislative criteria. The ACCC must assess a variation to the SAU against the criteria outlined in section 152CBD(2) of the CCA.

The ACCC must not accept a proposed variation unless:

- the terms and conditions specified in the variation in relation to compliance with the category B SAOs are consistent with those obligations and are reasonable
- any conduct that is specified in the variation in relation to access referred to in section 152CBA(3B) will promote the LTIE, and the related terms and conditions are reasonable, and
- any conduct that is specified in the variation in relation to certain matters referred to in section 152CBA(3C) will promote the LTIE.

In determining whether a particular thing promotes the LTIE, the CCA requires the ACCC to consider the extent to which the thing is likely to result in the achievement of the following objectives:

- promoting competition in markets for listed services

- achieving any-to-any connectivity in relation to carriage services that involve communications between end-users, and
- encouraging the economically efficient use of, and economically efficient investment in the infrastructure by which these services are supplied, and any other infrastructure by which these services are, or are likely to become capable of being supplied.⁹

The ACCC cannot consider any other objectives in assessing the LTIE.

In respect of the LTIE assessment, the CCA further provides that:

- in determining whether a thing is likely to result in the achievement of the objective of promoting competition in markets for listed services, the ACCC must have regard to the extent to which the thing will remove obstacles to end-users of listed services gaining access to those services, but may also have regard to other matters
- in determining whether a thing is likely to result in the achievement of the objective of encouraging the economically efficient use of, and economically efficient investment in the infrastructure, the ACCC must have regard to the following matters, but may also have regard to other matters:
 - whether it is technically feasible for the services to be supplied and charged for having regard to matters such as available technology, the cost involved in supplying the service and the likely effect on the operation or performance of telecommunications networks
 - the legitimate commercial interests of the supplier, including its ability to exploit economies of scale or scope
 - incentives for investment in the infrastructure by which the services are supplied, and
- the objective of any-to-any connectivity is achieved if and only if each end user is able to communicate with each other end-user who is supplied the same or a similar service, whether or not they are connected to the same telecommunications network.

In determining whether terms and conditions are reasonable, the CCA requires the ACCC to have regard to the following matters:

- whether the variation promotes the LTIE
- the legitimate business interests of NBN Co, and NBN Co's investment in facilities used to supply the services concerned
- the interests of persons who have the right to use the services concerned
- the direct costs of providing access to the services concerned
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, telecommunications network or facility, and
- the economically efficient operation of a carriage service, telecommunications network or facility.

The ACCC must also be satisfied that the varied undertaking is consistent with any Ministerial pricing determination. However, there are no relevant Ministerial pricing determinations in force at this time.

⁹ CCA, s. 152AB(2)

In addition to the criteria for accepting an SAU variation, the CCA sets out three reasons why the ACCC must not reject a variation. These reasons relate to:

- a fixed principle term or condition that is identical to one in the original SAU in all respects, provided the variation was given during the notional fixed period, and none of the qualifying circumstances exist, for the original fixed principle term or condition.
- price related terms and conditions that are reasonably necessary to achieve uniform national pricing of eligible services provided by NBN Co.
- a refusal by NBN Co to permit interconnection or supply services that is authorised by the CCA because it is reasonably necessary to achieve uniform national pricing of eligible services provided by NBN Co.

Finally, the ACCC must refuse to accept the SAU variation if it provides that a term or condition is a fixed principle term or condition for a notional fixed period, and the ACCC considers that it should not be a fixed principle term or condition, or the notional fixed period or qualifying circumstances for the fixed principle term or condition specified in the variation should not be the notional fixed period or qualifying circumstances.

Broadly, the ACCC considers that the LTIE assessment involves a balancing of costs and benefits to end-users over time, while the reasonableness assessment involves a balancing of potentially competing considerations. The matters the ACCC accounts for are often inter-related and involve trade-offs that will be weighed in our assessment.

The ACCC does not consider the assessment of the SAU variation to be a reassessment of each existing provision in the SAU. However, consistent with its previous approach to decision-making on variations to the SAU, in assessing the variation against the statutory criteria, the ACCC will consider the varied terms, the effects of the varied terms, and the interaction of the varied terms with unchanged provisions in the SAU. In other words, the ACCC proposes to assess varied terms in the context of the whole SAU.

The ACCC considers the term LTIE refers to the end-users' economic interests, which include sustainably lower prices, increased quality of service and greater diversity and scope in product offerings.

In assessing whether the proposed price and price control framework promotes the LTIE, the ACCC must have regard to the extent to which they are likely to result in the achievement of the following three objectives:

- Promoting competition in markets for carriage services, or services provided by means of carriage services.
- Achieving any-to-any connectivity in relation to carriage services that involve communication between end-users.
- Encouraging the economically efficient use of, and economically efficient investment in, infrastructure by which listed services are supplied and any other infrastructure by which listed services are, or are likely to become capable of, being supplied.

In relation to the objective of encouraging economically efficient use of, and investment in, infrastructure, the ACCC will examine efficiency from an economic perspective. The economic concept of efficiency consists of three components:

- **Productive efficiency** refers to the efficient use of resources within each firm to produce goods and services using the least cost combination of inputs.

- **Allocative efficiency** refers to the allocation of goods and services across the economy in a way that is most valued by consumers. It can also refer to the allocation of production across firms within an industry in a way that minimises industry-wide costs.
- **Dynamic efficiency** refers to the efficiencies flowing from innovation leading to the development of new services or improvements in production techniques. It also refers to the efficient deployment of resources between present and future uses so that the welfare of society is maximised over time.

In considering whether to accept the SAU variation, we must assess whether, collectively the price and other terms and conditions of the variation over the SAU term promote the LTIE and are reasonable in accordance with the relevant legislative framework.

Timeframe for assessment

Part XIC of the CCA specifies a time limit for the ACCC's assessment of a proposed variation to NBN Co's SAU. The ACCC must decide to either accept or reject a proposed variation within 6 months of receiving the variation, subject to the ability of the ACCC to extend this period by giving written notice to NBN Co. If the ACCC does not make a decision within the statutory time period, it is deemed to have accepted the variation.

In addition, the ACCC's decision-making period will also be extended by the following:

- the period in which the ACCC is undertaking the first public consultation
- any period during which the ACCC has requested further information from NBN Co under section 152CBH and is waiting for NBN Co to respond.

The ACCC may extend (or further extend) the time for assessment by a period of not more than 3 months in accordance with section 152CBG (9) of the CCA. The ACCC must give written notice to NBN Co explaining why the Commission is unable to decide on the variation within the six-month (or previously extended) period and publish the notice on the ACCC website.¹⁰

¹⁰ CCA, ss.152CBG(9) and (10).

4. Overview of SAU variation

4.1. Key elements of NBN Co's proposed variation to the SAU

NBN Co's SAU variation proposes to introduce significant changes across all key elements of the SAU. The following is a high level summary of key changes NBN Co has proposed to make to the SAU and which the ACCC seeks stakeholder feedback on. Each of the following elements is discussed in more detail in section 5 of the paper. A brief commentary on how the ACCC considers the package of proposals operates in practice is provided in section 4.2 below.

- **New flat rate pricing offers** – NBN Co proposes a flat monthly charge construct for residential grade 100 Mbps and higher offers, that currently make up less than 20% of NBN residential grade services.
- **New bundled offers** – NBN Co proposes new bundled offers that will apply to most other residential grade 50 Mbps or less offers (covering more than 80% of current NBN residential grade services). These provide for access and a CVC utilisation allowance, plus if the bundled CVC allowances are exceeded in aggregate, a volumetric CVC charge of \$8Mbps/month. There is provision for the CVC allowances in the bundled offers to be adjusted every 6 months, with the intention of offsetting around half the expected growth in peak CVC usage over time.
- **Price controls** – New individual product price caps will apply to the new product offers, a modified annual revenue cap and a new discount adjustment mechanism, with scope for the revenue cap and individual product caps to be replaced with a weighted average price cap. These controls provide for a minimum potential price escalation path of the relevant offers out to 2040.
- **Building block model** – NBN Co proposes to adopt an approach similar to current SAU arrangements on the composition of the annual building block revenue requirement (**ABBRR**) and regulatory asset base (**RAB**) roll-forward. NBN Co proposes to introduce new fixed principles regarding the ABBRR and RAB roll-forward relating to core regulated services.
- **Recovery of accumulated losses** – NBN Co proposes a framework for recovery of accumulated losses, as reflected in the initial cost recovery account (ICRA), over the remaining SAU period. NBN Co will calculate a portion of this balance for each year and add this amount to the ABBRR to establish a revenue cap. NBN Co proposes to carry forward 50% of any losses relative to the revenue cap for a regulatory cycle into the following regulatory cycle, and to index residual ICRA balances to inflation.
- **Cost allocation methodology** – NBN Co proposes to establish separate cost bases for 'core' and 'non-core' services using cost allocations. Services that are categorised as being supplied in competitive markets will be allocated to the non-core cost base, with prices for these services not being subject to SAU price controls. All other costs will be allocated to the core services cost base and SAU price controls will apply. Categorisation of services between core and non-core will be determined ahead of each regulatory cycle through the replacement module process.
- **Expenditure criteria** – Under clause 4.7 of the SAU variation, NBN Co must submit a Long Term Revenue Constraint Methodology proposal incorporating forecasts for its operating and capital expenditures that satisfy the principles in clause 2C.2.5 of Schedule C of the SAU variation. These principles require forecast expenditures to reasonably reflect the expenditure that a prudent and efficient operator in NBN Co's position would incur in achieving a number of 'Expenditure Objectives' specified in clause 2C.2.5, having regard to a number of 'Expenditure Factors' also specified in that clause. Clause 4.5(d) of the SAU variation requires the ACCC to have regard to the

Expenditure Objectives and Expenditure Factors in determining whether to accept or reject a replacement module application proposed by NBN Co, and clauses 4.7(a)(i) and 4.10(b)(ii) operate to require the ACCC to determine any forecast expenditures, in the replacement module determination that is to be made by the ACCC where it rejects the application, in accordance with the principles set out in clause 2C.2.5 of Schedule 2C. Similar considerations would apply to the pass-through of cost changes and the ACCC's assessment of whether NBN Co's actual capital expenditures ought to be included in its RAB.

- **Weighted average cost of capital** - NBN Co proposes applying a nominal vanilla WACC to determine the allowed rate of return on capital, which is based on individual estimates for all key parameters. NBN Co has proposed specific values for WACC parameters for the first regulatory period from a detailed methodology that it proposes to adopt thereafter. NBN Co proposes it would need to follow this methodology when proposing a WACC before each regulatory cycle in the subsequent regulatory period for the entirety of Module 2. The SAU variation would require the ACCC to follow the same principles in assessing WACC for each regulatory cycle.
- **General regulatory structure and replacement module assessment process** – Clauses 4.5 to 4.12 of the SAU variation require NBN Co to submit applications to the ACCC to vary the SAU under section 152CBG of the CCA, so as to incorporate replacement modules into the SAU, which are to be assessed, and accepted or rejected, by the ACCC under and in accordance with that section. The replacement module applications apply for 3,4 or 5 years and must include Long Term Revenue Constraint Methodology and RAB roll-forward proposals, including forecast information for 5 years. NBN Co is proposing some exceptions for the first regulatory period, including a shorter initial regulatory period of 2 years. The variation also proposes to align the maximum duration of its standard forms of access agreement with the term of the regulatory cycle. If the ACCC rejects a replacement module application, it is required to make a replacement module determination for a regulatory cycle in accordance with the requirements of the SAU variation.
- **Service quality** – Clauses 1C.1.8 of Schedule 1C, and 2B.1.7 of Schedule 2B, of the SAU variation expressly state that the NBN Offers and their Maximum Regulated Prices have been developed and proposed taking into consideration the service standard commitments that relate to the supply of NBN Offers as set out in the relevant standard forms of access agreement. Clause 2C.14 of Schedule 2C of the variation allows NBN Co to submit a cost pass-through application for service standard improvements which will allow for a further increase in price. However, if the ACCC does not accept a cost pass through application in full, NBN would not be required to proceed with the relevant Service Standards Improvement. Additionally, there is no commitment under the SAU variation to improve service quality to enable retailers to efficiently meet their regulatory requirements¹¹ or to resolve service delivery issues in a timely manner. There are also no consequences proposed for reductions in service quality.
- **Service description** – Under Schedule 1C and the dictionary, NBN Co has incorporated the technologies and connections that form part of the FTTB/C/N and HFC networks into the SAU document. As part of this incorporation, peak information rate and committed information rate objectives have also been proposed as part of the SAU.

¹¹ The ACMA is currently consulting on draft rules that provide for the pass-through of wholesale level rebates that the RSP received (such as those in WBA4), in monetary form or in kind, to consumers. The rules also require the retailer to keep records of rebates received/passed-through to consumers and to develop and publish their service level commitments in relation to connections and fault rectification etc. The ACMA's consultation paper and submissions on the Draft *Telecommunications (Statutory Infrastructure Providers—Standards, Rules and Benchmarks) Determination 2021* are available on the [ACMA website](#).

- **Reporting and transparency** – Clause 1H.6 of Schedule 1H, and 3D.2 of Schedule 3D, of the SAU variation specify that NBN Co will measure and monitor its performance, as well as report on that performance. The variation also clarifies that proposed service standard reporting will not apply should the ACCC make any relevant record-keeping rules.
- **ACCC functions and powers** – a small number of additional functions and powers are proposed to be conferred on the ACCC. These are in respect of discrete regulatory controls. It is not proposed that a broad power of direction to be conferred on the ACCC concerning the treatment of new issues or to step in where express commitments contained in the SAU no longer provide the protections for consumer, competition and efficiency objectives that they were meant to provide.

