Proposed variation to the NBN Co Special Access Undertaking

Consultation paper

January 2023

Contents

Abbreviations and acronyms 2

1. Executive Summary 4
2. Background and consultation process 10
3. Legislative framework 15
4. Overview of NBN Co's SAU variation proposal 19
   - 4.1. Key elements 19
   - 4.2. How the regulatory framework could be expected to operate 21
5. Detailed discussion of key elements of the SAU variation 26
   - 5.1. General regulatory framework and modular structure 26
   - 5.2. Post-2032 arrangements 28
   - 5.3. Pricing and product constructs 32
   - 5.4. Price controls and transparency measures 36
   - 5.5. NBN Co's approach to the BBM 39
   - 5.6. Recovery of accumulated losses 41
   - 5.7. Expenditure criteria 44
   - 5.8. Cost allocation and accounting separation 50
   - 5.9. Weighted average cost of capital 52
   - 5.10. Incorporating other access technologies 57
   - 5.11. Service quality 58
   - 5.12. Reporting 65
   - 5.13. ACCC functions and powers 66

Annexure A: Overview of current NBN Co SAU 69

Annexure B: The long-term interests of end-users 70

Annexure C: Price path analysis for the 12 Mbps and 25 Mbps speed tiers 72

Annexure D: Preliminary assessment of the proposed pricing and product construct measures and the Module 2 price control arrangements 75

Annexure E: Estimation of the mark up to currently projected revenues to fully draw down the proposed ICRA balance by end of 2039-40. 78

Annexure F: WACC values for First Regulatory Cycle 79

Abbreviations and acronyms

ABBRR	Annual building block revenue requirement
ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric digital subscriber line
AER	Australian Energy Regulator
AVC	Access virtual circuit
BBM	Building block model
Capex	Capital expenditure
CCA	*Competition and Consumer Act 2010* (Cth)
CPI	Consumer Price Index
CVC	Connectivity virtual circuit
FTTB	Fibre to the building
FTTC	Fibre to the curb
FTTP	Fibre to the premises
FTTN	Fibre to the node
HFC	Hybrid fibre coaxial
ICRA	Initial cost recovery account
LTIE	Long-term interests of end-users
Mbps	Megabits per second
MRP	Market risk premium
MTM	Multi-technology mix
NBN	National Broadband Network
NBN Co	National Broadband Network Company Limited
Opex	Operating expenditure
RAB	Regulatory asset base
SAU	Special access undertaking
SAO	Standard access obligations
SIP	Statutory Infrastructure Provider
TC-4	Traffic Class 4

VDSL	Very high-speed digital subscriber line
WACC	Weighted average cost of capital
WAPC	Weighted average price control
WBA	Wholesale broadband agreement

1. Executive Summary

Background

NBN Co's 2013 Special Access Undertaking (SAU) establishes a framework for regulating access to the NBN, including rules by which maximum prices are determined and other measures aimed at promoting competition and encouraging efficiency. Hence, the SAU can play an important role in maximising the economic and public benefits of the NBN.

NBN Co has proposed substantial amendments to the SAU. The ACCC has published NBN Co's proposal as well as this consultation paper to assist in the preparation of submissions in response, which are due on 17 February 2023.

NBN Co's proposal follows extensive consultation that commenced in June 2021, including forums, working groups and consideration of a proposed made in March 2022 but subsequently withdrawn. The 2021 working groups identified five outcomes that could guide the development of a varied SAU. They were:-

- 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 efficient use of the NBN.
- Retail service providers (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.

Current proposal

NBN Co proposes to broaden the SAU to cover each of the access technologies it has adopted since the SAU was accepted, along with fundamental revisions to the regulatory framework. These revisions differ in important respects to those proposed in March 2022, and include:

- adopting a weighted average price control (WAPC), instead of a revenue cap, with the aim of strengthening incentives to achieve revenue, cost, and demand targets, and providing ex-ante and ex-post oversight over the prudency and efficiency of expenditures through a regulatory module determination process.
- incorporating a service standards framework, with the aim of allowing better coordination in the regulation of the price and quality of access to the NBN.
- specifying the value of accumulated losses reflected in the initial cost recovery account (ICRA) as $12.5 billion in current nominal terms, with the aim of providing additional long-term certainty while allowing a reasonable opportunity for NBN Co to achieve a stand-alone investment grade credit rating during the SAU term.
- an initial resetting of prices for residential grade access services and adopting the 25/5 megabits per second (Mbps) speed tier as the entry level broadband access offer.

- implementing an average price cap to be set at the Consumer Price Index (CPI) until revenues recover costs on an annual basis, currently projected for the 2030 financial year, and other controls over price increases on individual speed tiers at a maximum of either CPI or 5 percent per annum up until 30 June 2032
- requiring that NBN Co consult with stakeholders (including representatives of low-income groups) on its expenditure proposals, and including provisions aimed at increasing accountability when NBN Co is acting other than on a purely commercial basis, with the aim of promoting investment in projects of most value to its customers and to reduce the risk of unnecessary price rises

The ACCC is required to consider the SAU variation (including by reference to stakeholder feedback during consultation) and to decide whether to accept or reject the variation. The ACCC must not accept an SAU variation proposal unless it is satisfied that it meets the statutory criteria, which is described in detail in section 3 below. In summary, the criteria require assessing whether certain conduct will promote the long-term interests of end-users (LTIE) and that the terms and conditions are reasonable.

The revised SAU variation proposal would appear a positive step towards an SAU that could be capable of achieving the five outcomes that were identified through the ACCC's earlier consultation. However, based on current information there are some matters where it is not presently clear how NBN Co's proposed approach would satisfy the statutory criteria.

In particular, the ACCC notes the requirement that NBN Co's revenue allowance in the post-2032 regulatory period must be set to allow it a reasonable opportunity to achieve and maintain a stand-alone credit rating with a stable outlook, for the duration of each regulatory cycle. It appears that this requirement could limit the ACCC's ability to make regulatory determinations that encourage NBN Co to invest and operate more efficiently over time or could risk price shocks in the future. Regulating to mitigate such potential risks could also be difficult, given some of the factors which determine a credit rating would typically not fall within the ACCC's regulatory functions and powers. These matters are discussed further in section 5.2.

We also note that in the subsequent regulatory period it is proposed that if the ACCC does not make a replacement module determination for a regulatory cycle in the prescribed time, a replacement module determination will be taken to be in effect for that cycle in the terms proposed by NBN Co in its replacement module application. It appears this could possibly be a limitation on the ACCC's decision-making, or could pose issues if the ACCC were waiting on relevant information from NBN Co which impacted the ACCC's ability to make a determination on time. These matters are raised in sections 5.1, 5.7 and 5.13.

We understand that NBN Co is committed to continuing to work constructively with us and stakeholders in this consultation process to consider and address these issues.

The ACCC will also look to test whether the initial benchmark service standards proposed for the first regulatory cycle would suitably address certain quality issues that have previously been raised by retail service providers within a reasonable time. As discussed in section 5.11, it is not currently clear that this would be the case.

The ACCC will continue to consider NBN Co's proposal, applying the statutory test and having regard to stakeholder submissions. In this respect, we expect stakeholders will wish to consider in detail aspects of NBN Co's current proposal described in this paper.

Price and cost certainty available to retailers including complexity of pricing model

NBN Co has proposed a range of price transparency measures and a commitment to progressively cease charging for daily peak usage of residential grade access services (formally referred to as traffic-class 4 connectivity virtual circuit (CVC) charges), with its removal from high-speed access products (those of 100 Mbps or more) from 1 July 2023 and removal from other speed tiers from 1 July 2026. Because daily peak usage can be difficult to predict and charge for in retail markets, CVC charges have been a principal source of concern for retailers in managing cost uncertainty and the complexity of NBN Co's pricing model.

NBN Co forecasts that growth in daily peak usage, which drives the cost to retailers of accessing CVC, will remain materially below historic levels. To partially mitigate the cost increases associated with residual growth, NBN Co proposes to increase the CVC inclusions associated with the 25 Mbps and higher speed tiers at regular intervals at around half the rate of growth in usage. Further, retailers could also potentially optimise their cost base by making provisioning decisions on a service-by-service basis having regard to both the end-user's selected maximum speed and how often the end-user is online during the busy evening hours.