4.2. How we expect the framework to operate in practice

The key elements of the SAU variation and the issues the ACCC seeks feedback on are discussed in section 5 of this consultation paper. However, it is important to consider how the various elements of the SAU variation are expected to interact and potentially operate as a single framework.

This section summarises how the ACCC expects the main regulatory processes outlined in NBN Co's proposal, from establishing service quality parameters to setting prices, would work in practice as a package with some initial observations on their expected operation.

4.2.1. Service quality commitments would be set through commercial negotiation with cost increases passed through to retailers

First, NBN Co would establish service standards outside of the SAU framework through commercial negotiation. NBN Co would then specify its service levels and associated matters (such as service level timeframes, performance objectives and rebate arrangements) in its standard form wholesale broadband agreement. These service levels would become binding on the retailer once it entered the agreement.

The SAU does not provide a commitment or mechanism by which retailers or the ACCC could require service quality improvements should NBN Co not choose to make requested changes itself.

NBN Co could however apply to increase the maximum allowable prices and revenues established under the SAU for any service standard improvement that it chose to introduce through a commercial negotiation process or which was imposed on it by regulation. Should the application be rejected in whole or part, NBN Co could choose not to proceed with the improvement.

The development of service standard improvements in this manner could lead to households and businesses missing out on improvements that they would value more highly than it would cost NBN Co and retailers to deliver. On the other hand, improvements that cost more than consumers would be willing to pay could be developed only to be rejected when a cost pass through application is subsequently received.

4.2.2. The cost base for supplying core regulated services would be determined ahead of each regulatory cycle

Second, the cost base for supplying core regulated service would be determined for each regulatory cycle. This would include a forward-looking assessment of NBN Co's expected costs over the next regulatory cycle (see sections 5.3 and 5.8 for further discussion)

The cost base would be established through the annual building block revenue requirement (the ABBRR), which reflects the annualised costs to NBN Co of supplying services. This amount reflects recovery of expenditure incurred consistent with the provisions of the SAU and to recover investments over the life of the assets including previous investments for which the relevant assets still have remaining economic life.

The SAU variation sets out the detailed methodology and principles for determining the various inputs that are used to determine ABBRR for core services. These include operating and capital expenditure forecasts, the weighted average cost of capital and cost allocation. NBN Co would be required to follow these methodologies and principles in preparing its proposal for a regulatory cycle (replacement module application). Similarly, the ACCC would need to follow the same requirements in its assessment of NBN Co's proposals (see sections 5.3 to 5.7).

4.2.3. An amount for the recovery of historical losses would be added to the cost base to establish a revenue cap

Third, once the cost base for supplying core regulated services has been established, an additional amount reflecting recover of historical losses would be added (see section 5.4).

A portion of NBN Co's historical losses (as reflected in the initial cost recovery account or 'ICRA' as of 1 July 2023) would be added to the ABBRR in each year. The sum of both these items in each year of a regulatory cycle would form NBN Co's revenue cap. The ICRA recovery component would increase each year over the remaining SAU period.

As the ICRA recovery component in each year is incorporated into the revenue cap and is eligible for recovery by NBN Co, the same amount is subtracted from the ICRA balance. The residual ICRA balance is then indexed for inflation each year, which is a change from the practice under the SAU as it stands of indexing this amount by the weighted average cost of capital.

4.2.4. Differences between the revenue cap and actual revenue is partly carried forward to the next regulatory cycle

Fourth, once NBN Co's revenue cap is established in the manner described above, NBN Co will be limited from recovering more than this amount over a regulatory cycle (see section 5.4).

If NBN Co recovers more than the revenue cap over a regulatory cycle, 50% of the difference between actual revenue received and the revenue cap will be carried forward to the next regulatory cycle in the unders-overs account to offset future revenue allowances. The weighted average cost of capital would be applied to each annual under or over amount within a regulatory period in making these calculations.

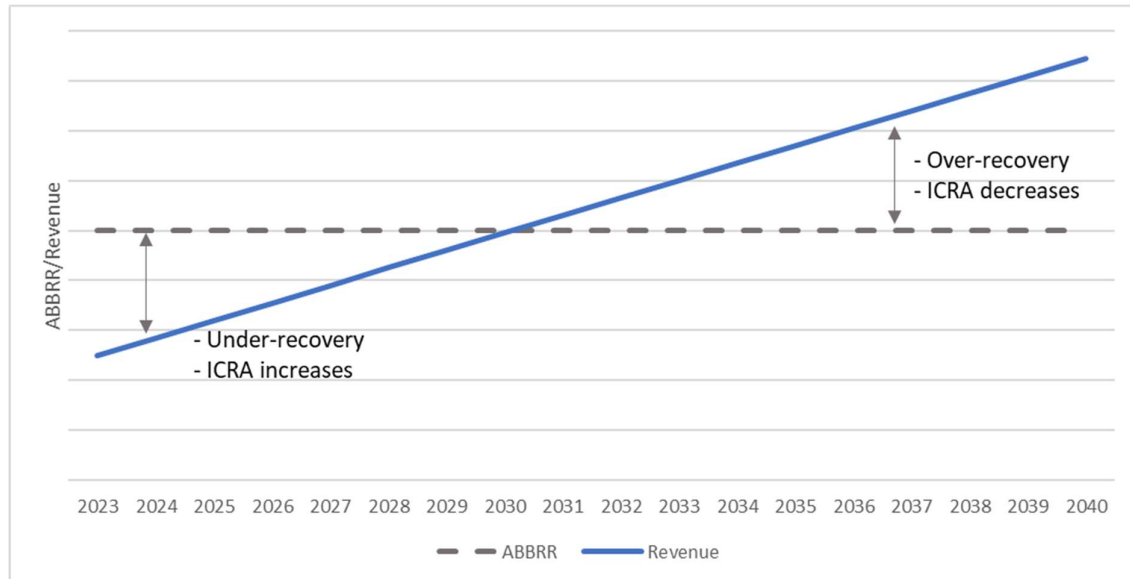
The same mechanism would apply in the case of any revenue shortfalls relative to the revenue cap over a regulatory cycle, i.e., 50% of the shortfall would carry forward to the next regulatory cycle. In this case, the mechanism would result in an increase to the revenue allowance for the next regulatory period.

However, the ACCC notes that NBN Co does not currently earn sufficient revenue to recover its ABBRR, and is not expected to do so for several years. Given the ICRA recovery component will be added to the ABBRR to form the revenue cap, and noting that the ICRA recovery component is expected to increase year on year, it is likely that NBN Co will earn less than the revenue cap for a significant period of time unless NBN Co can generate significant increases in revenues.

The implication of this scenario is that the revenue cap would likely fail to act as a binding constraint on NBN Co or provide any basis for setting prices. It would also likely result in the unders-overs account remaining in deficit (with potential for this deficit to grow), which together with the residual ICRA balance, is likely to create future uncertainty regarding the treatment of accumulated losses.

To illustrate this effect further, consider the indicative scenarios considered below in Figure 1 and Figure 2. ¹²

Figure 1: ABBRR vs revenue (current SAU arrangements – indicative only).

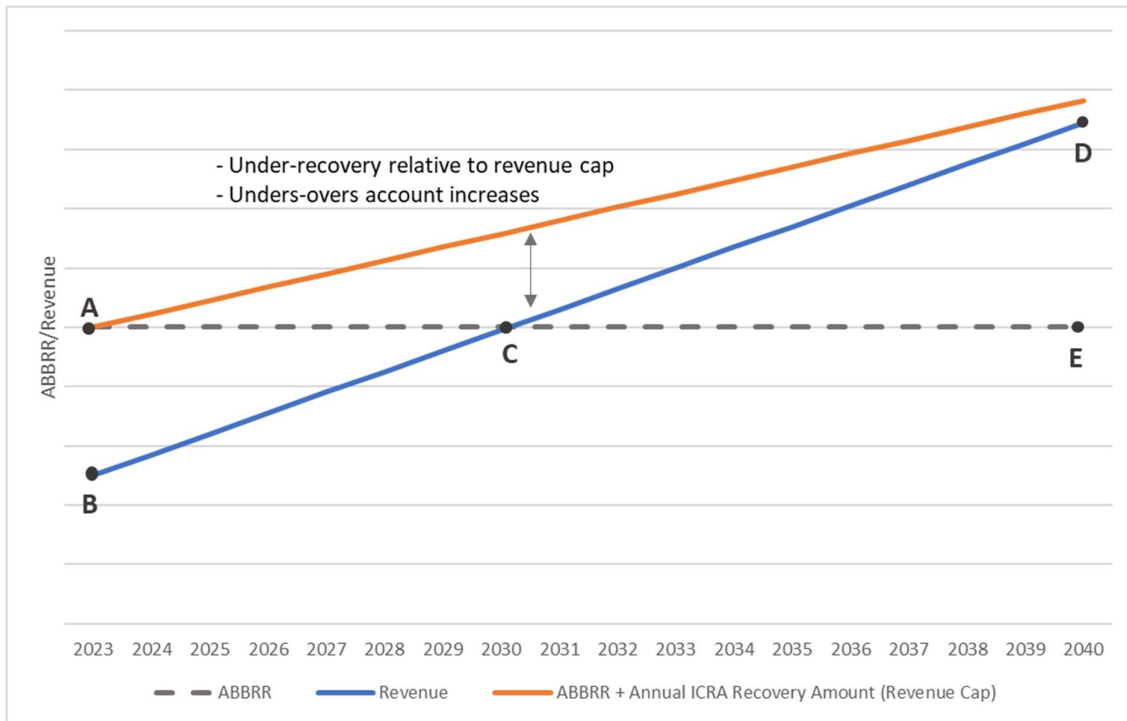


The scenario in Figure 1 represents current ICRA arrangements under the SAU, whereby NBN Co is not limited in how much revenue it can earn in a given year, so long as the ICRA balance is positive (ie, there are accumulated losses yet to be recovered). NBN Co is currently recovering less revenue than its ABBRR, and is expected to do so for a number of years post 2023.

With growing revenue and a relatively stable ABBRR, NBN Co would reach a point of cost recovery within the SAU period. After this point, NBN Co would continue to recover revenue in an unconstrained manner and would over recover relative to ABBRR. Given the size of the ICRA, this situation would continue for the duration of the SAU period to 2040.

¹² We have assumed ABBRR remains unchanged over the SAU period in Figures 1 and 2 for ease of illustration.

Figure 2: ABBRR including annual ICRA recovery component vs revenue (proposed SAU arrangement – indicative only)



The scenario in Figure 2 represents NBN Co’s proposed arrangements under the SAU variation. Under NBN Co’s proposal a portion of NBN Co’s accumulated losses is added to the ABBRR to form a revenue cap. This portion increases in a linear manner each year over the SAU period. Unlike the current arrangements, the revenue cap will act as a constraint if NBN Co exceeds the revenue cap. If NBN Co does exceeds the revenue cap, 50% of the difference will be deducted from the revenue cap for the next regulatory cycle.

However, we consider NBN Co is likely to recover less than the revenue cap for an extended period, possibly out to 2040. Half of this unrecovered amount (the difference between the revenue cap and revenue received) will go into the unders-overs account, which will continue to accumulate as long as revenue remains below this amount. Under this scenario the unders-overs account would continue to accumulate in a manner similar to the current ICRA account and the revenue cap would fail to act as a binding constraint (much like the current arrangement).

Although this example demonstrates a scenario where NBN Co under-recovers relative to the revenue cap, it is important to note there would be a period under this scenario when NBN Co over-recovers significantly relative to ABBRR.

Figure 2 shows that NBN Co would begin to earn enough revenue to recover its ABBRR from point C. NBN Co will under-recover relative to ABBRR up until this point. The accumulated losses NBN Co would incur before reaching this point is shown by the areas bounded by points A, B and C. However, after NBN Co reaches this point, it would over-recover relative to ABBRR. The cumulative effect of the over-recovery until the end of the SAU period in 2040 is shown in Figure 2 by the area bound by points C, D and E. However, NBN would include in its unders-overs account half of the difference between the revenue cap (the orange line) and its revenues (the blue line). It is unclear what would happen to this accumulated balance at the expiry of the SAU in 2040. This adds to the uncertainty about the residual balance of the ICRA in 2040.

We note that, with the right regulatory framework in place, the building block model, on which the ABBRR is calculated, is designed to allow a regulated business to recover the costs required to operate in an efficient manner and to undertake new investments. As such, as a matter of practice building block regulation provides sufficient revenue for a business to meet its efficient expenses (including operating costs, working capital requirements and taxation) and provide a return on and of capital to shareholders. This would allow the business to meet all its efficient expenses (including debt obligations). This provides strong incentives on the regulated business to continue to invest in the network. We would generally expect a building block model would promote these outcomes in the first instance, subject to achieving and maintaining minimum financial benchmarks.

We also note that any revenue NBN Co receives over and above ABBRR under its proposed revenue cap will reflect the recovery of historical losses. The losses reflect costs associated with supplying services in the past and to reflect recovery of assets that have past their economic lives and have been depreciated. The continued deferral of cost recovery under the proposed model will result in these costs being borne by current and future customers.