That said, retailers may have different views on the likely effect of the proposed price transparency measures and other changes to NBN Co's pricing model, including the effectiveness of the measures intended to mitigate exposure to cost uncertainty over the initial regulatory period.

Reasonableness of the proposed price / quality offer for the initial regulatory period and incentives to efficiently improve quality over time

For the initial regulatory period (referred to as the 'subsequent regulatory period' in the SAU variation and which covers 1 July 2023 to 30 June 2032), NBN Co has proposed material adjustments to its price model, some of which reduce access costs while others increase them. NBN Co is also proposing adjustments to some of its service quality measures, however the core commitments remain unchanged from those it set in the wholesale broadband agreement (WBA) that was published in December 2020.

Notably, the minimum cost[1] for the 50/20 Mbps speed tier (which is the most popular access product today) would increase by $5 per month or around 11 percent. Both the maximum speed inclusion and the cost of entry-level data access would increase, with a 25/5 Mbps speed inclusion available at around $3.10 to $3.50 per month more than applies today to the 12/1 Mbps speed tier. On the other hand, NBN Co will reduce the cost to acquire voice only access by around $10.50 per month, as well as the cost of access products with 100 Mbps and higher maximum download speeds that are currently popular among a small proportion of end-users by between $3 to $10 per month.

The net effect of these changes could be expected to increase average revenues that NBN Co earns per end-user, assuming broadly similar demand. That said, the overall effect that these changes would have on a retailer's cost base could depend on the maximum speed selections that their end-users make, as well as how much use they make of their service during the busiest hour of the day. It could also depend on whether the retailer could optimise its cost base by switching the NBN access it uses to serve heavier users away from offers that retain CVC charges to flat rate offers.

Regulated service levels would generally remain at those specified in the current commercial agreement that was published in December 2020, save for a reduction in the commitment to invest in transit links materially ahead of those links reaching capacity, and small number of upward revisions on some service specifications. For instance, a fault could be reported on a service that experiences more than 7 dropouts (temporary network disconnections) a day, 2 fewer than the current threshold. Additional quality improvements could still be made,

[1] Minimum cost refers to the fixed monthly charge before accounting for CVC inclusions and overage charges.

including at the ACCC's instigation in certain circumstances, but generally only where the efficient incremental costs are passed through to consumers in the form of higher regulated prices, unless NBN Co wishes to proceed with the improvement nonetheless.

Stakeholders may wish to consider the likely implications of the price and service quality framework proposed by NBN Co for the initial regulatory period, in terms of their access charges as well as the call centre, help desk and other retailing costs that make up the remaining portion of their cost base. In doing so, stakeholders may wish to consider whether the service quality concerns that they have previously expressed are being appropriately addressed or, if not, what measures could be efficient for NBN Co to implement over the initial regulatory period.

The ACCC would also be interested in testing whether the proposed variation could lead to cost reductions over the medium term that put service quality at risk. This is because approximately $1 billion of the ICRA related revenue allowance appears to depend on NBN Co breaking even in its annual regulatory accounts by around the 2030 financial year but not on having met reasonable quality expectations.

Support for low-income and disadvantaged consumers

NBN Co's proposed pricing framework for the initial regulatory period could offer better (or similar) support for low-income and disadvantaged consumers that require voice connectivity. However, those consumers that require similar data connectivity to most other households could face higher prices as the minimum access cost to acquire the 50/20 Mbps speed tier increases. Further, support beyond the first regulatory period for consumers that make limited use of their NBN service would likely require new access products or offers to be developed.

NBN Co proposes to commit to hosting an annual forum for retailers and consumer representatives to discuss targeted access measures to better support these end-users. This could potentially lead to NBN Co incorporating effective low-income measures into its business planning. However, stakeholders may wish to consider whether there would be sufficient transparency over the recommendations advanced by low income and disadvantaged consumer advocates and other attendees at the annual forum and NBN Co's actions in response to assess and, where appropriate implement, those recommendations.

Stakeholders may also wish to consider whether there are other approaches that could be adopted in the SAU to support these consumers.

Longer term trajectory of annual costs and annual building block revenue allowances

NBN Co has proposed a framework for a building block model (BBM) that would project its revenues, costs, and demand, including its intended depreciation amounts and return on its regulatory asset base.

Notably, the BBM submitted by NBN Co includes higher capital expenditures, including the portion of the announced fibre to the premise and fixed wireless upgrades that NBN Co is intending to fund. NBN Co is also projecting significant savings in its service assurance costs such as from optimising its truck roll volumes which in part offsets the higher capital costs. The model also includes a weighted average cost of capital (WACC) for the first regulatory cycle that is around 0.5 percentage points higher than would likely have resulted applying the basic methodology specified in the first module of the current SAU. The economic lives for some of its asset categories have been increased, which reduces the capital cost recovery amounts in the near term and boosts them in the later years of the SAU.

Stakeholders may wish to consider whether the proposed framework and BBM inputs and projections appear reasonable, and if the model could be relied upon to calculate accurate cost measures, etc., for the upcoming regulatory period.

Sufficiency of proposed scope of regulatory oversight

An SAU is an opportunity for an access provider to propose a regulatory framework that is tailored to its circumstances and can potentially provide both itself and access seekers with longer term certainty over the form of regulation to apply. Given the potential for significant changes in market conditions over its term, the appropriateness of an SAU can depend on whether there is sufficient scope for the regulator to adjust regulatory settings so that they reflect the prevailing market and can continue to promote the long-term interests of end-users.

The SAU variation proposal would provide for periodic review of certain aspects of NBN access via the regulatory module determination process, with this review to occur each 3 to 5 years. It also confers a selection of additional powers for the ACCC as the economic regulator.

Stakeholders may wish to consider whether the proposal strikes the correct balance between responsiveness and long-term certainty, so that end-user interests can still be promoted should fundamental issues emerge. These issues could be due to errors in the drafting of the SAU, and/or significant market developments, that lead to gaps in the SAU mechanisms.

The post-2032 period

A significant change from the current SAU and the variation proposed in March 2022 is breaking the SAU term into separate components or modules. Module 2 would apply up until 30 June 2032 and a new Module 3 would apply from that time.

The basic premise of this change is that there should be a more significant point of regulatory review given the long-term nature of the SAU and many of the proposed rules and processes for setting maximum prices and benchmark service quality, etc., would need to fall away for that review to be meaningful.

Stakeholders may wish to consider the proposed Module 3 arrangements carefully given their significance, notwithstanding that they would not commence for some time. In doing so, they may wish to check that important commitments that are given for Module 2, such as the low-income forum commitment, which could be carried forward into Module 3 should this be the outcome of the ACCC's regulatory review.

The ACCC is also interested in testing the reasonableness of the proposed limitations on its power to determine an annual regulated revenue allowance that are contained in the proposed Module 3 principles. These would require that the annual regulated revenue allowance for a financial year within a regulatory cycle must be set to allow NBN Co a reasonable opportunity to achieve and maintain, for the duration of that regulatory cycle, a stand-alone investment grade credit rating with a stable outlook. A stand-alone credit rating refers to the rating NBN Co would receive leaving aside government ownership.

Notably, this requirement does not appear to be subject to any condition that NBN Co has or would continue to invest and operate efficiently. In addition, allowing a reasonable opportunity to achieve and maintain such a credit rating from the commencement of Module 3 could potentially require NBN Co to increase its revenues to pay down its debt over a compressed timeframe and so could bring a material risk of inefficiently high pricing. It also appears that all the factors that ratings agencies use to assess a credit rating would be relevant to the application of this principle, including those which would typically fall outside of the regulatory framework. Consequently, at this stage the proposed principle as drafted appears to present risks to the effectiveness of regulation during Module 3.

2. Background and consultation process

2.1. NBN Co's current special access undertaking

Annexure A provides an overview of NBN Co's current SAU, which was accepted by the ACCC in 2013 with a term ending in June 2040.

2.2. Initial stakeholder engagement

The ACCC engaged extensively with NBN Co, access seekers and other stakeholders during 2021 on potential changes to the NBN regulatory framework under the SAU.

In June 2021, the ACCC hosted an industry roundtable with NBN Co, broadband retailers, industry groups, consumer bodies and government to canvass views to assist NBN Co in developing an SAU variation proposal.[2] NBN Co had also notified the ACCC that it intended to lodge a proposed variation to its SAU within the 12 months.

The ACCC then chaired a series of industry working groups to discuss aspects of the NBN regulatory framework. The key issues discussed by the working groups included NBN products and pricing, NBN Co's BBM and the regulatory framework and approach. The ACCC published a report summarising matters arising in the working groups in December 2021.[3]

An important output of this engagement was the development of five key outcomes from a varied SAU that would guide the development of an SAU variation proposal. These were:

- 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 efficient 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.

2.3. March 2022 proposal to vary the special access undertaking

On 29 March 2022, NBN Co lodged its SAU variation proposal with the ACCC. The March SAU variation sought to incorporate into the SAU the hybrid fibre coaxial (HFC), fibre-to-the-node (FTTN) and other copper-based technologies that it had adopted since 2013. It also proposed significant changes to the SAU framework itself. The ACCC published the variation and consultation paper on 23 May 2022, after working with NBN Co to resolve extensive confidentiality claims that would have compromised effective public consultation if the ACCC had accepted them in full.

The response submissions raised a series of concerns with this SAU variation proposal and in addition the Minister for Communications wrote to the ACCC on 22 July 2022 expressing

2 A summary of the industry roundtable is available on the ACCC website.

3 A summary of working group meetings is available on the ACCC website.

support for NBN Co to withdraw it and submit a revised proposal that would provide pricing certainty to retailers and other changes needed so that it was capable of acceptance. On 27 July 2022 NBN Co notified the ACCC of its decision to withdraw the SAU variation proposal with a view to making a revised proposal.[4]

2.4. Development of a revised proposal

NBN Co published a consultation paper on the changes that it was considering for a revised SAU variation proposal and the ACCC held a further forum on 18 and 19 of August 2022 to discuss these and other potential changes for inclusion in a revised SAU variation, as well as interim arrangements given the delay stemming from the withdrawn March 2022 variation proposal. The forum agenda and public summary of discussion are available on the ACCC website.[5]

Following the forum, NBN Co continued to engage with the ACCC, retailers and its other stakeholders as it developed its revised SAU variation proposal.

2.5. NBN Co's revised SAU variation proposal

On 29 November 2022, NBN Co lodged its revised SAU variation proposal with the ACCC and over the following fortnight supplied various supporting materials in. These supporting materials include:

- a covering letter, which provides additional context for the submission, including a description of each of the documents
- NBN Co's supporting submissions, separated into topics of discussion, to explain the rationale behind NBN Co's proposed changes to the SAU
- expert reports from Frontier Economics, Castalia, Analysys Mason and Roberson and Associates commissioned by NBN Co
- the core services BBM for the 2009-2023 and the 2024-2040 periods to assess essential variables and the effect that the proposed SAU variation would have on NBN Co's revenue constraint (NBN Co also provide a BBM handbook for both time periods)
- a set of forecasts in support of NBN Co's replacement module application. These forecasts include projected revenue, demand, and other metrics for the 2021 to 2026 financial years
- a template WAPC model to assist stakeholders and the ACCC to assess the proposed WAPC model in the SAU
- a cost allocation manual describing the methodology by which NBN Co's costs will be allocated in accordance with the principles of the SAU
- a draft statement of pricing intent.

The revised proposal includes significant changes to the SAU, many of which differ in important respects to the March 2022 SAU variation proposal.

The SAU variation and the public versions of the supporting material are available on the ACCC website.[6]

4 A copy of the Minister's letter and NBN Co's letter of withdrawal are available on the ACCC website.

5 The forum agenda and public summary are available here.

6 The SAU variation and supporting materials are available here.

The ACCC has published the SAU variation proposal in full and most of NBN Co's supporting documents. A small portion of material remains redacted as the subject of ongoing confidentiality claims by NBN Co.

The redactions are in Part F of NBN Co's supporting submission, which concerns the efficiency of NBN Co's expenditure and demand forecasts, and set of forecasts. NBN Co also lodged a BBM for the 2009-2023 and 2024-2040 periods that has further levels of detail than the public version it supplied.

The ACCC's process for considering confidentiality claims and publishing information is discussed below.

2.6. Consultation

The ACCC plans to consult with interested parties at several stages before deciding to either accept or reject the SAU variation proposal. The ACCC has published the SAU variation and supporting documents on its website and invites submissions by 17 February 2023. The ACCC has also released this consultation paper to assist interested parties in preparing their submissions.

The ACCC intends to release its draft decision in April 2023 and release its final decision following consideration of submissions to the draft. The draft and final decisions will be published on the ACCC's website.

Submissions to the consultation

The ACCC encourages interested parties to make submissions that are responsive to this Consultation paper and any other issue concerning NBN Co's proposed SAU variation. Submissions should include detailed reasons and information to support views, with reference to the relevant statutory criteria, which are discussed in section 3 of this paper.

To enable an informed and consultative process, all submissions will be published on the ACCC's website. Submitters are encouraged to provide a public submission that keeps confidentiality redactions to a minimum. The ACCC's approach in this consultation to any confidentiality claims and its approach to publishing information contained in submissions is set out below.

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 17 February 2023 to nbn@accc.gov.au and copy to:

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

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

Approach to handling information received during this consultation

The ACCC/AER Information Policy[7] sets out the general policy of the ACCC on the collection, use and disclosure of information.

The ACCC considers that a public and transparent consultation process is necessary to discharge the ACCC's procedural obligations and allow the ACCC to effectively assess the SAU variation proposal in accordance with the legislative framework and given the significance of the proposed changes to the SAU and their potential long-term consequences for Australian consumers and businesses. Hence, the ACCC will only agree not to disclose information that is the subject of a confidentiality claim in limited circumstances.

In these circumstances, the ACCC has also formed the view that making information available to third parties only through limited individual non-disclosure agreements would not be an appropriate means to manage confidentiality claims in this consultation. Hence in this consultation it does not intend to apply the ACCC's confidentiality guideline for submitting confidential material to ACCC communications inquiries.[8]

The ACCC has published the SAU variation in full and has published NBN Co's supporting material with only minimal redactions. The ACCC notes that the redactions are confined to supporting documents and are limited in scope. Therefore, the ACCC does not intend to publish any further information from NBN Co's supporting material at this time.

The ACCC will continue to consider what further information is required for, or of significance to the consultation and should therefore be published, in full or in part.

Disclosure of information

The ACCC will assess any confidentiality claims on a case-by-case basis and in doing so will consider whether it is required to publish information having regard to its statutory and common law duties and functions in each instance and in accordance with section 155AAA of the *Competition and Consumer Act 2010* (Cth) (CCA).[9]

In assessing confidentiality claims, the ACCC will consider whether publication of the information is required to enable effective public consultation and allow it to perform its statutory function of assessing the SAU variation in accordance with the statutory framework. The ACCC will assess whether this requirement outweighs any significant commercial harm a party submits may result from publication. The ACCC will afford procedural fairness in reaching these views.

Process for claiming confidentiality

If a party wishes to make a claim of confidentiality over material provided during this consultation, it 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

[7] The ACCC/AER Information Policy is available on the ACCC website.

[8] The Confidentiality guideline is available on the ACCC website.

[9] The ACCC notes in this regard paragraph 3.1 of the ACCC-AER Information Policy.

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 kept to a minimum so that consultation on all relevant material is not unnecessarily impeded.
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, and why disclosure of the information would be likely to cause significant 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 publication of the redacted information is required to enable effective public consultation and to allow the ACCC to perform its statutory function of assessing the SAU variation in accordance with the statutory framework. The ACCC will notify with the relevant party and engage with them in relation to how this information can be disclosed.

2.7. Structure of the remainder of this paper

The remainder of this consultation paper is structured as follows:

- Section 3 sets out the legislative framework covering the SAU variation process.
- Section 4 provides an overview of NBN Co’s proposed SAU variation.
- Section 5 outlines key issues for consideration.