4.2.5. Pricing is determined independently of cost base and revenue cap

Finally, NBN Co's pricing is then set independently of the cost base and revenue cap. This means that under NBN Co's proposal there remains no link between underlying costs and the price structure, price levels or projected price paths. Further, NBN Co's proposed pricing and proposed price paths do not appear to contain any direct link to current or future demand.

Rather, NBN Co's proposed pricing appears to derive largely from an escalation of its existing pricing practices. Although NBN Co has proposed some material changes (including some limited flat monthly price offers) volumetric CVC charging would continue for the majority of its current services.

The retention of CVC pricing would result in escalating costs for retailers to access the NBN at an uncertain rate. This steady increase in access revenues from NBN Co's standard and more basic residential grade products would likely reduce incentives for NBN Co to develop new products, and make it harder for NBN Co to rebalance prices to encourage efficient use of the NBN, such as by facilitating the use of spare network capacity to supply households and businesses with better speeds and quality during the busy hours. Rather, in combination with the flat monthly offers, it is likely to force households and businesses to purchase high speed inclusions at a price that does not represent fair value to them based on their requirements. This could also undermine retail competition and the efficient use of the network by making it more difficult to retailers to differentiate their product offers and tailor them to a greater range of household or business types.

The price control arrangements could also leave retailers exposed to price shocks on withdrawal of targeted discounts notwithstanding the limits that have been proposed for NBN Co's continuing discounting practices.

5. Issues for consultation

5.1. Pricing and product constructs

5.1.1. Overview of NBN Co's proposal

NBN Co proposes to replace its main SAU price offers with revised product and pricing constructs. This would see CVC charging removed from some higher speed products and the introduction of bundled access and CVC offers (with provision for CVC overage at a lower CVC price than in the SAU at present) for lower speed products. This would mean that the SAU offers would be brought more in line with existing commercial offers that apply under WBA4, with some additional modification.

More specifically, NBN Co's variation proposal includes a new flat monthly charge construct for residential grade 100 Mbps and higher offers. These currently make up less than 20% of NBN residential grade services.

For most other residential grade offers of 50 Mbps or less (covering more than 80% of current NBN residential grade services), the SAU variation includes new bundled offers that provide for access and a CVC utilisation allowance. For the bundled offers, if the bundled CVC allowances are exceeded in aggregate, a volumetric CVC charge of \$8Mbps/month applies to the CVC overage. CVC use for these products will be determined and charged for on the basis of peak utilisation rather than peak provisioning.

There is provision in the SAU variation for the CVC allowances in the bundled offers (excluding the 12/1 Mbps products) to be adjusted every 6 months. This comprises an automatic adjustment equal to 50% of the change in average aggregate peak CVC utilisation for a preceding 6 month period compared to the same period in the year prior divided by two (to reflect the adjustment is applied for a 6 month period).

NBN Co has also proposed to change its entry level broadband pricing to provide closer alignment of the 25 Mbps offer to the 12 Mbps offer, both compared to the existing SAU and WBA4 commercial offers. There is also a proposed new 12 Mbps voice-only offer priced initially at \$12 per month.

These changes are proposed to apply for the remainder of the SAU term until 2040, subject to other provisions allowing for the substitution of new price offers and the annual adjustment of prices under the price controls detailed in section 5.2 of the paper.

5.1.2. Preliminary observations

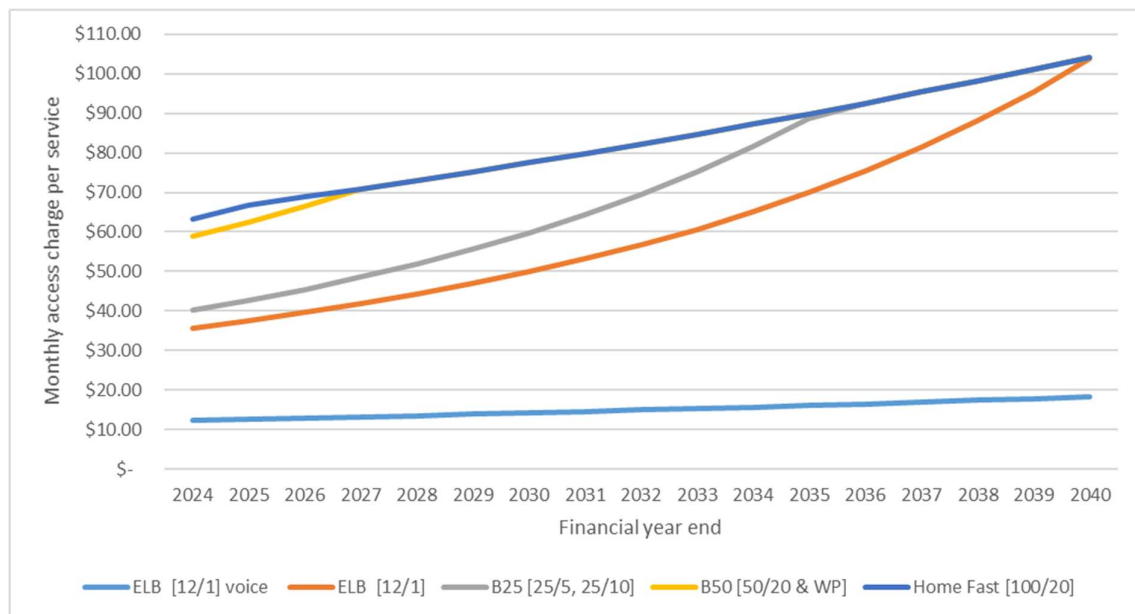
In a continuation of existing arrangements, the SAU variation does not appear to provide for an explicit link between the overall annual pricing yield and the annual costs that are derived from the building block model. Accordingly, it appears unclear whether the pricing yield reflects NBN Co's costs/cost allocations, or whether it is expected to do so over time. As discussed in section 4.2, we consider there would be no direct link between prices and underlying costs under the SAU variation and hence no basis for determining whether proposed prices reflect efficient costs unless NBN Co's revenues increase substantially. That is, for pricing yield and unit costs to fall into a close alignment, NBN Co's revenues would need to grow (for example, by NBN Co developing and introducing new products that customers value and are willing to pay for) to approximate the aggregate of its annual revenue requirement that is derived from its invested capital (regulated asset base), the annual ICRA recovery component and any deficit balance in its then current unders-or-overs account.

The retention of CVC charging may result in access cost escalation over time, as peak data demand continues to grow. It could also expose retailers and customers to cost increases due to demand shocks, such as those observed during COVID-19 lockdowns. The cost escalation could occur because the CVC allowances for the bundles appear to be designed not to grow as fast as peak data demand.

The level of the CVC overage charge at \$8Mbps/month also appears to be above NBN Co's costs of making additional CVC capacity available to retailers. The level of this CVC charge contributes to the amount of the cost escalation that could occur due to CVC allowances not keeping pace with peak data demand. In this regard NBN Co is forecasting annual peak data demand growth of 13% but the SAU variation proposal makes allowance for annual growth in the CVC allowances in the bundled offers of around half this level.

As a result of the retention of CVC charging for the bundled products less than 100Mbps and the CVC cost escalation mechanism built into the SAU proposal (along with allowable CPI+X adjustments), we observe that the costs to retailers of the 50 Mbps product are expected to equal those of the 100 Mbps product within only a few years and similarly for the 25 Mbps product before the end of SAU term. These wholesale pricing outcomes are illustrated in Figure 3 below.

Figure 3: Expected SAU wholesale charges for products 100 Mbps and below (\$ nominal)



These dynamics indicate that there can be expected to be a narrowing of reasonably priced access products in the market that could be in turn damaging to the level of retail competition and result in the supply of retail products in the market at higher prices and at speeds in excess of end customer needs. The level and structure of prices and how these will affect retailers' costs over time also raises the question of whether the efficient use of the NBN will be promoted. It is also relevant to the consideration of whether it will be in the LTIE for the MTM technologies to be brought within the SAU.

Further to these matters, the maximum price paths are calculated using NBN Co's expected 13% annual increase in CVC daily peak usage. This is low compared to historical trends observed via the Cisco index. Should actual CVC daily peak usage exceed this, maximum

permitted access costs for the 50 Mbps and lower speed tiers will grow more steeply than we have depicted in Figure 3.

Should NBN Co's proposed pricing measures come into effect, NBN Co is forecasting a significant migration of access services from the 50 Mbps and lower speed tiers to the 100 Mbps speed tier with a commensurate increase in its average revenue per user (**ARPU**). The Bureau of Communications and Arts Research on the other hand does not expect to see this level of household need. It forecasts that the median household speed requirement will be 29 Mbps in 2028 and that 99.9% of households will need no more than 78 Mbps.¹³ RSP NBN product fact sheets also currently recommend the 100 Mbps speed tier only for larger households, which represent around 10% of Australian households.¹⁴

We also note that the entry level fixed line broadband speed tier (currently the 12 Mbps tier) would be subject to the greatest increase in cost to retailers compared to the prevailing cost under current WBA commercial prices. We expect this to rise by around 15% in 2023-24 compared to 2022-23. This and the other lower speed access products have to date been used to supply more affordable NBN broadband services to consumers. They also serve as a source of product differentiation, and competition, between retailers.

It is difficult to forecast exactly how quickly and by how much the maximum allowable cost to retailers to access the entry level speed tier would increase over the remainder of the SAU term should the SAU variation be accepted. This is because this would depend on both growth in CPI and also network utilisation metrics for the daily busy hours (which are more difficult to predict as they in turn depend on the number and type of applications that households use in the early evening). That said, applying NBN Co's current forecasts the maximum allowable cost to retailers to acquire the entry level speed tier would double by around 2033 and continue to increase towards \$104 per month in nominal terms by 2040.

5.1.3. Issues/questions for stakeholder views

What are your views on the various elements of the pricing proposals put forward by NBN Co for the SAU variation?

Do you consider the proposals to be reasonable and likely to promote the LTIE, and if not, why not and what changes would be appropriate to achieve those outcomes?

5.2. Controls on prices and revenues

5.2.1. Overview of NBN Co's proposal

To constrain prices and revenues over time, NBN Co proposes new individual product price caps to apply to the new product offers over the remaining undertaking term and a modified annual revenue cap.

The proposed caps on the annual movement in individual product prices vary between products or product groups and comprise:

- flat monthly charge offers: CPI+3% per financial year for the first regulatory period and the greater of CPI or 3% in subsequent regulatory periods
- bundled product offers: CPI for the bundle product prices over the SAU term

¹³ Bureau of Communications and Arts Research (BCAR), *Demand for fixed-line broadband in Australia 2018–2028*, Working paper, July 2020.

¹⁴ Share of Australian households with 5 or more persons, from 2016 Census data. See <https://profile.id.com.au/australia/household-size>

- CVC overage charge of \$8/Mbps: no ability for NBN Co to make nominal or real increases over the SAU term
- all other offers: CPI-1.5% per financial year over the SAU term that applies at present.

The modified revenue cap includes an 'unders and overs' mechanism that allows 50% of the annual revenue losses or gains accumulated during a regulatory period to be carried into the subsequent regulatory period (with an adjustment to compensate for the WACC). Over the first few years NBN Co forecast costs to exceed revenue, which would mean that the unders and overs account would be likely to accumulate a substantial under recovery in early years for recovery in future years.

Under its new pricing offers, NBN Co is committing to discontinue its current practice of treating its main market offers as discounts. It is also proposing an adjustment mechanism to the maximum regulated prices for residential grade (TC-4) products where discounts exceed a specified threshold level. In effect, these provisions will require that, if the aggregate value of discounts to its residential grade charges exceed 5% of total residential grade revenues in a financial year, NBN must reduce maximum prices for residential grade products (not necessarily for the same products) in the subsequent financial year (such that, if those maximum prices had been in place for the entire financial year in which the discounts were provided, the 5% threshold would not have been exceeded). These reduced prices would then be subject to the annual price movement protections under the price caps.

The SAU variation provides for the possibility of a transition to a weighted average price cap in future. This would require the ACCC to initiate an inquiry to determine if introducing a weighted average price cap would be consistent with the legislative criteria. Following the inquiry, the ACCC may ask NBN Co to lodge a SAU variation which would provide for a weighted average price cap to replace the revenue cap and individual price controls as the primary form of economic regulation applicable under the SAU. NBN Co would only be required to submit a SAU variation providing for a transition to a weighted average price cap after the conclusion of a subsequent full regulatory period.

5.2.2. Preliminary observations

Individual product price caps

The individual product CPI+X price caps build in price escalation for the new products that are higher than currently apply. These would operate for the full SAU term of 17 years, with provision to be reopened only in order to increase them.

NBN Co has not specified how the X factors for the caps have been determined and why they are appropriate.

Another consideration for us is whether the individual price caps may provide less pricing flexibility to respond to significant shifts in demand for different products than may be available under a weighted average price cap, and whether this is reasonable and promotes the LTIE. The ACCC is interested in whether this would have important implications for the allocative efficiency of NBN Co's prices over time. Added flexibility to change the caps could also be important if new products and prices were to be introduced in the future.

Hybrid price-revenue cap proposal

The ACCC is interested in views on whether the carry over of revenue shortfalls between regulatory periods under the hybrid cap could be a source of additional access price uncertainty. This is on the basis that, along with other provisions in the SAU variation, it creates an opportunity for NBN Co to seek increases in prices above those indicated under

the individual product CPI+X price caps (or to raise the level of a weighted average price cap and associated individual product prices, should this form of control be introduced instead).