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 LTIE of carriage services and services provided by means of carriage services.

Regulation of access to NBN services

NBN Co must only supply services that have been declared under Part XIC of the CCA. Services that are, or are capable of being, supplied by NBN Co may become declared services can become declared in the following three ways:

- 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
- 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, along with Ancillary Services and, to the extent required for interconnection, the Facilities Access Service.

Declaration of an NBN service is significant as this requires NBN Co to comply with the category B standard access obligations (SAOs) specified in the CCA. These include obligations to supply the declared service if requested by a service provider and to permit interconnection of facilities.

Setting regulated 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 accepted by the ACCC - documents given by the access provider agreeing to be bound by the relevant SAOs and 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 of the SAOs as specified in the rules
- 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 of the SAOs.

Part XIC of the CCA establishes a hierarchy to allow parties to identify which terms and conditions are to apply, particularly in the event of inconsistency between the various instruments that may be in effect.

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.

The ACCC assessment of the SAU variation is important in the context of the legislative hierarchy. Once the ACCC accepts a variation proposal, there is no provision under Part XIC of the CCA for the ACCC to vary or set aside the terms of the resulting 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 inconsistency with the SAU as varied for so long as the SAU remains in effect.

Part XIC also provides for NBN Co to formulate and publish standing offers, known as a standard form of access agreement. A standard form access agreement is not itself 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. WBA4 is the current standard form access agreement. NBN Co has entered into access agreements based on it.

For completeness, other forms of regulation can potentially affect the terms of access to an NBN service. The Statutory Infrastructure Provider (SIP) regime established by Part 19 of the *Telecommunications Act 1997* commenced on 1 July 2020. Under that regime, the Minister may determine minimum service standards, benchmarks, and performance standards for nominated SIPs. NBN Co has been designated as the default SIP.

The terms contained in any such SIP instrument would prevail over all other terms in the regulatory hierarchy, including terms in commercially negotiated access agreements from the time that those agreements are next varied or new agreements entered. While no such SIP instrument has yet been made, a consultation draft proposed setting a baseline that would not limit a SIP from offering better service standards.

3.2. Assessment approach

The ACCC must decide to accept or reject a proposed SAU variation after assessing it against the legislative criteria. This includes assessing it in accordance with 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
- 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
- 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.[10]

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

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. The ACCC's approach to assessing the LTIE is discussed in Annexure B.

Broadly speaking, this assessment can involve a balancing of costs and benefits to end-users over time and involve a range of potentially competing considerations. The ACCC does not consider the assessment of an SAU variation proposal is a reassessment of each existing provision in the SAU. However, consistent with its approach to previous SAU variation proposals, the ACCC will consider the varied terms, their effects, and their interaction with unchanged provisions of the SAU, i.e. it will consider the proposed variation in the context of the whole SAU.

The ACCC must also be satisfied that the undertaking as varied would be consistent with any Ministerial pricing determination. However, no relevant Ministerial pricing determinations are in effect.

The CCA specifies three reasons why the ACCC must not reject a variation. These reasons relate to:

- a fixed principle term or condition[11] 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 an SAU variation proposal 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.[12]

[10] CCA, section 152AB(2).

[11] CCA, section 152CBAA.

[12] CCA, subsection 152CBD(4).

Timeframe for assessment

Under Part XIC of the CCA, the ACCC must decide to either accept or reject a proposed variation within 6 months of receiving it, subject to any permitted extensions to this period. If the ACCC does not make a decision within the statutory time period, it is deemed to have accepted the variation.

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.[13]

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.

[13] CCA, subsections 152CBG(9) and (10).

4. Overview of NBN Co's SAU variation proposal

4.1. Key elements

NBN Co's SAU variation proposes significant changes across many elements of the SAU regulatory framework. These are summarised below and further discussed in section 5. A brief commentary on how the ACCC considers the package of proposals operates in practice is provided in section 4.2 below.

- **Regulatory module applications and determinations** – the SAU variation would continue the approach for certain matters to be determined ahead of each regulatory cycle through the replacement module process. NBN Co would submit a replacement module application and the ACCC would make a replacement module determination in response, accepting some or all of what NBN Co proposes, or otherwise determining matters for itself. Under the proposed variation, each regulatory cycle would last between 3 and 5 years, and the assessment process would be streamlined and specified in the SAU itself, rather than this process partially relying on the statutory SAU variation process as is the case today.
- **Post-2032 arrangements** – the SAU variation would split the remaining term into pre-and-post 30 June 2032 periods. Some aspects of the regulatory framework appear to fall away at the end of the first of these periods. Although it appears some of these aspects could be included in a determination in the post-2032 period and the ACCC can issue a statement of approach to inform what NBN Co includes in a replacement module application, it is unclear whether all elements could be re-established should they still be required. The replacement module application and determination process would also operate differently. In Module 2 there are more prescriptive rules that bound the potential determinations that can be made by the ACCC, whereas post-2032 determinations would be limited by the high-level terms and principles, in particular the principles in Module 3. Notably, these principles would appear to prevent the ACCC from making a regulatory determination that would set the annual regulated revenue amount below an amount necessary to give NBN Co a reasonable opportunity to achieve and maintain, for the duration of the relevant regulatory cycle, a stand-alone investment-grade credit rating, which would potentially require large price increases at the beginning of Module 3. As discussed elsewhere, this proposed limitation could introduce several risks to the effectiveness of regulation during the post-2032 regulatory period.
- **Move to flat rate pricing offers** – the SAU variation would require residential grade 100 Mbps and higher speed tiers to be offered on a flat monthly charge basis from 1 July 2023 or three months from acceptance, with the remaining residential grade speed tiers to transition to flat rate offers by 1 July 2026. The latter would involve the CVC overage charge being reduced each year of the first regulatory cycle from $8/7/6 Mbps/month and then being set to zero. The CVC allowances in the bundled offers would also be adjusted every 6 months over the initial regulatory period, with a view to offsetting around half the change in peak daily CVC usage associated with the relevant speed tiers.
- **Price controls** – the SAU variation would establish new individual product price controls for the flat rate and bundled product offers, along with an overall WAPC covering NBN Co's core product offerings. For the speed tiers that remain subject to CVC charging over the first regulatory cycle, the price controls will apply to the bundled charge amounts as calculated on a weighted average basis across retailers. Hence cost outcomes for retailers may depend on how their usage compares to industry averages.

- **Regulated price path to 30 June 2032 –** the SAU variation would result in regulated price paths for the period up until 30 June 2032 that appear largely dependent on the operation of the price controls specified in the SAU rather than regulatory determinations made at each reset. Until NBN Co reaches the point where its annual revenues align with its regulatory allowances, which it projects to occur in the 2030 financial year, the WAPC would be limited to increases in CPI. From that time the annual change in average price could be either above or below CPI and driven by NBN Co's then regulatory allowances and forecasts of demand. Price changes for speed tier offers would be limited to no more than 5 percent or CPI (whichever the higher), other than for the entry level data access offer which would be limited to CPI increases. Where a speed tier increased in price within its individual control by more than CPI, another speed tier offer would need to increase by less than CPI to allow compliance with the WAPC.
- **Other price certainty measures –** the SAU variation would require NBN Co to publish by 1 May of each year a binding tariff list for the forthcoming financial year and roadmap of prices for the next three financial years. Subsequent year tariff list prices would not be able to differ significantly from roadmap prices previously published for that year, due to the operation of a mechanism that would maintain relativities between monthly prices to within $1 per month of the relevant roadmap pricing. NBN Co would also be required to publish a statement of pricing intent for each regulatory period, with a requirement for the tariff list and roadmap prices to be consistent with this statement.
- **Building block model –** the SAU variation would continue current SAU framework in relation to the composition of the annual building block revenue requirement (ABBRR) and regulatory asset base (RAB) roll-forward, albeit with a more rigorous test for prudency and efficiency of capital expenditure (see below). This includes separate identification of costs attributed to core regulated services in recognition that NBN Co has entered competitive enterprise markets. NBN Co also proposes to revise the economic lives of some of its asset classes and has updated the model it has submitted to include its recently announced investments in fibre to the premise (FTTP) and fixed wireless networks, which alters each capital cost profile compared to earlier BBMs that it has submitted.
- **Recovery of historical losses –** the SAU variation proposes to specify the balance of the ICRA as $12.5 billion in current nominal terms, significantly below the balance accumulated under the current SAU. This balance would be maintained in real terms, but no further losses could be added to it. The balance would be progressively recovered by adding drawdown amounts to the ABBRR from around the 2030 financial year to give an overall annual regulated revenue allowance. NBN Co considers the recovery of this additional amount is required to provide a reasonable opportunity to achieve and maintain an appropriate investment grade credit rating during the SAU term. The proposed ICRA amount also appears to result in an annual regulated revenue allowance (revenue allowance) that generally aligns with or exceeds the revenues that NBN Co projects for the remaining SAU term from the time that ICRA drawdown would commence.
- **Cost allocation methodology –** the SAU variation proposes to 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, and prices for these services would sit outside the SAU controls. Residential grade and all other services would be core services, and their costs would be allocated to the core services cost base and SAU price controls would apply to them. New services would be categorised ahead of each regulatory cycle through the replacement module process. Notably, the full ICRA balance would be allocated to core services.

- **Expenditure criteria** – the SAU variation would require NBN Co to submit a BBM proposal at each regulatory reset, which is to include forecasts for its operating and capital expenditures amongst other things. The forecast expenditures are to reasonably reflect those that a prudent and efficient operator in NBN Co's position would incur in achieving the 'expenditure objectives', having regard to a number of 'expenditure factors'. The ACCC would also be required to have regard to the expenditure objectives and expenditure factors in making a regulatory module determination. Similar considerations would apply to the assessment of cost pass-throughs and the assessment of whether capital expenditures ought to be included in the RAB.
- **Weighted average cost of capital –** the SAU variation would apply a nominal 'vanilla' WACC (that is a weighted average of the pre-tax cost of debt and the post-tax cost of equity) 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 cycle using a detailed methodology that it intends to adopt thereafter. This would result in a higher WACC than applied under the simple methodology that was in effect during Module 1 of the SAU (which applies until 30 June 2023). That said, the ACCC would now have the power to undertake a review of the WACC methodology ahead of each regulatory cycle.
- **Service quality** – the SAU variation now proposes a framework for specifying benchmark service standards for each regulatory cycle, with these initially tied in large part to the service levels, and associated performance objectives and rebates, applying under WBA4. These could be changed for each regulatory cycle, and mid-regulatory cycle changes could also be made in response to retail regulatory changes, a systemic service standard event or an application lodged by NBN Co. During the post-2032 regulatory period, NBN Co would have the option of nominating benchmark service standards but would be under no obligation to do so unless requested by the ACCC in its statement of approach. Regardless, the ACCC could specify benchmark service standards for a regulatory cycle in a replacement module determination.
- **Expanded scope of SAU to cover other access technologies** – the SAU variation would make services supplied over the fibre to the building/curb/node (FTTB/C/N) and HFC networks subject to the SAU. Some important specifications for these services have been included into the SAU, including peak information rate and committed information rate objectives and service boundary points.
- **Reporting and transparency –** the SAU variation proposes to introduce commitments to report on service levels, operational matters such as network availability, network utilization and corrective action. This proposed reporting mostly mirrors current reporting under WBA4.
- **ACCC functions and powers –** the SAU variation would confer additional functions and powers on the ACCC as described above. These are generally confined in their scope, such as to administering a specific regulatory process. The SAU variation does not propose a broad power of direction to address new or systemic issues.

4.2. How the regulatory framework could be expected to operate

It is important to consider how the various elements of the SAU variation are expected to interact and operate in reaching a view on whether it should be accepted. This section summarises how the ACCC expects the key components of the regulatory framework would work as a package should it accept the SAU variation proposal.

4.2.1. Minimum benchmarks for service quality would be determined for each regulatory cycle

Under the proposed SAU variation, NBN Co would establish minimum benchmark service standards for key elements of its service delivery ahead of each regulatory cycle. From the second regulatory cycle onwards, NBN Co would propose a set of minimum benchmark service standards as part of its replacement module application for each regulatory cycle. The ACCC would then assess and consult on the proposed service standards and would include them in a replacement module determination, or otherwise determine them for itself in the replacement module determination (see sections 5.1 and 5.11 for further discussion).

This would allow NBN Co's service standards to be considered contemporaneously with expenditure forecasts and pricing proposals through the same process. This would appear to provide a mechanism to allow price-quality trade-offs to be considered by NBN Co in formulating its proposals for each regulatory cycle and would allow the ACCC to consult on these trade-offs and consider them as part of its replacement module determinations. For example, once a baseline service level has been established, any improvement in service qualities could be considered at the same time as associated increases in increased expenditure and the potential flow on effect in pricing.

This compares to arrangements under the current SAU, and the March SAU variation proposal, where there are no substantive quality of service provisions in the SAU. Under the current arrangements, service standards are determined primarily through the WBA process, whereas price and expenditure associated with service standards would be determined by or considered under the SAU.

NBN Co has included in its SAU variation proposal a set of benchmark service standards for the first regulatory cycle, which will operate for three years from 1 July 2023. These proposed are largely equivalent to the service standards that currently apply under WBA4.

As these were set in December 2020, it could have been expected that NBN Co would be able to offer service levels that support improved quality outcomes for end-users by July 2023. That is, with the significant further capital expenditure and operational experience NBN Co could have realised be a range of efficiencies that consumers could benefit from in the form of a better experience when using their NBN service. The proposal does however appear to leave open a potential pathway to higher service quality commitments in future regulatory cycles.

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

The cost base for supplying core regulated service would be determined for each regulatory cycle through the replacement module process.

From the second regulatory cycle (commencing in 1 July 2026), NBN Co would include in its replacement module application for each regulatory cycle its proposed operating and capital expenditure, a WACC (which provides a return on NBN Co's invested capital) and inputs into the ABBRR. The ACCC would consider these proposed inputs as part of its assessment of the replacement module application. The ACCC would include the inputs in a replacement module determination, or otherwise determine the inputs itself in the replacement module determination. Importantly, the proposed expenditure would reflect the service standard commitments set out in the same replacement module application.

For the first regulatory cycle (from 1 July 2023 to 30 June 2026), NBN Co has proposed a set of proposed expenditure forecasts and ABBRR inputs, which would be incorporated into the SAU through the current SAU variation process.

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, WACC 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 and when determining the inputs for itself (see sections 5.7 to 5.9 for further details).

4.2.3. An amount for the recovery of historical losses would be added to the cost base to establish NBN Co's annual regulated revenue allowance.

NBN Co has incurred shortfalls in revenue relative to ABBRR in each year since the commencement of the SAU, which is reflected in the ICRA. NBN Co has proposed an opening ICRA balance of $12.5 billion as of 1 July 2023 as part of the SAU variation. This represents a significantly smaller amount compared to balance recorded in the regulatory accounts that NBN Co publishes under the current SAU. NBN Co is seeking to recover this $12.5 billion amount by including it in its allowable revenues over the SAU period. NBN Co has indicated that recovery of this amount over the SAU period would be necessary to ensure the opportunity to achieve and maintain a standalone investment grade credit rating.

In the initial years of Module 2, NBN Co is not expected to earn enough revenue to recover its ABBRR. In this period, prices for NBN Co's products would be set according to a CPI price control from 2023-24 until the point when NBN Co's revenue is likely to exceed its ABBRR, which is expected to occur in 2029-30. Any revenue shortfalls incurred over this period would not be added to the ICRA balance, although the $12.5 billion balance accounts for the forecast shortfalls in estimating the amount required to achieve the investment grade credit rating.