The ACCC is also considering whether the hybrid-price revenue cap maintains an incentive for NBN Co to seek price increases for its access services rather than promote greater use of the NBN. We expect that a weighted average price cap control is likely to provide better incentives to promote efficient network use, and lead to increased competition.

Effectiveness of discount adjustment mechanism

In relation to the price adjustment mechanism to accommodate discounts amounts above the threshold into the subsequent year's maximum prices, the proposed formulation would appear to allow more significant discounts to be applied where they are targeted at particular segments, are for limited duration, or are spread across acquittal periods. To provide a simple illustration of this, a discount that applied to products that collectively contributed a quarter of the total annual revenues or a quarter of the total acquittal periods over which it operated could be as high as 20% of the list price (20% = 4 x 5% threshold amount on total revenue). There is also no constraint on the withdrawal of discounts, exposing retailers to the possibility of price shocks.

We also query how likely the proposed 5% threshold will be in seeing routine discounts offered by NBN Co's transition to new SAU prices and whether it may actually serve as a disincentive to offer permanent maximum price reductions instead.

5.2.3. Issues/questions for stakeholder views

To assist the ACCC's assessment against the statutory criteria, we are interested in stakeholder views on the following questions about the proposed price and price control arrangements, including their expected evolution over the SAU term:

What are your views on the various elements of the price control proposals put forward by NBN Co for the SAU variation?

Do you consider the proposals to be reasonable and likely to promote the LTIE, and if not, why not and what changes would be required to achieve those outcomes?

Please consider the following aspects of the pricing proposals in providing your views on the potential strengths and weaknesses of the pricing measures that have been proposed:

- Are the access prices set at efficient levels, noting the elements of efficiency outlined in section 3.2 above?
- Are the proposed pricing measures likely to expand or reduce the diversity of retail offers and promote competition in dependent markets?
- Do the proposed pricing measures provide retailers with sufficient certainty about access costs?
- Do the proposed pricing measures provide incentives for NBN Co to operate efficiently, allow for the recovery of efficient new investments, and promote the efficient use of the NBN?
- Do the proposed pricing measures ensure that end-users are protected from price shocks and from prices that are higher than necessary in later years?
- Are the prices likely to represent value over time having regard to the permissible price increases without commensurate commitments to also improve service standards?

We note that regulated firms in other sectors give firm commitments that their pricing discretion would be exercised in an agreed upon manner including to deliver specified outcomes in the regulated market in accordance with specified pricing principles.

Please provide comments on whether the proposed pricing measures, which do not contain any commitment by NBN Co to specified pricing principles, are capable of delivering the outcomes that are agreed upon for each regulatory period?

5.3. Building block model – general approach

5.3.1. Overview of NBN Co's proposal

Schedule 2C of the SAU variation sets out the proposed framework for NBN Co's building block model.

The current SAU only covers a subset of NBN Co's network technologies, fibre-to-the-premises, fixed wireless and satellite, which account for approximately 25% of NBN Co's assets. The SAU variation would bring the majority of NBN assets into the SAU framework

The SAU variation adopts a similar approach to the current SAU to the composition of the annual building block revenue requirement (**ABBRR**) and RAB roll forward. Similar to the current framework, NBN Co proposes that ABBRR and its components (including forecasts of operating and capital expenditure) be assessed by the ACCC periodically on an ex-ante basis before the start of each regulatory cycle. NBN Co has also provided forecasts of the ABBRR and its components for an initial regulatory cycle of two years commencing 1 July 2023 and specified them in the SAU variation in Module 3. For subsequent regulatory cycles, the ABBRR and related inputs will be proposed by NBN Co and assessed by the ACCC through the replacement module process (see section 5.8 for further discussion).

NBN Co's proposed framework also provides for the following: a mechanism for the recovery of accumulated losses over the SAU period; a cost allocation framework for determining cost bases for 'core' regulated services and 'non-core' competitive services; detailed criteria for determining prudent and efficient expenditure; and a methodology for determining the weighted average cost of capital. These components are discussed in further detail in sections 5.4 to 5.7 of this paper.

Further to this, NBN Co also proposes to introduce additional fixed principles into the SAU in relation to how the values for the RAB and ABBRR for core services are determined. If accepted, these fixed principles would operate alongside existing fixed principles relating to how total RAB and ABBRR are determined.

In addition to the above matters, NBN Co proposes to introduce a financeability test as part of its proposed building block model framework. Under the proposed test, a number of financial indicators would be calculated using the core services ABBRR and other benchmark values for debt and interest expense. These would then be used to calculate an overall rating. If the overall rating fails to meet the necessary threshold for the benchmark credit rating (Baa2), the core services ABBRR would be adjusted upwards to ensure this benchmark credit rating is met. This upward adjustment would take place either by adjusting the return on equity or depreciation profiles.

5.3.2. Preliminary observations

NBN Co's approach to the composition of the ABBRR and the RAB roll forward is generally consistent with the approach set out in the current SAU. This overall approach may give some level of continuity and predictability in how some key building block model elements are determined. NBN Co has however made significant changes to individual components of the model, which are discussed further below.

In particular, the SAU variation appears to propose no link between prices and underlying costs. The price structure, price level and proposed price paths appear to each be

determined independently from the building block model, and therefore unrelated to underlying costs. Rather, the price structure, price level and proposed price paths would generate a certain amount of revenue independently of costs, which in turn would determine the amounts going into, or coming out of, the unders-overs account.

In addition, NBN Co has proposed new additional fixed principles. Although they appear to operate in a similar way to the principles in the current SAU, and to complement those fixed principles, the ACCC is considering the long-term and potentially broad effects of these new fixed principles.

We also note it is common practice for regulators to assess financeability on the basis of benchmarks rather than actual gearing and cost of debt. It is also common practice for the regulator to have discretion over whether an adjustment should be made to the allowable revenues or to leave responsibility for addressing financeability concerns to rest with the regulated business. Further, any regulatory adjustments to address financeability concerns are preferably to be done in a revenue neutral manner.

NBN Co's proposed financeability test appears to differ to some extent from tests seen in other regulatory frameworks. These tests can act as a final check of decisions on allowable revenues to ensure any potential financeability concerns are highlighted for further consideration by the regulator. The regulator can then consider whether adjustments to regulated revenue are required to address any financeability concern. However, in NBN Co's proposal, a failure to meet necessary benchmarks appears to result in an upward adjustment to revenue rather than acting as a trigger for further consideration by the regulator.

5.3.3. Issues/questions for stakeholder views

The ACCC seeks stakeholder views on:

- NBN Co's general approach to the building block model, which incorporates elements of the current SAU
- NBN Co's proposed additional fixed principles, and
- the operation of the proposed financeability test.

5.4. Recovery of accumulated losses

5.4.1. Overview of NBN Co's proposal

The SAU variation provides a mechanism to allow NBN Co to recover a portion of its accumulated losses from 1 July 2023 to the end of the SAU term in 2040. This mechanism is specified in clauses 2C.4 and 2C.5 of Schedule 2C of the SAU variation and governs how NBN Co's accumulated losses, as reflected in the initial cost recovery account (**ICRA**), will be treated.

Under the proposed arrangements, the ICRA balance related to core services (the core services ICRA) will first be 'crystallised' in real terms as of 1 July 2023. This balance is specified in the SAU variation at approximately \$38 billion in real terms (approximately \$44.5 billion in nominal terms).¹⁵ After this date no new losses will be included in the ICRA.

A portion of this ICRA balance (the ICRA drawdown amount) will be added to the ABBRR in each year to establish the revenue cap for that year. NBN Co proposes to increase the ICRA drawdown amount linearly over the SAU period, with the assumption that the entire ICRA balance will be drawn down to zero over a 27 year period (ie, to 2050). The method for

¹⁵ Clause 2C.4.3(a) of the SAU variation.

calculating the ICRA drawdown amount in a particular year is specified in clause 2C.5 of Schedule 2C of the SAU variation.

The ICRA drawdown amount will then be deducted from the ICRA balance each year. The remaining ICRA balance will then be indexed to inflation. This represents a change from the ICRA roll-forward mechanism under the current SAU, where the carried-forward ICRA balance attracts the regulated cost of capital. The method for rolling forward residual ICRA balances is set out in clause 2C.4.2 of Schedule 2C of the SAU variation.

Finally, and as noted in section 5.2, NBN Co is proposing a modified revenue cap. Under the proposed revenue cap, 50% of the difference between the revenue cap and the actual amount of revenue earned over a regulatory cycle will be carried over to the next regulatory cycle. For revenue shortfalls over a regulatory cycle, 50% of this amount will be added to the total revenue cap for the following regulatory cycle. Revenue over-recoveries would be deducted from the total revenue cap for the following regulatory cycle. This is referred to as the 'unders-overs account'. The weighted average cost of capital would also be applied to the unders-overs accounts when carried forward between regulatory cycles. The detailed method for setting the revenue cap is set out in clause 2C.5 of Schedule 2C of the SAU variation. As noted in section 5.2, we consider the proposed unders-overs mechanism would act as a hybrid regulatory control, in that NBN Co would be insulated from some revenue risk through the ability to carry over 50% of any revenue deviation to the following regulatory cycle, but would not be able to recover the remaining 50%.

We note that although the unders-overs mechanism provides for a symmetrical treatment of under and over-recovered amounts, NBN Co is currently under-recovering relative to its ABBRR and we expect NBN Co to continue to under-recover for several years. For this reason, it is likely the unders-overs account will be in deficit for some time.

5.4.2. Preliminary observations

NBN Co's proposed approach to the recovery of accumulated losses includes several changes to the current SAU.

First, in respect of ICRA, in the current SAU the revenue NBN Co can earn in any given year is not constrained by any cap, provided there is a positive ICRA balance. The SAU variation provides more structure around how much ICRA NBN Co will be allowed to recover over the SAU term and the timing of this recovery. The ICRA drawdown amount will be added to the ABBRR to establish a revenue cap, which NBN Co will not be able to exceed. If NBN Co exceeds the revenue cap, the revenue cap for the following regulatory cycle will be reduced to offset this over-recovery.

Second, in the current SAU any residual ICRA balance will be rolled forward in line with the regulated cost of capital, and any new losses would be carried forward in the ICRA in their entirety. The SAU variation proposes to instead index residual ICRA balances to inflation and to only roll forward 50% of new losses into the unders-overs account. These proposed changes may mean that NBN Co will not carry forward the same level of accumulated losses as under the current SAU.

Under NBN Co's proposed approach only around 40% of the real ICRA balance will be earmarked for recovery over the SAU term. This means there will be a significant residual ICRA amount remaining at 2040.

Further, unless there are significant increases in revenue over the term of the SAU (for example, by NBN Co developing and introducing new products that customers value and are willing to pay for), it seems unlikely that NBN Co will reach its revenue cap for periods in the SAU term and the accumulated unders-overs balance could therefore be significant. In its

assessment, the ACCC will consider whether the combined value of these balances, together with an apparent lack of clarity around how these amounts will be accounted for in the regulatory framework in the future, could create a high degree of regulatory uncertainty and uncertainty about longer term price levels.

The ACCC is also interested in stakeholder's views on whether NBN Co's proposed approach to the recovery of accumulated losses through the regulatory arrangements could mean that NBN Co recovers more revenue than it needs to operate the network efficiently, to continue to invest in the network and to achieve and maintain an investment grade credit rating. The ACCC is also interested in views on whether NBN Co's approach to the recovery of accumulated losses could lead to higher prices in the long term, discourage efficient use of the network, and could lead to inefficient behaviour by NBN Co.

5.4.3. Issues/questions for stakeholder views

The ACCC seeks comments from stakeholders on whether NBN Co's proposed treatment of accumulated losses is reasonable and in the LTIE. In particular, the ACCC seeks stakeholder views on:

- the extent to which NBN Co's proposed revenue cap provides clarity about the recovery of accumulated losses and promotes certainty about future price levels
- the likely price and associated impacts of NBN Co's proposals on retailers and end-users over the long term, and
- likely implications for NBN Co's incentives under its proposal.

5.5. Cost allocation

5.5.1. Overview of NBN Co's proposal

Under the SAU variation, services would be categorised as either 'core' or 'non-core' services. Services that are considered to be competitive (ie, services that are supplied in competitive markets) would be categorised as non-core services. All other services, including all services supplied to residential premises, would be categorised as core services.

Once services have been categorised in this manner, a separate cost base for core and non-core services would be determined in accordance with a cost allocation framework set out in clause 2C.10 of the SAU variation. This would involve allocation of the ABBRR, RAB and ICRA between the two categories of services. As noted in section 5.3, the ABBRR and RAB relating to core services would be subject to new fixed principles.

Core services would then be subject to SAU requirements, including maximum regulated prices, price controls, revenue controls and product withdrawal obligations. Non-core services would not be subject to SAU obligations and NBN Co will set prices and other terms for these services outside of the SAU framework. The services that will initially be categorised as non-cores services are enterprise ethernet, business satellite and satellite mobility services.

Clause 2C.10.2 sets out the cost allocation principles NBN Co will follow in allocating costs between core and non-core services. NBN Co must also prepare and maintain a cost allocation manual that sets out the detailed methodology through which it would implement the cost allocation principles.¹⁶

¹⁶ NBN Co submitted its cost allocation manual with the SAU variation and is available on the ACCC website.

The categorisation of services between core and non-core services and cost allocations would be determined before the start of each regulatory cycle through the replacement module process. Through this process NBN Co may propose changes to the categorisation of services (for example due to changes in competitive conditions in certain market segments) and allocation of costs. The ACCC may also determine categorisation and cost allocation in accordance with the replacement module process.

The SAU variation also provides for a process for NBN Co to propose categorisation and cost allocations in relation to new services. The ACCC would be required to assess NBN Co's proposal and has the ability to determine the categorisation of new services and relevant cost allocations. NBN Co and the ACCC would need to follow the process and timelines set out in clause 2C.10.4.

5.5.2. Preliminary observations

Appropriate allocation of costs between core regulated services and services that are supplied in competitive markets is crucial to ensure efficient outcomes and to ensure a regulated business cannot obtain an unfair competitive advantage through its regulated services. Without a rigorous cost allocation framework, there is a risk a regulated business may shift costs from competitive services towards core regulated services. This would provide a cost advantage for the business in the supply of competitive services and could promote anticompetitive behaviour or anticompetitive outcomes. It would also lead to prices for core regulated services being higher than the cost reflective level.

We note NBN Co's proposed cost allocation principles differ from those used in regulatory frameworks in other sectors in some important ways, including the allocation of fixed and common costs. Further, in order to effectively separate the competitive parts of the business from regulated services, regulatory frameworks routinely additionally impose ringfencing requirements and conditions around the maintenance of the Regulatory Asset Base (eg, LTRCM) to account for the outcomes of applying the cost allocation principles. Further, there are likely to be benefits in reviewing the categorisation of services and cost allocations on a periodic basis through the replacement module process. This will assist in ensuring services are appropriately categorised according to competitive conditions that prevail at the time, and that subsequent cost allocations remain appropriate in the face of changing conditions.

The cost allocation framework is a crucial component in determining the regulated cost base and for safeguarding against cost advantages in the supply of competitive services. Although the cost allocation principles are important, the implementation of the principles is likely to have a material impact on determining the respective cost bases. In our assessment we will closely consider whether allocations appropriately reflect relevant cost drivers, the allocation of common costs, and how the ICRA balance is treated in the relevant allocations.

We also note the proposed cost allocation appears to provide a degree of flexibility around implementation. NBN Co is required to prepare a cost allocation manual and notify the ACCC of any variations to the manual. The ACCC does not appear to have any role to approve the cost allocation manual or initiate changes to it. However, the ACCC would also need to have regard to the cost allocation manual if it determines cost allocations through a replacement module determination. We will closely consider the role of the cost allocation manual in the proposed framework, the flexibility it appears to afford NBN Co and the role of the ACCC.

Finally, the ACCC would be required to approve or determine the categorisation of new services and relevant cost allocations in accordance with the process set out in the SAU. This would require the ACCC to reach a decision on these matters within 60 business days, with a proposal deemed to have been accepted if the ACCC does not reach a decision in this timeframe, among other things. We will closely consider whether this process

unreasonably constrains the scope or timeframe within which the ACCC must perform this function (see section 5.12 for further discussion on ACCC powers and functions under the SAU variation).

5.5.3. Issues/questions for stakeholder views

The ACCC seeks comments from stakeholders on whether NBN Co's proposed cost allocation framework is likely to promote the LTIE and are reasonable. In particular, the ACCC seeks stakeholder views on the following:

- Will the cost allocation principles alone provide for the effective separation of the competitive services from the regulated services?
- Are the proposed cost allocation principles and detailed implementation likely to reflect relevant cost drivers and appropriately allocate common costs and historical losses?
- Are the processes for periodically reviewing cost allocations through the replacement module process, and processes for considering cost allocations for new services, appropriate and accommodating of changing conditions?
- Does the proposed cost allocation framework achieve an appropriate balance between flexibility on implementation and ACCC oversight?

5.6. Expenditure criteria

5.6.1. Overview of NBN Co's proposal

Schedule 2C of the SAU variation proposes introducing a number of requirements that would govern the extent, and manner, in which NBN Co's proposed and actual operating and capital expenditures could be recovered from customers of its 'Core Regulated Services' over time. These requirements would apply, in varying ways, to NBN Co's forecasts of its operating and capital expenditures as well as to the scope for NBN Co's Core Revenue Cap to be adjusted during a Regulatory Cycle in response to changes in its costs. Schedule 2C also proposes similar criteria for the inclusion of NBN Co's actual capital expenditure in its Real RAB (and Real Core Services RAB). Each of these requirements is outlined below.

5.6.1.1. Forecast Opex and Capex

Under clause 2C.2.5(a) of the SAU variation, NBN Co's forecast operating expenditure (**opex**) and capital expenditure (**capex**) would need to "reasonably reflect the expenditure that a prudent and efficient operator in NBN Co's position, acting in accordance with good industry practice, would incur in achieving" a set of objectives referred to as the 'Expenditure Objectives'. These objectives are, in summary: meeting or managing expected demand, satisfying applicable regulatory requirements, implementing projects directed by the Commonwealth Government, maintaining the quality, reliability, safety, security and integrity of services, and maintaining a national network offering ubiquitous access to all Australians.

Clause 2C.2.5(b) of the SAU variation defines the expenditure of a prudent and efficient operator as follows:

- **Prudent:** the expenditure that a prudent operator in NBN Co's position, acting in accordance with good industry practice, would incur if the expenditure reflects a reasonable choice amongst available alternatives.
- **Efficient:** the expenditure that an efficient operator in NBN Co's position, acting in accordance with good industry practice, would incur if the expenditure is likely to lead to the lowest Total Cost of Ownership or highest value outcome over time. The Total Cost of Ownership refers to the present value of all life cycle operating and capital costs.

For the purposes of determining whether forecast expenditure reasonably reflects the expenditure that a prudent and efficient operator would incur in meeting the Expenditure Objectives, clause 2C.2.5(c) of the SAU variation would require that regard be had to a wide range of 'Expenditure Factors'.

These include, in summary:

- i. historical trends in the relevant form of expenditure
- ii. the robustness of the approach and models used
- iii. appropriately accounting for uncertainty in the need for and timing of the expenditure
- iv. the efficiency of trade-offs between capex and opex to ensure lowest Total Cost of Ownership
- v. the promotion of competition in telecommunications markets
- vi. the extent expenditure is referable to a 'Conforming Contract'
- vii. reasonable expectations of Access Seeker and end-user demand in relation to connections, speed, data volumes, quality, and reliability
- viii. NBN Co's ability to finance the expenditure
- ix. the relevance and comparability of applicable benchmarks
- x. for opex, the previous period's opex, any reasons for changes and evidence of productivity improvements
- xi. for capex, the previous period's capex, any reasons for changes, the robustness of NBN Co's procurement, lowest Total Cost of Ownership compliance, evidence of productivity improvements, whether procurement is from competitive markets
- xii. efficient allowances for risks and sensitivities, and
- xiii. any other relevant matters.

The effect of the proposed variation appears to be that the ACCC is required to have regard to these expenditure objectives and expenditure factors in considering NBN Co's forecast opex and capex for the purpose of its decision on whether to accept or reject NBN Co's replacement module applications. If the ACCC rejects NBN Co's replacement module application, clause 4.10 of the SAU variation would oblige the ACCC to make a replacement module determination and, for this purpose, to determine forecasts for NBN Co's operating and capital expenditure that comply with the criteria in Schedule 2C of the SAU variation. In making such a determination, the ACCC would need to take into account the factors set out in section 152BCA(1) of the CCA and would need to publish its determination, together with its reasons, on its website.

The effect of clause 4.10(c) of the SAU variation appears to be that the ACCC is obliged to accept as prudent any expenditure forecast to be incurred on projects or programs that NBN Co was directed to undertake by the Commonwealth Government (those subject of a 'Government Policy Project Notice') in making a replacement module determination. Such expenditures would still be assessed for efficiency. The ACCC would be permitted to cap any forecast expenditures relating to Government Policy Project Notices that it determines in making a replacement module determination at levels consistent with the relevant notice.

5.6.1.2. Ex post review of capex

Clause 2C.9.7 of the SAU variation provides that prior to the end of a regulatory cycle, the ACCC must review NBN Co's actual capex against the same prudence and efficiency criteria

as applied to NBN Co's forecast capex. The ACCC could include a lesser amount of capex in NBN Co's RAB than its actual capex, if the ACCC determined such an amount would have been (or would be) incurred prudently and efficiently by NBN Co, acting in accordance with good industry practice, in achieving the Expenditure Objectives and taking account of the Expenditure Factors. The effect of this provision appears to be that the ACCC would need to make such assessments based on the circumstances existing, the alternatives and information that NBN Co could reasonably have considered, and the analysis NBN Co could reasonably have undertaken at the time of its decision to incur the capex.

As with forecast expenditures, capex incurred on projects and programs that are the subject of a Government Policy Project Notice would be deemed to be incurred prudently. The ACCC would be required to assess these expenditures for efficiency.

5.6.1.3. Cost pass-through

Part D of Schedule 2C of the SAU variation would enable NBN Co to seek the pass-through of certain changes in its costs to its regulated revenue and prices during a Regulatory Cycle. The cost pass-through arrangements would apply where NBN Co incurred or expected to incur changes in its costs due to tax changes, regulatory changes, force majeure events or service standard improvements included in its standard form access agreement.

The proposed regulatory change events refer to changes in any of the following to the extent that they affect or may affect or are otherwise associated with the supply of any products or services by NBN Co (defined in the SAU variation as 'Regulatory Requirements'):

- any legal, regulatory or administrative obligations or requirements
- any policy or direction to NBN Co issued or maintained by any government agency (including any Statement of Expectations) or
- a Government Policy Project Notice.

For pass-through applications relating to service standard improvements, clause 2C.14 of the SAU variation would require NBN Co to provide the ACCC with details of the previous service standard and to identify the nature of the change. Unlike tax changes, regulatory changes and force majeure events, improvements in services standards – and accordingly the ability to seek cost recovery via a cost pass-through application – are largely within the control of NBN Co.

Under clause 2C.13 of the SAU variation, NBN Co would be obliged to apply for a pass-through of cost reductions due to changes in taxes or Regulatory Requirements. The ACCC could instigate a negative cost pass-through if NBN Co did not do so during the relevant time window.

In each case, clause 2C.13.5 of the SAU variation provides that the claimed amount of the adjustment would be assessed to ascertain whether it reasonably reflects the change in costs that a prudent and efficient operator in NBN Co's position, acting in accordance with good industry practice, would incur in responding to the cost pass through event. This assessment is to have regard to the expenditure factors and be based on the circumstances existing, and information and analysis reasonably available to NBN Co, at the time NBN Co made the decision to incur the costs or made the cost pass through application (whichever is the earlier). As with forecast expenditures and ex post reviews of capex, expenditures reflected in cost pass-through applications that are incurred on projects and programs that are the subject of a Government Policy Project Notice would be deemed to be incurred prudently and would only be assessed by the ACCC for efficiency.

5.6.2. Preliminary observations

The ACCC's December 2021 report, NBN Co SAU Summary of Industry Working Groups Outcomes, noted the importance many working group participants placed on the need for more rigorous scrutiny of NBN Co's future opex and capex than had occurred during the rollout. This included providing an ability for the ACCC to review the *efficiency* of NBN Co's forecast expenditures, rather than just reviewing the *prudence* of expenditures. Working Groups participants also emphasised the need for appropriate ex post scrutiny of NBN Co's actual capex before it was admitted into the RAB and flowed through into prices. Finally, while Working Group participants recognised the need for NBN Co to recover the efficient costs of expenditures required to meet Government-directed obligations, participants considered that such obligations needed to be explicit and clearly defined to ensure that NBN Co's expenditures reflect the most efficient response to Government obligations, as well as be made publicly available to promote transparency.

While the proposed arrangements for assessing NBN Co's expenditure in the SAU variation provides a framework for assessing NBN Co's forecast expenditures, as well as its actual capital expenditures prior to those values being rolled into its RAB, it appears the SAU variation could seek to constrain the ACCC's assessment of prudence and efficiency by the numerous and sometimes conflicting objectives and factors listed in the proposed SAU.

The ACCC is interested in stakeholder views on a number of issues with the proposed arrangements in the SAU variation, which each apply to expenditure forecasts, ex post reviews and cost pass-through applications. The first is the partly circular way in which prudent and efficient expenditures have been defined. The second is the wide variety and scope of Expenditure Objectives that expenditures can legitimately be directed towards and the large number of Expenditure Factors to which the ACCC would be required to have regard in making its assessment. The ACCC is considering whether a requirement to take into account a large number of competing expenditure objectives, in the absence of any guidance on the weights to be applied to each, creates a greater risk of outcomes that undermine the LTIE. As the proposed provisions would apply for the remainder of the SAU, the ACCC needs to be satisfied that they are sufficiently clear and robust to govern expenditure forecasts in the circumstances.

The ACCC considers that an effective expenditure review regime is likely to require NBN Co to make sufficient information available to both wider stakeholders and the ACCC to enable a robust assessment of expenditure decisions. This would need to include the key assumptions relied upon by NBN Co and the analysis undertaken in developing its expenditure forecasts.

Finally, limitations on the ACCC's determination of expenditure forecasts for the purpose of its replacement module determinations, ex post reviews of capex and assessment of cost pass-throughs, apply when examining the prudence of expenditure on Government-directed projects and related cost pass-throughs. NBN Co's expenditures on these projects are deemed to be prudent. The ACCC will consider, and is interested in, stakeholder views on the extent to which a more circumscribed form of regulatory assessment is appropriate for expenditure decisions imposed on NBN Co by governments.