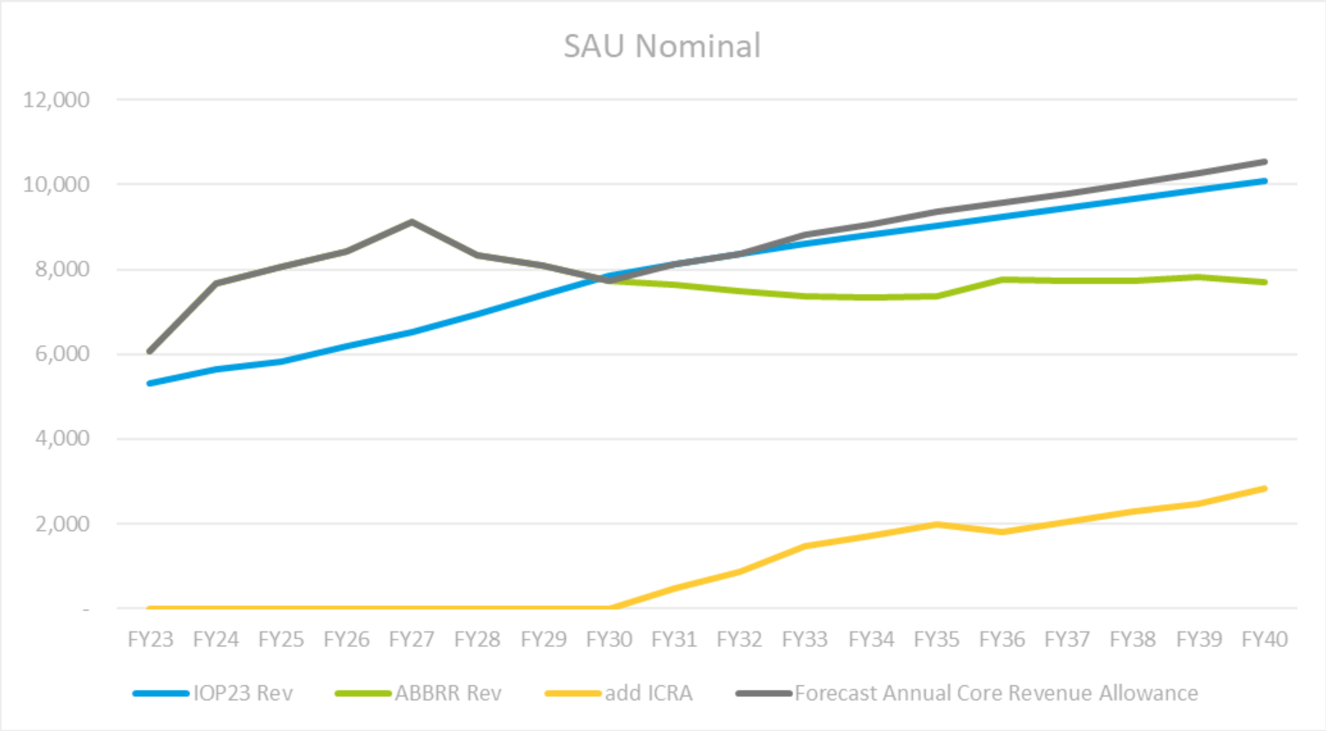
For each year after this point, NBN Co's allowable revenues for core services would be determined by adding ICRA recovery amounts to the ABBRR. This amount will then act as the basis for setting the overall WAPC, which would act as the primary regulatory control on prices. The amounts of ICRA NBN Co would be entitled to include in its revenue allowances would be determined ahead of each regulatory cycle through the replacement module process. The total amounts NBN Co can recover over the Module 2 period (2023-24 to 2031-32) and the Module 3 period (2032-33 – 2039-40) are specified in the SAU. Any residual ICRA amounts NBN Co has not recovered at the end of these periods would be extinguished and would not be carried forward for recovery in future years.

Figure 1 below illustrates NBN Co's forecast ICRA recovery from 2023 to the end of the SAU period. This indicates that the revenues that NBN Co forecast when developing its latest Integrated Operating Plan (IOP23) are currently expected to exceed the ABBRR for the first time in 2029-30, in which case ICRA draw down could then be expected to commence and gradually increase towards 2039-40. According to the BBM, the annual ICRA draw down amount is forecast to peak in 2039-40 at around $2.8 billion in nominal terms.[14]

Figure 1 also shows that NBN Co's forecast annual regulated revenue allowances for its core services (ABBRR inclusive of the proposed ICRA draw down amounts) would exceed NBN Co's current revenue projections for the core services from 2032-33 to the end of the SAU period. In other words, NBN Co could potentially require higher core services revenues in addition to the revenues that it forecast when developing its latest Integrated Operating Plan to fully draw down the ICRA by the end of 2039-40.

[14] NBN Co, Public 2024-2040 Building Block Model- Core Services, 2 December 2022, see worksheet ICRA, cell H39.

Figure 1: ABBRR, ICRA and 2023 integrated operating plan (forecast) revenue



Source: NBN Co 2024-40 building block model

4.2.4. Weighted average price control establishes a link between price, costs and ICRA recovery in Module 2

NBN Co is proposing a WAPC as the primary regulatory control on prices in Module 2 of the SAU. In the initial period when NBN Co's revenue is below ABBRR, the annual allowable increase in the WAPC is to be limited to no more than the increase in the CPI.

From the time that NBN Co earns enough revenue to recover the ABBRR for the year, ICRA drawdown amounts would be included in the following annual revenue allowance and the annual change in the WAPC would be determined by reference to a CPI+/-X formula. The value of X in this formula would be set with a view to maintaining a link between regulated prices and annual revenue allowances from this time. That is, the formula would be calibrated so that forecast revenues from the regulated average price and demand would align with the regulatory allowances that result from its BBM costs inclusive of an ICRA drawdown amount.

An important feature of these arrangements is that the CPI+/-X formula could potentially result in price increases that are above CPI in certain circumstances once the ICRA draw down amounts become available.

4.2.5. Replacement module process post-2032

The replacement module process, which will determine key matters ahead of each regulatory cycle, will operate until the end of the SAU term. However, the replacement module process would change in important respects from 1 July 2032.

In the period up to 2032, any replacement module determination would need to be made in accordance with the prescriptive rules contained in Module 2, with the regulated price paths to be determined by the operation of the price controls specified in the SAU.

With the commencement of Module 3 on 1 July 2032, replacement module determinations would have to include some limited matters. Determinations would also be governed by high level rules and principles, in particular the principles in Module 3. The prescriptive aspects in Module 2 would not apply, although it appears there would be scope to include some of those aspects in a determination in the post-2032 period, such as those in relation to maximum prices, and the ACCC may also issue a statement of approach to inform what NBN Co includes in a replacement module application. This proposed framework could result in some additional scope or discretion for the ACCC to establish reasonable access terms and address other access issues that could otherwise impact the LTIE from this time.

However, it appears important limitations could remain on how the ACCC exercises any additional discretion that becomes available to it. These include the limitations that are contained in the Module 3 principles which, for example, appear to establish a floor in the annual regulated revenue allowances that may be determined. These are discussed in section 5.2.

5. Detailed discussion of key elements of the SAU variation

5.1. General regulatory framework and modular structure

5.1.1. Overview of NBN Co's proposal

The SAU variation builds on the modular structure of the current SAU, with different arrangements applying over the SAU period. NBN Co proposes that the term of the SAU be broken into two regulatory periods, namely the subsequent regulatory period which runs from 1 July 2023 to 30 June 2032 and the post 2032 regulatory period, which comprises the remainder of the SAU term.

5.1.1.1. Changes to replacement module process

A feature of each period is the replacement module process, which would specify access terms and other matters for each regulatory cycle of between 3 and 5 years, other than for the first regulatory cycle which is addressed in proposed Module 4 of the SAU variation proposal.

This process would be entirely self-contained within the SAU through conferring relevant powers on the ACCC under section 152CBA(10A) of the CCA and specifying additional processes relevant to establishing terms for each regulatory cycle.[15] Under this revised process, NBN Co would submit a replacement module application ahead of each regulatory cycle; and then the ACCC would make a replacement module determination. A replacement module determination may adopt NBN Co's application in whole, or in part, or specify alternatives in accordance with the requirements of the SAU.

This compares to the arrangements under the current SAU (which NBN Co proposed to retain in the March 2022 SAU variation), where NBN Co must first seek to vary the SAU under section 152CBG of the CCA to establish access terms for a regulatory cycle through in the SAU itself. The ACCC must than assess that SAU variation under the Part XIC process. If the ACCC does not accept the SAU variation, the ACCC may then make a replacement module determination under the SAU to determine an alternative set of access terms for that regulatory cycle.