5.6.3. Issues/questions for stakeholder views

Do you consider the Expenditure Objectives and/or Expenditure Factors proposed in the SAU variation raise the prospect that NBN Co may be required to make complex and/or subjective trade-offs and if so, why? Do you think that the Expenditure Objectives and/or Expenditure Factors will lead to only prudent and efficient expenditure being allowed?

Do you consider the proposed triggers for cost pass-through applications as drafted may allow NBN Co to recover from users increases in costs that could be greater than those necessary to promote the LTIE? If so, please explain how this could occur and any changes to the proposed triggers that would be required in order for them to promote the LTIE?

What are your views on the SAU variation's proposal that less stringent criteria would apply to the ACCC's determination of forecast expenditures on Government-directed projects relative to other forms of its expenditure for the purpose of making its replacement module determinations? Do you consider this proposal is reasonable and promotes the LTIE and, if not, why not?

5.7. Weighted average cost of capital

The required rate of return of an infrastructure provider is the expected rate of return investors could obtain today if they invested in alternative assets of equivalent risk. The ACCC generally calculates the required rate of return of a regulated business by estimating a weighted average of the opportunity cost of debt and the opportunity cost of equity, which is referred to as the weighted average cost of capital or WACC.

5.7.1. Overview of NBN Co's proposal

NBN Co proposes applying a WACC methodology from 1 July 2023 which adopts the use of a nominal vanilla WACC to determine the allowed rate of return on capital for each forecast year.¹⁷ The proposed WACC is based on individual estimates for all key parameters, such as risk free rate and market risk premium. Parameters are individually specified and potentially change over time.

NBN Co has proposed specific values for WACC parameters for the first regulatory period and a detailed methodology to be followed thereafter. NBN Co proposes it would need to follow this methodology when proposing a WACC before each regulatory cycle in the subsequent regulatory period (i.e., the entirety of Module 2) by reference to a formula and specified inputs.¹⁸ The SAU variation would require the ACCC to follow the same principles in assessing WACC for each regulatory cycle.

5.7.2. Preliminary observations

On the basis of its proposed methodology, NBN Co's nominal vanilla WACC is 7.2% in 2023-24 and 7.1% in 2024-25 (the first regulatory cycle).¹⁹ This is a change of approach from the NBN Co SAU Module 1, which uses a set risk margin approach, where the nominal rate of return is calculated as the risk free rate plus a fixed 3.5% risk margin.

We note the risk free rate has increased significantly since NBN Co's SAU variation request was received. However, for the purpose of comparison, using a risk free rate of 1.7% (as at December 2021) proposed by NBN Co for the first regulatory cycle, the SAU Module 1 methodology implies a current nominal rate of return of 5.2%.²⁰ The latter methodology corresponds to the prevailing 10 year risk free rate of 1.7% plus a risk margin of 3.5%.²¹

¹⁷ NBN, *NBN Co SAU 2022 - Supporting Submission*, March 2022, pp. 72-73, 150-155; Frontier Economics, *Return on capital, inflation and financeability, prepared for and in collaboration with NBN Co*, 11 March 2022.

¹⁸ NBN, *NBN Co SAU 2022 - Supporting Submission*, March 2022, p. 72.

¹⁹ NBN, *NBN Co SAU 2022 - Supporting Submission*, March 2022, p. 178.

²⁰ Frontier Economics, *Return on capital, inflation and financeability, prepared for and in collaboration with NBN Co*, 11 March 2022, p. 9. These estimates have been prepared by Frontier Economics as at December 2021 and will continue to be updated until the commencement of the regulatory cycle.

²¹ The NBN Co-proposed methodology of calculating the prevailing 10 year risk free rate does not exactly correspond to the methodology employed under the NBN Co SAU Module 1, 1E.7.1. Under 1E.7.1. the risk free rate for a given financial year is calculated as an average annualised yield on 10 year Commonwealth Government Securities over the last 20 business

When expressed as risk margins alone, the NBN Co-proposed nominal vanilla WACC for 2023-24 implies a risk margin of 5.5% (7.2% minus the risk free rate of 1.7%) versus the NBN Co SAU Module 1 risk margin of 3.5%.

NBN Co proposes to prescribe a WACC methodology until the end of the SAU period of 2040.²² This differs from current arrangements under Module 2, where the ACCC has discretion in calculating the WACC.

The NBN Co-proposed WACC methodology is substantially different from the approach adopted by the ACCC in other recent decisions, such as Domestic Mobile Terminating Access Service Determination made in 2020.²³ The key parameters where there are substantial differences in methodology include: the calculation and estimation of the market risk premium (MRP), the nominal risk free rate, the return on debt, gamma and expected inflation.

Although NBN Co's proposed WACC methodology differs from the ACCC's approach in previous regulatory determinations, the ACCC's approach to these issues is not static and will be reviewed in the current context. The ACCC will assess NBN Co's proposed WACC methodology and parameters against the legislative criteria, taking into account submissions raised by stakeholders.

5.7.2.1. Return on equity approach

NBN Co proposes that the allowed return on equity be set by:

- pairing prevailing, forward-looking estimates of the nominal risk-free rate and MRP to produce a prevailing estimate of the required return on equity
- pairing long-term average estimates of the nominal risk-free rate and MRP to produce a long-term average estimate of the required return on equity, and
- applying equal weight to each estimate.

This proposed methodology differs from the ACCC's methodology adopted for previous determinations, where a single and best estimate of each parameter is primarily adopted for the calculation of the return on equity.

Market risk premium (MRP)

NBN Co proposes an MRP of 7.8% for Module 3. This is based on the methodology specified in the SAU variation, which requires the MRP estimate to be an average of the averaging current MRP estimated using four differently specified Dividend Growth Models and a long-term MRP of 6.5% based on the arithmetic average of historical excess returns for Australia.

The NBN Co-proposed MRP differs from the ACCC's methodology adopted for previous determinations, which primarily used the long term average of realised historical excess return, including a consideration of relevant forward looking evidence such as surveys. The ACCC's recent MRP estimates have ranged between 6.0% and 6.5%.

days of the preceding financial year. In contrast, and in NBN Co's proposal for the prevailing risk free rate, the average annualised yield of 1.7% on 10 year Commonwealth Government Securities is calculated over 40 business days, and does not specify that the risk free rate must be calculated over the final business days of the preceding financial year. However, the exercise here is purely for purpose and ease of comparison.

²² NBN Co, *NBN Co SAU 2022 - Supporting Submission*, March 2022, p. 72.

²³ An example of the ACCC's WACC methodology may be obtained from the ACCC's Domestic Mobile Terminating Access Service Determination, made in October 2020. ACCC (2020), *Public inquiry on the access determination for the Domestic Mobile Terminating Access Service*, Final Report, October 2020.

Risk free rate

For the estimate of the prevailing risk-free rate, NBN Co proposes a 40 business day average of the prevailing annualised yield on 10-year Commonwealth Government Securities. NBN Co also proposes a long term nominal risk free rate that is used by Commonwealth Treasury in its 2021 Intergenerational Report. The long term nominal risk free rate is the yield on 10 year Commonwealth Government Securities that is forecast to be observed in 2039-40.

The NBN Co-proposed risk free rate methodology differs from the ACCC methodology adopted for previous determinations. The ACCC's methodology estimates the prevailing nominal risk free rate, based on the average of the annualised yield on 10-year Commonwealth Government Securities over 20 business days.

5.7.2.2. Return on debt approach

'On the day' versus 'trailing average'

NBN Co proposes that the return on debt is estimated as a 10-year historical trailing average of 10-year BBB corporate bond yields. Historical data on 10-year BBB corporate bond yields are obtained from published RBA statistics.

We note that NBN Co's proposed methodology differs from the ACCC's methodology adopted for previous determinations, by applying an 'on the day' approach of using Bloomberg and RBA third party bond yield curves over the same 20 business day averaging period as that used in determining the risk free rate.

5.7.2.3. Gamma

NBN Co's proposed methodology for gamma is one obtained from an estimation of the market value of franking credits (relative to the value of dividends and capital gains) of 0.25. The estimation of the market value of franking credits is based on a set of dividend drop-off analyses, most recently from 2017.

NBN Co's methodology differs from the current arrangements for gamma under the NBN Co SAU Module 1. Because NBN Co would not be in a tax paying position for a period measured in decades, the ACCC previously determined that gamma should be left unspecified and the ACCC would decide on a gamma value if and when the need arises.²⁴

NBN Co's methodology differs from the ACCC's methodology adopted for previous determinations, where the ACCC separately estimated the distribution rate and utilisation rate, with the calculated value of gamma of 0.585.²⁵

5.7.2.4. Expected inflation

NBN Co's proposed methodology of expected inflation differs from the ACCC's methodology adopted for previous determinations. NBN Co's proposed methodology for estimating expected inflation is based on the Queensland Competition Authority's glide path approach up to 5 years ahead.

NBN Co's proposed methodology is a geometric average of the RBA forecast inflation rate for 1 and 2 years ahead and, depending on the horizon of the regulatory cycle, linear glide path estimates of forecast inflation for 3 and 4 years ahead. At 5 years ahead, an anchor

²⁴ ACCC, *NBN Co Special Access Undertaking – Final decision*, 13 December 2013, p. 97.

²⁵ ACCC, *Public inquiry on the access determination for the Domestic Mobile Terminating Access Service – Final report*, October 2020, p. 82.

forecast inflation rate of 2.5% is assumed, that is adjusted upward (downward) by 0.25% if the RBA's 2 year ahead forecast inflation rate is 3% and above (2% and below).

The ACCC's methodology for previous determinations adopts a 10 year geometric average of the RBA forecast inflation rate for 1 and 2 years ahead and the midpoint of the RBA's inflation target band for from 3 to 10 years ahead. The ACCC's methodology for previous determinations also assumes that the horizon of inflation expectations implied in the nominal risk free rate match the term of the risk free rate of 10 years. NBN Co's proposal does not make that assumption.

5.7.3. Issues/questions for stakeholder views

The ACCC welcomes stakeholders' feedback in relation to the matters set out below:

- NBN Co's proposal to lock in a detailed WACC methodology in the SAU, without any scope for a review of the methodology, until the end of SAU period of 2040.
- NBN Co's proposed WACC for SAU Module 2 with respect to the methodology and parameters.
- NBN Co's proposed WACC for the first regulatory cycle with respect to the methodology and parameters.

5.8. General regulatory structure and replacement module assessment process

5.8.1. Overview of NBN Co's proposal

As described in section 2.1, the current SAU has a modular structure with different provisions applying at different times. An important feature of the SAU is its provision for the introduction to the SAU of replacement modules, which apply for between 3 and 5 years.

Under the current SAU, replacement modules are introduced to the SAU for regulatory cycles within the subsequent regulatory period. NBN Co is required to submit applications to the ACCC to vary the SAU under section 152CBG of the CCA, so as to incorporate replacement modules into the SAU for each of those regulatory cycles. The replacement module application will contain necessary terms for the upcoming regulatory cycle, including certain forecast information for 5 years. As the replacement module application is an application to vary the SAU made in accordance with section 152CBG of the CCA, the ACCC must assess, and accept or reject, the application under and in accordance with section 152CBG, which governs its decision-making. If the ACCC decides to reject the replacement module application for a regulatory cycle, it must issue a replacement module determination for the regulatory cycle under and in accordance with the SAU.²⁶

NBN Co is proposing to maintain a similar replacement module process as contained in the current SAU, but with some important changes. In particular, NBN Co is proposing some exceptions from the existing framework for the first regulatory cycle. This includes a shorter regulatory period of only 2 years, and an exception from the requirement to submit 5 years of forecast information.²⁷

NBN Co is also proposing changes to the replacement module application assessment process. Under the proposal, the ACCC will be required to publish its preliminary view on whether it intends to make a replacement module determination, and, if so, on the Long

²⁶ Clauses 4.6 to 4.10 of the SAU variation.

²⁷ Clause 4.6(e) of the SAU variation.

Term Revenue Constraint Methodology proposal to be determined as part of that determination by 31 March of the last financial year of each regulatory cycle.²⁸ The variation also includes a new provision that provides that, if the ACCC does not make a replacement module determination by the specified date (20 business days prior the end of the previous regulatory cycle), it is taken to have made a determination in accordance with NBN Co's replacement module application.²⁹ Further, there is a new provision that allows the revocation of an ACCC replacement module determination for wrong information or error.³⁰

In the variation, NBN Co is proposing to introduce a binding revenue cap in relation to NBN Co's core regulated services. This revenue cap will comprise a standard building block revenue requirement and a portion of the initial cost recovery account. NBN Co is also proposing changes to the classification of services as either core regulated services or competitive services, the ACCC's ability to perform functions and exercise powers to review NBN Co's capital expenditure, cost pass-through events and the form of regulatory control. These matters are discussed in detail in other sections of this paper.