5.1.1.2. Scope of matters to be assessed for each regulatory cycle

The SAU variation would expand the scope of matters which NBN Co must include in its replacement module applications and which the ACCC must determine in replacement module determinations.[16] For the subsequent regulatory period, NBN Co would include the length of each regulatory cycle, a BBM proposal (which includes proposed expenditure, WACC, regulatory depreciation and all other necessary inputs under the BBM), an entry level offer proposal and a service standards proposal.

The ACCC would then determine each of these matters as part of its replacement module determination. In making a replacement module determination, the ACCC would have to take into account the matters set out in section 152BCA(1) of the CCA (which specifies the matters the ACCC must take into account when making an access determination) and would

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[15] NBN Co, SAU variation, Main Body, clause 5. NBN Co, *SAU* variation *Supporting submission, Part D: ACCC roles and powers*, November 2022, Chapter 13, p 6.

[16] NBN Co, SAU variation, Main Body, clauses 5.2(e) and 5.9(a) and (b). NBN Co, *SAU* variation *Supporting submission, Part D: ACCC roles and powers*, November 2022, Chapter 13, pp.7-8.

need to publish its determination, together with its reasons, on its website.[17] Details of these elements are discussed in subsequent sections of this paper.

If the ACCC does not make a replacement module determination for a regulatory cycle in the subsequent regulatory period in the prescribed time, a replacement module determination will be taken to be in effect during that regulatory cycle in which the matters required to be determined are as stated in NBN Co's replacement module application.[18]

5.1.1.3. Initial regulatory cycle ending 30 June 2026

The first regulatory cycle would run from 1 July 2023 to 30 June 2026, a period of three years as compared to the two years proposed in the March variation proposal. The proposed terms for this cycle are set out in Module 4 of the SAU variation and are to be assessed as part current SAU variation process rather than under the stand-alone replacement module process.

5.1.1.4. Post-2032 arrangements

The SAU variation proposes a significant change in approach for the post 2032 period. Notably, Module 3 would specify high level rules and principles that would apply to replacement module applications and determinations after 2032. While the ACCC could more directly specify some of access terms to apply, its power to do so is subject to the limiting principles that are specified in Module 3. These arrangements are discussed in more detail in section 5.2 of this paper.

5.1.1.5. Additional procedural provisions

The SAU variation may require the ACCC to publish, by 31 March of the last financial year of each regulatory cycle, a preliminary view on the matters to be determined as part of any ACCC replacement module determination for the next regulatory cycle.[19] This would be an additional step in the process that was previously proposed in NBN Co's March variation proposal. Further, the SAU variation would require NBN Co to consult with access seekers and consumer advocacy groups in preparing its replacement module applications.[20]

5.1.1.6. Expiry of the SAU and proposed change of control clause

The arrangements described above would apply until the expiry of the SAU. The current SAU variation now proposes that the SAU expire on the earlier of 30 June 2040 or a change of control occurring. This could be triggered either by the Commonwealth government ceasing to hold more than 50 percent of the shares in NBN Co, or 20 business days after the Commonwealth government publishes a change of control notice, stating it intends to take steps to relinquish control over NBN Co.[21]

5.1.2. Preliminary observations

NBN Co's proposed changes to the replacement module process would appear to represent significant changes to the SAU's general regulatory framework. The proposal to incorporate the replacement module process into the SAU could provide a more straightforward and streamlined process compared to reliance on both a statutory process (i.e., the assessment of the replacements module application as an SAU variation under Part XIC) and a separate

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[17] NBN Co, SAU variation, Main Body, clause 5.8(b) to (d).

[18] NBN Co, SAU variation, Main Body, clause 5.9(d).

[19] NBN Co, SAU variation, Main Body, clause 5.11.

[20] NBN Co, SAU variation, Main Body, clause 5.7.

[21] NBN Co, SAU variation, Main Body, clause 3.2(b).

process established under the SAU (i.e., the making by the ACCC of replacement module determinations).

The proposal to bring forward the SAU end date should there be a change of control over NBN Co would provide an additional point of regulatory review, including to revise any regulatory arrangements that might not be consistent with government relinquishing control, such as aspects of the government notified investment provisions.

However, we propose to assess this aspect of the proposal to check whether:

- timeframes are appropriate and allow enough time at each step for NBN Co to prepare relevant materials, for the ACCC to assess the relevant proposals, and for consultation
- all relevant scenarios are accounted for with a view to closing any procedural gaps
- the risks of unintended consequences are appropriately mitigated.

5.1.3. 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 LTIE. In particular, the ACCC seeks comments on:

- the suitability and completeness of the proposed regulatory module processes, including the new pre-lodgement consultation requirement and the proposed timeframes
- the appropriateness of the change in control provisions to terminate the SAU then in operation.

5.2. Post-2032 arrangements

5.2.1. Overview of NBN Co's proposal

The SAU variation would introduce a new Module 3 to operate from 1 July 2032 until the end of the SAU term. The replacement module process would continue in that time. Determinations made in this period must determine certain matters, in particular the term of the regulatory cycle (3 to 5 years); and the values of the annual regulated revenue allowance, forecast nominal ABBRR, certain values related to ICRA drawdown amounts, and the values of the inputs into those amounts.[22] In addition, a determination may include other matters, including maximum prices, a framework for controlling maximum prices, rules applicable to NBN Co tariff lists and pricing roadmaps, benchmark service standards and rules applicable to the development and withdrawal of products.[23]

The ACCC's replacement module determinations would need to be made in accordance with the relevant SAU Module. Compared to Module 2, the proposed Module 3 appears to substitute limiting principles for some of the prescriptive rules that apply to the ACCC in making a replacement module determination. The ACCC could also issue an ACCC statement of approach before NBN Co is required to give the ACCC a replacement module application. The statement of approach may be directed towards the matters described above that a replacement module determination may include; request NBN Co to include any proposals in a replacement module application that a replacement module determination may include; and request that NBN Co provide information with its replacement module

[22] NBN Co, SAU variation, Main Body, clause 5.10(a).

[23] NBN Co, SAU variation, Main Body, clause 5.10(b).

application.[24] If the ACCC issues an ACCC statement of approach, any replacement module application would need to include the relevant proposals and be accompanied by the requested information.

Notably, Module 3 specifies that a regulatory module determination must provide NBN Co with a reasonable opportunity to earn, in a regulatory cycle, the sum of the revenue allowance for each financial year of the cycle, which is based on the ABBRR and on drawing down ICRA, where each revenue allowance must be set to allow NBN Co a reasonable opportunity to achieve and maintain, for the duration of regulatory cycle, a stand-alone investment grade credit rating with a stable outlook.[25]

Proposed Schedule 3B of Module 3 also specifies high-level terms and principles that cover the following areas: products and pricing, service standards, the revenue allowance (which incorporates calculation of the ABBRR and the ICRA recovery profile) and the calculation of the RAB.[26]

NBN Co submits that the proposed changes would ensure recovery of the ICRA will be predictable, constrained, transparent and subject to ACCC oversight, and appropriately balance greater certainty on the extent and timing of NBN Co's recovery of historical losses, while providing NBN Co an opportunity to achieve and maintain a standalone investment grade credit rating. [27] It also submits that the significant expansion of the ACCC's regulatory discretion from 2032 should provide long-term confidence to retailers and end-users that the price and non-price regulation to which NBN Co will be subject remains fit for purpose.[28]

5.2.2. Preliminary observations

Adopting a principled-based approach for the post-2032 period could potentially bring additional flexibility that would better support appropriate regulatory settings over the latter years of the SAU. This could be the case provided the principles allow for regulatory settings that promote the LTIE, including by encouraging efficiency and promoting competition in response to changed market conditions, while still preserving a reasonable degree of regulatory certainty for both NBN Co and retailers.

That said, it is not clear that proposed Module 3 would have this effect.

Clauses 3B.3.1(a) and 3B.3.1(b) of Module 3 would require that NBN Co must be given a reasonable opportunity to recover, in a regulatory cycle, the sum of its annual revenue allowances for that cycle, and that each revenue allowance must be calculated as the sum of the ABBRR plus an annual ICRA drawdown amount. Clauses 3B.3.2 to 3B.3.6 and 3B.4 of Module 3 then specify the components for calculating the ABBRR and principles for how these components are to be determined.