NBN Co is also proposing a change to the maximum duration of standard form of access agreements. Under Module 1 of the current SAU, standard form of access agreements have a maximum term of 2 years, although this can be extended. The SAU variation proposes to broadly align the maximum term of standard form of access agreements with the length of replacement modules. NBN Co is proposing to specify the length of the agreement for the first regulatory cycle to be no longer than the length of the regulatory cycle (2 years) plus 3 months.³¹ For future regulatory cycles, NBN Co is proposing to align the maximum term of any standard form of access agreement to the length of the regulatory cycle.³²

5.8.2. Preliminary observations

Under the current SAU, the long term revenue constraints are determined on an ex-ante basis in replacement modules for the subsequent regulatory period. Replacement module applications must specify the length of the regulatory cycle and must include Long Term Revenue Constraint Methodology and RAB roll-forward proposals, including forecast information for 5 years.

NBN Co is proposing to retain the existing timeframes of either 3, 4 or 5 years for the length of the regulatory cycle, with the exception of the first regulatory cycle. For the first regulatory cycle, NBN Co has proposed a one-off 2 year regulatory period.³³ NBN Co considers this would be more appropriate due to the level of demand and revenue uncertainty over the period and to align the replacement module process with NBN Co's current Integrated Operating Plan. The ACCC notes that a regulatory period of 2 years is shorter than the regulatory term usually applied in other regulated industries in Australia.³⁴ The ACCC also notes that it will need to consider the costs of regulation when assessing whether a 2 year regulatory period is appropriate. The SAU variation also proposes to allow an exception for the requirement under the current SAU to submit 5 years of forecast information for the first regulatory period.³⁵

²⁸ Clause 4.10(i) of the SAU variation.

²⁹ Clause 4.10(j) of the SAU variation.

³⁰ Clause 4.11 of the SAU variation.

³¹ Clause 3A.2 of Schedule 3A of SAU variation.

³² Schedule 2F of SAU variation.

³³ Clause 4.6(e) of the SAU variation.

³⁴ For example, 5 year regulatory cycles are typically applied for wholesale electricity and gas regulation by the Australian Energy Regulator, and 4 year regulatory cycles are common for water regulation in Australia.

³⁵ Clause 4.6(e)(iv) of the SAU variation.

Replacement modules will continue to be introduced, where NBN Co submits a replacement module application to the ACCC for assessment. The ACCC must either accept or reject the replacement module application. If the ACCC decides to reject the replacement module application, it must issue a replacement module determination.³⁶

NBN Co has proposed to introduce a requirement for the ACCC to publish, by 31 March of the last financial year of each regulatory cycle, its preliminary view regarding whether the ACCC intends to make a replacement module determination in respect of the upcoming regulatory cycle and if so, the preliminary view on the Long Term Revenue Constraint Methodology proposal to be determined.³⁷ NBN Co is also proposing to include a new provision that deems that the ACCC has made a replacement module determination in substantively identical terms to NBN Co's replacement module application if it has not made a determination by the required date.³⁸

Under the variation, NBN Co is also proposing that the maximum term of the standard forms of access agreement would broadly align with the length of the replacement modules.³⁹ The ACCC notes that, under Module 1 of the current SAU, NBN Co is required to offer each wholesale broadband agreement with a maximum term of 2 years, however, there is no such requirement in Module 2 of the current SAU.

NBN Co is also proposing significant changes to the substance of the replacement module applications, however these are discussed in detail in other sections of the paper.

5.8.3. Issues/questions for stakeholder views

The ACCC seeks comments from stakeholders on whether NBN Co's proposed changes to the replacement module process are reasonable and in the long-term interests of end-users. In particular, the ACCC seeks comments on:

- changes to the assessment process, including the deeming provisions in clause 4.10(j), and whether those changes are consistent with the legislative framework, including section 152CBG of the CCA (which governs the ACCC's consideration of a proposed variation to the SAU and, thus, any NBN Co replacement module application) and section 152CBA(10A) (which provides that the ACCC may perform functions, and exercise powers, conferred on it by the SAU in accordance with that SAU), and
- whether an initial regulatory period of 2 years is sufficient to provide regulatory certainty for stakeholders and is appropriate in terms of the costs of regulation.

We are also interested in stakeholder views on NBN Co's proposal to align the maximum term of commercial agreements with the replacement module process. We note that a commercial agreement with a term of 5 years would be significantly longer than the current arrangements. We seek views on whether the proposed period would facilitate timely negotiation and resolution of issues.

5.9. Service quality

5.9.1. Overview of NBN Co's proposal

NBN Co is not proposing to include a comprehensive service quality framework in the SAU variation as it submits that commercial negotiation between retailers and NBN Co is a more appropriate mechanism for determining service standards.

³⁶ Clauses 4.6 to 4.10 of the SAU variation.

³⁷ Clause 4.10(i) of the SAU variation.

³⁸ Clause 4.10(j) of the SAU variation.

³⁹ Schedule 2F of the SAU variation.

NBN Co's SAU variation includes a service standards recital that expressly states that NBN offers, and their maximum regulated prices, have been set by reference to the service standards commitments in the standard form of access agreement.⁴⁰ The service standards recital also confirms that, as the SAU variation does not incorporate in the SAU service standard commitments applicable to NBN offers, the SAU does not prevent NBN Co from entering into access agreements with different service standard commitments, nor does it have the potential effect of rendering any regulatory access determination setting out service standards commitments that is made by the ACCC inconsistent with the SAU. Further, it confirms that a breach by NBN Co of service standards commitments in an access agreement or regulatory access determination is not a breach of the SAU.⁴¹

The SAU variation also proposes to allow NBN Co to submit a cost pass-through application for improvements to service standards.⁴² This cost pass-through would allow an adjustment to NBN Co's permitted revenue requirements and maximum regulated prices. The ACCC would have a role in reviewing cost pass-through applications and, if necessary, providing an alternative amount or manner of adjustment to that proposed in NBN Co's pass-through event application. However, if NBN Co makes a service standard change contingent on the ACCC not making such a cost pass-through determination of a specified kind, and the ACCC makes such a determination, the NBN proposed adjustments to permitted revenue requirements and maximum regulated prices will have no effect.⁴³ We interpret this to mean that NBN Co would not be obliged to proceed with a service quality improvement in that scenario but could choose to do so.

NBN Co is also proposing to include a new utilisation management commitment in the SAU variation.⁴⁴ This commitment seeks to provide assurance that service quality will be maintained with the transition to AVC-only pricing for higher speed tiers and utilisation-based billing for CVC TC-4. The new commitments require NBN Co to take corrective measures where utilisation of its shared network resource in the transit backhaul network exceeds 95% for 15 minutes or more on 3 separate days in a 30 day period, subject to certain exceptions. Transparency will also be provided via monthly reporting on utilisation and reporting on NBN Co's augmentation activities.

5.9.2. Preliminary observations

The SAU variation does not specify a baseline set of service standards or performance benchmarks that NBN Co would meet or better over the SAU period, nor is there any commitment to include these in future regulatory periods through the replacement module process.

In support of its proposed approach, NBN Co submits that that commercial negotiation of service standards provides greater flexibility and notes that appropriate regulatory backstops will continue. These include any standards, rules and benchmarks introduced under the legislative SIP framework or ACCC regulatory instruments made under Part XIC of the CCA. The ACCC agrees that a Ministerial SIP determination could, when made, potentially provide a regulatory backstop.

We recognise that the SIP regime has an important role to play in establishing minimum standards that the public should reasonably expect to receive regardless of the superfast broadband access network to which they are connected. However, we understand that the minimum service standards set through a SIP determination would be calibrated with both

⁴⁰ Clauses 1C.1.8 and 2B.1.7 of SAU variation.

⁴¹ Clauses 1C.1.8 and 2B.1.7 of SAU variation.

⁴² Clause 2C.14 of SAU variation.

⁴³ Clause 2C.14(b) of SAU variation.

⁴⁴ Clauses 1H.5 and 3D.1 of SAU variation.

established and smaller network operators in mind.⁴⁵ The ACCC is seeking views on its preliminary view that it would be consistent with the objectives of the SIP regime for NBN retailers to have recourse to a higher service standard where it would be reasonable for an operator of NBN Co's scale to meet that higher service standard and in circumstances where consumers are willing to pay for that service. We also note that regulatory backstops do not provide a mechanism to improve service quality within the term of commercial agreements, which would weaken their effectiveness, particularly if the length of commercial agreements is extended (as is proposed in the variation).

While NBN Co is proposing to link the prices in the SAU variation to service quality specifications in standard forms of access agreement, a key area of our assessment will be whether the determination of service prices and service quality in separate processes could lead to outcomes that are not in the LTIE.

We note that the cost pass-through mechanism proposed by NBN Co appears to have a number of limitations, including that if the ACCC does not accept a cost pass through application in full, NBN Co would not be required to proceed with the relevant Service Standards Improvement. As such, there may be no certainty that a matter would proceed where potential efficiencies are identified during the regulatory assessment.

There is no commitment under the SAU to improve service quality to enable retailers to efficiently meet their regulatory requirements, or to resolve service delivery issues in a timely manner. There are also no consequences proposed for reductions in service quality. We note that a deterioration in service quality would not constitute a negative change event under Part D of Schedule 2C, so that mechanism could not be invoked to reduce NBN Co's allowable revenue amounts if it were otherwise considered appropriate to do so. We will need to consider whether the utilisation management threshold is appropriate and targets the appropriate network segments. An important consideration in our assessment will be whether the proposed utilisation management threshold is set at a level that ensures there is sufficient capacity on the network to support end-users' services. We note that the utilisation metric is significantly higher than the current metric under WBA4 (set at 70%). We will also need to consider whether the triggering events that would need to occur before NBN Co is required to address utilisation on the network promote the LTIE and are reasonable.

5.9.3. Issues/questions for stakeholder views

The ACCC seeks views on whether the service quality framework proposed by NBN Co in the SAU variation is reasonable and promotes the LTIE.

The ACCC seeks comments on whether the proposed utilisation management commitment is reasonable and whether it provides sufficient certainty with regards to service quality.

The ACCC also seeks comments on whether NBN Co's proposed approach to service quality, which does not contain any commitments to update wholesale service standards, would allow retailers to efficiently meet any new retail service quality determinations that may be made.

5.10. Service description

5.10.1. Overview of NBN Co's proposal

NBN Co is proposing to broaden the scope of the SAU to include MTM technologies. The current SAU only covers FTTP, fixed wireless and satellite connections which means it only

⁴⁵ The Department is consulting on the draft *Telecommunications (Statutory Infrastructure Providers—Standards, Rules and Benchmarks) Determination 2021*. The draft Determination applies to all SIPs, including NBN Co.

covers 25.2% of NBN services in operation.⁴⁶ NBN Co incorporates MTM technologies into the SAU by expanding the scope of NBN access services and adding new technologies into the service description.⁴⁷

Specifically, the variation:

- expands the dictionary to include the new technologies and terms involved in the support of the new networks.
- includes MTM technologies within NBN offers and other charge sections of the SAU. The proposed SAU also contains explanations of installations for each of the MTM technologies, outlined in annexures within Schedule 1C.
- extends pricing commitments to the MTM technologies and through the initial product components and prices features lists in Module 1.
- adopts in Module 2 the peak information rates and committed information rates from WBA4. FTTB and FTTC networks (except the 12 Mbps peak information rate downlink and the 1 Mbps peak information rate uplink) have a minimum peak information rate of 25 Mbps downlink and a 5 Mbps uplink. For the FTTN network this is a minimum of 12 Mbps downlink and 1 Mbps uplink.
- expands non-price terms and conditions in Module 3 to include MTM technologies. These include, for example, reporting for network performance and network capability.

5.10.2. Preliminary observations

An important consideration in our assessment will be whether the incorporation of MTM technologies into the SAU is in the LTIE.

The ACCC has previously considered, and consulted on, variations to NBN Co's SAU that focused on the incorporation of MTM technologies into the SAU in 2016⁴⁸ and 2017.⁴⁹ We outlined our position on changes that concerned the service description in a draft decision in 2017 on NBN Co's 2016 variation.⁵⁰ The current proposed SAU variation has attempted to address concerns raised in the ACCC draft decision. It also includes changes to the definitions in the dictionary to cover related MTM terms.⁵¹

The proposed variation introduces similar network boundary points for the FTTB, FTTN and HFC networks as the fibre, wireless and satellite networks. We note that there is a different outline for the FTTC boundary point. For non-multi dwelling units, this boundary point puts the NBN Co network connection device outside of NBN Co's network boundary.⁵²

We consider that the effective and efficient operation of the SAU depends in part on service descriptions, and related terms, that are clear and accessible to retailers. Clarity is required in relation to the scope of regulated services, as well as lines of responsibility between NBN Co and its customers. We note that under the proposed framework, adding new network technologies would require a further SAU variation. This reflects the position the ACCC adopted in the 2017 draft decision.

⁴⁶ ACCC, [NBN Wholesale Market Indicators Report](#), May 2022.

⁴⁷ Clauses 2(c) and 2(d), Attachment A Service Descriptions of the SAU variation.

⁴⁸ ACCC, [NBN Co SAU Variation](#), May 2016.

⁴⁹ ACCC, [NBN Co SAU Variation 2017](#), November 2018.

⁵⁰ ACCC, [Variation to NBN Co Special Access Undertaking](#), March 2017, p. 14.

⁵¹ Attachment C Dictionary of the SAU variation.

⁵² Clause 2(d), Attachment A Service Descriptions of the SAU variation.

5.10.3. Issues/questions for stakeholder views

The ACCC notes that definitions in the dictionary have been added in connection with MTM technologies. We seek stakeholder views on whether incorporating the MTM technologies into the SAU is in the LTIE. We also seek stakeholder views on whether the drafting of those definitions and service descriptions are sufficiently clear for the new technologies. Additionally, we seek views on whether the network boundary points in the proposed SAU variation are reasonable.

5.11. Service level reporting

5.11.1. Overview of NBN Co's proposal

NBN Co proposes to incorporate reporting and transparency measures with respect to utilisation management, network performance and service levels.

NBN Co proposes new reporting on network capability and some network availability metrics, such as outages and recurring faults. Aside from these changes, the transparency measures in the SAU variation generally reflect current reporting by NBN Co. The variation also clarifies that proposed network performance reporting will not apply to the extent that the ACCC makes record-keeping rules in respect of information that is substantially the same as that which NBN Co would otherwise be required to provide under the SAU.

5.11.2. Preliminary observations

SAU variation reporting requirements

NBN Co's proposed new reporting requirements generally align with the reporting metrics sought by retailers in the industry working groups, undertaken as part of the ACCC's review of the NBN framework.⁵³ However, there are a number of differences with respect to reporting frequency, level of aggregation and scope. We are interested in views on the extent to which these differences impact the reasonableness of the reporting requirements and promote the LTIE.

Monitoring and reporting requirements may promote the LTIE where they highlight performance issues, such that service quality improvements may be addressed over time. Effective monitoring and reporting could also potentially strengthen incentives for the efficient operation of the NBN.

The ACCC is interested in views on whether the reporting requirements proposed by NBN Co enable performance issues to be monitored effectively and enable retailers to mitigate risks to end-users. For instance, we are interested whether the requirements that NBN Co only report on end-user faults for each access technology, exclusive of service performance incidents, could undermine efforts to mitigate the risk to end-users that performance incidents pose. Further, the ACCC is interested in views on whether the reporting requirements in the SAU variation are reasonable and promote the LTIE.

Record keeping rules

The ACCC notes that separately to any provision in the SAU variation for reporting requirements, the ACCC has powers to collect information from NBN Co to undertake its telecommunications regulatory functions under the CCA and other relevant telecommunications legislation.

⁵³ An overview of the ACCC NBN framework review is available on the ACCC [website](#).

Specifically, Division 6 of Part XIB of the CCA permits the ACCC to, in certain circumstances:

- make record keeping rules (RKR), which specify how records and reports must be kept by NBN Co, and
- issue disclosure directions, which could require the disclosure or publication of certain records and reports.

The ACCC is exploring the potential benefits of providing a comprehensive reporting framework for the ACCC to obtain and disclose information regarding network performance by NBN Co in an RKR. This would be outside of the SAU variation and will be considered by the ACCC in parallel to its consideration of whether to accept or reject the proposed SAU variation. The ACCC will consider commencing the development of a new RKR, or whether to include this as part of the ACCC's ongoing review into the NBN services in operation RKR.⁵⁴

5.11.3. Issues/questions for stakeholder views

The ACCC seeks views on whether the performance reporting requirements that are proposed by NBN Co provide adequate transparency around the quality of NBN Co's services, and the performance of the NBN, such that they are reasonable and promote the LTIE. In particular, the ACCC is interested in stakeholders' views on:

- the scope of services to which the network performance reporting requirements apply
- the proposed form and method of reporting
- the level of detail and prescription in the reporting, and
- the timeliness of reporting.

Separately the ACCC is also interested in views on the advantages and disadvantages of developing a comprehensive reporting framework outside of the SAU, including in particular whether or not such a framework could address stakeholder concerns with the reporting requirements proposed in the SAU variation.

5.12. ACCC functions and powers

5.12.1. Overview of NBN Co's proposal

The current SAU confers some functions and powers on the ACCC. Under the proposed variation, additional functions and powers would be conferred. These include conducting ex post reviews of capital expenditure, assessing cost pass through applications, reviewing proposed changes to price constructs, determining the classification of new products as either competitive services or core services, and conducting an inquiry into whether the form of regulatory control should be changed.

⁵⁴ In October 2021, the ACCC sought stakeholder views on the existing NBN SIO RKR. This included issues relevant to this process, such as views on improving the reporting requirements for new products or services, and the inclusion of a requirement for NBN Co to report on its performance against the service standards commitments set out in its current WBA. The consultation paper and stakeholder submissions to the inquiry are available on the ACCC [website](#)

5.12.2. Preliminary observations

Sub-section 152CBA(10A) of the CCA permits a special access undertaking to confer functions and powers on the ACCC, in which case the ACCC may exercise or perform them in accordance with the undertaking.

This is intended to permit special access undertakings to operate flexibly, by ensuring that an undertaking can provide for the ACCC to make decisions on particular matters at a future time.

Such functions and powers could be an intrinsic element of specific regulatory controls that are included in the SAU without which it is very unlikely that it could operate effectively. Providing for the ACCC to check that actual expenditures were prudently and efficiently incurred prior to them being recognised in NBN Co's RAB may be an example of such a function or power.

Conferred functions and powers can provide assurance that the SAU overall is likely to deliver outcomes that promote the LTIE and/or deliver access terms that are reasonable over time. A power to review the effectiveness of the existing regulatory controls, and to require changes where these have been found to be ineffective in bringing about the intended outcome, could be an example of such a function or power.

The proposed variation to the SAU would significantly broaden its scope, and there is potential for matters to arise over the duration of the SAU that could not be anticipated in advance of its acceptance. Consequently, it is important in assessing the proposed variation to consider whether the conferred functions and powers are sufficient, in nature and scope, to deal with such situations.

Whether conferred functions and powers are sufficient in scope, and formulated so as, to enable the SAU variation to satisfy the statutory criteria is important as acceptance of an SAU can restrict the operative effect of access determinations or binding rules of conduct that are issued in reliance on other statutory powers that are contained in Part XIC of the CCA. The SAU would prevail over such an access determination or rule to the extent of any inconsistency. In this respect, the conferral of functions and powers recognises that in the absence of an undertaking being in effect, the ACCC would have broad powers to establish default access terms or the rules by which access terms are to be developed and offered.

The ACCC will consider whether there are any matters in respect of which the ACCC has no functions or powers under the varied SAU but in respect of which ACCC functions and powers are required in order for the variation to promote the LTIE, or to ensure the terms and conditions of the variation are reasonable, over the term of the SAU. The ACCC observes, for example, that the ACCC has no regulatory oversight of the cost allocation manual that is to be established and maintained by NBN Co under clause 2C.10.2 of Schedule 2C, in circumstances where:

- the cost allocation manual is to govern NBN Co's allocation of building block costs for new products and services that are categorised as Competitive Services and the associated adjustments to the RAB and annual building block revenue requirement for Core Services, and
- the ACCC must have regard to the manual in determining any allocation and associated adjustments in the event that it disallows the allocation of building block costs to new products and services, and associated adjustments, under clause 2C.10.4 of Schedule 2C.

Further, under the proposed SAU, NBN Co has not proposed any ringfencing guidelines or obligations on itself to maintain the regulatory asset base to support separation of the competitive and regulated parts of the business.

Whether a conferred function or power enables the SAU variation to promote the LTIE, and ensures the variation's terms and conditions are reasonable, over time will depend on its nature and scope, including any limitations that are expressly included or which arise indirectly via the incentives that the undertaking creates.

The ACCC will consider the suitability of the functions and powers that NBN Co has proposed to confer on the ACCC by way of the SAU variation. This includes consideration of the proposal in the SAU variation that the ACCC's existing functions and powers in the SAU relating to other services be extended to apply to additional access technologies, and whether those functions and powers will, given their extended scope, enable the SAU variation to satisfy the statutory criteria.

The ACCC first proposes to assess the clarity with which the function and power is conferred. This includes whether the conferral is made expressly or is implied by reference to ACCC determinations etc that are included in operative provisions of the undertaking.

For each function and power that would be conferred, the ACCC will consider whether the function or power can be exercised when required and whether it could be exercised in a manner that is sufficiently determinative of the matter. This could include considering whether the ACCC can exercise the function or power on its own initiative or whether this remains under the control of NBN Co by needing to make an application etc. Further, where the function or power can be exercised, a question to be considered is whether the regulator can make a substantive decision or only veto a proposal. For example, under the proposed variation, the ACCC could veto a change to a price structure that NBN Co has proposed but could not itself require such a change. Nor could the ACCC determine the price(s) associated with the proposed price construct, unlike its existing power under the current SAU to determine prices for new products or services.

The effective exercise of a function and power requires the ACCC to have access to information and other cooperation from NBN Co so that the subject matter and supporting context for a decision can be understood and any supporting facts or arguments tested with relevant parties. Consequently, the ACCC will consider whether each function and power is supported by a firm commitment to supply all relevant information, including responding to information requests made by the ACCC, or by an existing or conferred ACCC power to compel the supply of all relevant information, so that decisions can be made on an informed basis, and that this occurs in an open and transparent process.

For example, the proposed SAU variation could potentially operate to prevent the ACCC from considering information that should have brought about a reconsideration of an original decision to proceed with a particular investment program where this becomes available after the time of the initial decision to proceed, as a consequence of the requirement under the SAU variation for expenditure forecasts to 'be based on the circumstances existing, and information and analysis reasonably available to NBN Co, at the time of making the forecasts'. The requirement to consider only information reasonably available to NBN Co could arguably distort decision making and potentially weaken incentives on NBN Co to diligently seek out all relevant options and information.

The effectiveness of a function or power could also be reduced should the scope of decision making be overly restricted. This could occur expressly by restricting the information or matters to which the ACCC can have regard, or be introduced through definitions that deem or prescribe underlying matters. For example, the limits on the ACCC's functions and powers imposed by reference to expenditure forecasts and clause 2C.5.2 of Schedule 2C of the

SAU variation may operate to preclude the SAU variation from satisfying the statutory criteria for acceptance of the varied SAU, or those limits may be inconsistent with the legislative framework established by Part XIC of the CCA, for one or more of the following reasons:

- Prudency or efficiency may be defined in an overly permissive way in the SAU variation and this may result in some NBN Co applications being accepted even though what is proposed would otherwise be inconsistent with those economic concepts.
- The requirements for expenditure forecasts set out in clause 2C.2.5 of Schedule 2C of the varied SAU may not properly assess prudent and efficient expenditure.
- The requirement for the ACCC to consider the expenditure objectives and expenditure factors in deciding whether to accept or reject NBN Co's replacement module applications may be inconsistent with the legislative framework under Part XIC of the CCA governing ACCC decision-making on a variation to the SAU including the statutory criteria for acceptance of a variation.
- The SAU variation requires expenditure forecasts to 'be based on the circumstances existing, and information and analysis reasonably available to NBN Co, at the time of making the forecasts' and this may operate to preclude the ACCC from determining forecasts in its replacement module determinations that reflect information current at the time of their use in forecasting annual building block revenue requirements.

The effectiveness of a function or power conferred on the ACCC by the SAU variation could also be reduced by the specification of timeframes for its exercise, at the expiration of which the ACCC ceases to have any function or power, that are inadequate to allow for its effective exercise. A further consideration is whether NBN Co has incentives to cooperate in the regulatory process for the exercise of a function or power conferred on the ACCC, in circumstances where its proposals come into effect after a specified period has expired. For example:

- The timeframe for the ACCC's replacement module determinations under clause 4.10(i) of the SAU variation, being at least 20 business days prior to the cycle expiry date, and on the expiration of which the ACCC is deemed to have made a determination for the regulatory cycle that reflects NBN Co's replacement module application for that cycle, may operate to preclude the effectiveness of the ACCC's role in the replacement module process.
- The time allowed by clause 2C.10.4(d) of Schedule 2C of the SAU variation for the ACCC to notify NBN Co of the disallowance of its categorisation of any new product or service, or allocation of building block costs to any product or service categorised as a Competitive Service and corresponding adjustment to the RAB and annual building block revenue requirement for Core Services, being within 60 business days of any notice by NBN Co of its categorisation of any new product or service, and on the expiration of which NBN Co's categorisation, allocation and adjustments will take effect, may be insufficient to ensure the effective exercise of the ACCC's role in respect of categorisation and cost allocation.

5.12.3. Issues/questions for stakeholder views

Although we would see this task as largely one for us to undertake, we are interested in stakeholder views on:

- Our proposed approach to assessing the sufficiency and effectiveness of the proposed functions and powers that are to be conferred on the ACCC. Are there any other checks that we should be doing on the powers and functions that have been proposed to be conferred?

- Whether there are any further functions and powers that should be conferred so that the proposed regulatory controls will be effective, and to ensure the SAU variation promotes the LTIE, and its terms and conditions are reasonable over time? Is ACCC oversight of the cost allocation manual required for this purpose?
- Whether the limits that apply to the exercise by the ACCC of the functions and powers conferred on it by the varied SAU are certain and readily ascertainable.
- Whether any of the limits on the ACCC's functions and powers will preclude the SAU variation from satisfying the statutory criteria for acceptance of the varied SAU, and the consistency of those limits with the legislative framework established by Part XIC of the CCA, including for example:
 - The appropriateness, and consistency with the ACCC's existing powers and the statutory criteria under the legislative framework established by Part XIC, of the limits on the ACCC's powers to accept or reject NBN Co's replacement module applications and make a replacement module determination imposed by the SAU variation in respect of expenditure forecasts and by reference to clause 2C.2.5 of Schedule 2C of the SAU variation.
 - The adequacy of the timeframes specified for regulatory decision-making by the ACCC under the varied SAU and at the expiration of which the ACCC ceases to have regulatory oversight.