In addition, clause 3B.3.1(c) of Module 3 provides that the revenue allowance for a financial year within a regulatory cycle must be set to allow NBN Co a reasonable opportunity to achieve and maintain, for the duration of that regulatory cycle, a stand-alone investment grade credit rating with a stable outlook. A stand-alone credit rating refers to the rating that NBN Co would achieve leaving aside government ownership.

Notably, this requirement does not appear to be subject to any condition that NBN Co has or would continue to invest and operate efficiently. In addition, allowing a reasonable

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24 NBN Co, SAU variation, Module 3, Schedule 3A.1.3.

25 NBN Co, SAU variation, Module 3, Schedule 3A.1.2 and 3B.3.1(a) to (c).

26 NBN Co, SAU variation, Module 3, Schedule 3B.

27 NBN Co, SAU variation, *Supporting submission, Executive summary and key narratives*, November 2022, p. 9.

28 NBN Co, SAU variation *Supporting submission, Executive summary and key narratives*, November 2022, p. 7.

opportunity to achieve and maintain such a credit rating from the commencement of Module 3 could potentially require NBN Co to increase its revenues to pay down its debt over a compressed timeframe at the beginning of Module 3 and so could bring a material risk of inefficiently high pricing. It also appears that all the factors that ratings agencies use to assess a credit rating would be relevant to the application of this principle, including those which would typically fall outside of the regulatory framework. Consequently, at this stage the proposed principle as drafted appears to present risks to the effectiveness of regulation during Module 3.

It is also unclear from current information whether there would be material benefit for NBN Co to be afforded a reasonable opportunity to achieve and maintain such a stand-alone credit rating for the duration of each regulatory cycle within Module 3 given it would remain government owned while the SAU is in effect. This means it would be its actual credit rating that would be relevant to the terms on which it can access financial markets over the relevant period. That said, there could be potential benefit for NBN Co to have a reasonable opportunity to move towards such a credit rating by the end of the SAU term which could assist with any transition if there were a change in control of NBN Co.

This proposed approach to establishing a floor for the revenue allowance could also raise a practical issue in how the various principles would be applied where they result in conflicting amounts. For example, if no values for the ABBRRs and ICRA drawdown amounts for the regulatory cycle can be derived that satisfy the requirements of proposed clause 3B.3.1(b) of Module 3 of the SAU while also resulting in a revenue allowance that satisfies the credit rating condition in clause 3B.3.1(c), it is not clear how the resultant inconsistency between those clauses is to be resolved.

In addition to the above issues, there could also be a degree of complexity in relation to the practical operation of the post 2032 arrangements. The ACCC's power to issue statements of approach would appear to have an important role in complementing or further specifying the replacement module process. It would be important that the regulatory module process and ACCC's statements of approach can work effectively, without material gaps in the form of supporting processes or regulatory powers.

5.2.3. Issues / questions for stakeholder views

The ACCC seeks comments from stakeholders on whether the post-2032 arrangements are reasonable and in the LTIE. In particular, the ACCC seeks comments on the following issues:

- whether the proposed arrangements achieve an appropriate balance between providing regulatory certainty to both NBN Co and retailers about how matters are to be determined through the replacement module process, and flexibility to determine arrangements that better respond to conditions and regulatory best practice at the time
- whether the proposed Module 3 principles are likely to provide appropriate incentives on NBN Co to operate in a prudent and efficient manner and safeguard against price shocks while allowing it a reasonable opportunity to achieve a stand-alone credit rating before the end of the SAU term. If not, what changes to the principles would you propose?
- whether the proposed arrangements are likely to result in any undue complexity or whether there are gaps in the regulatory framework that could lead to any unintended consequences

- whether the proposed arrangements appropriately mitigate the risk of price shocks that could result from NBN Co pricing its services to achieve a stand-alone credit rating for the duration of each regulatory cycle in the post 2032 period.

5.3. Pricing and product constructs

5.3.1. Overview of NBN Co's proposal

NBN Co proposes the following significant changes to its product and pricing model:

- the introduction within 3 months from acceptance of the SAU of a flat monthly charge construct for residential grade 100 Mbps and higher offers[29]; and
- the transition of the remaining lower bandwidth residential grade bundled offers of less than 100 Mbps to flat rate offers from 1 July 2026 by reducing the CVC overage charge for each intervening financial year from $8/$7/$6 per Mbps per month and then setting this at zero.[30]

NBN Co is also proposing to charge for CVC overage for the bundled offers on the basis of CVC capacity actually utilised, rather than provisioned as applies at present. Included CVC in bundled offers is also to be specified in utilised capacity terms, rather than provisioned capacity.[31] There is also provision for the CVC allowances in the bundled offers to be adjusted formulaically every 6 months, with the apparent intention of offsetting around half the expected growth in peak CVC usage over time.[32]

Some notable price differences from the current WBA4 offer[33] are:

- a rise of $5 per month in the minimum charge for 50 Mbps fixed line and Wireless Plus services from $45 to $50
- $3 to $10 per month reductions of the minimum charges of services of 100 Mbps or more
- $11 per month reduction in the minimum charge for 25 Mbps services from $37 to $26 per month
- a $3.10 per month increase in the cost to acquire the 12 Mbps broadband access service[34]
- the availability of a new voice capacity offer priced at $12 per month, which is down by $10.50 per month from the existing commercial offer of $22.50 per month.

NBN Co has also lowered its monthly recurring charges for the ports typically used by smaller retailers to interconnect to the NBN (network-to-network interface) in line with a recent change made to its commercial offer.

The ACCC's initial comparison of the proposed charges to current wholesale pricing suggests the following outcomes for individual speed tiers:

- reductions in the average costs to serve consumers currently acquiring 25 Mbps and 100 Mbps and higher speed plans, and those that require only a voice service
- increases in the costs to serve consumers currently acquiring 12 Mbps and 50 Mbps broadband plans

[29] These speed tiers represent less than 20 percent of NBN residential grade services; see ACCC, *NBN wholesale market indicators report*, September 2022.

[30] NBN Co, SAU variation, Module 2, Schedule 2E.2.2(d).

[31] NBN Co, SAU variation, Module 2, Attachment E, clause 3.1 (a).

[32] NBN Co, SAU variation, Module 2, Schedule 2B.5.1.

[33] The commencing prices and CVC inclusions (as applicable) are listed in Attachment E of the SAU variation.

[34] The $3.10 cost increase comprises a $1.90 per month increase in the minimum charge from $22.50 to $24.40, and the removal of the CVC inclusion of 0.15 Mbps that increases exposure to CVC overage charges by $1.20 per month.

- the use of 12 Mbps access could become uneconomic in comparison to 25 Mbps access to provide entry level retail broadband plans under similar levels of daily peak CVC utilisation.

Some of the proposed pricing changes also differ to those proposed in the March 2022 SAU variation.[35] These include:

- a reduction in the commencing bundled charge for 12 Mbps broadband speed tier from $26.00 to $24.40
- minor increases in starting CVC inclusions for the 25 and 50 Mbps tiers (by 0.1 Mbps and 0.05 Mbps respectively)
- the progressive reduction in the price of CVC overage[36] and its complete removal from the start of 2026-27
- a $5 to $10 per month reduction in the previously proposed flat rate charges for several 100 Mbps and higher speed tiers
- the reduced monthly recurring charges for its lower capacity network-to-network interfaces did not feature in the March 2022 variation proposal.

The SAU variation would require NBN Co to establish a low-income forum to identify possible targeted initiatives to improve access to the NBN for low-income, vulnerable and unconnected consumers.[37] NBN Co would also have regard to forum outcomes in changing or setting prices,[38] as well as publish a report each year on NBN Co's progress on implementing its initiatives to improve access for low-income consumers. NBN Co has indicated that planning is underway to establish the forum in early 2023, prior to an accepted SAU coming into operation.[39]

However, there appears to be no formal role for low-income forum members to be consulted on product introduction and withdrawal decisions as applies for the existing Product Development Forum, and it is unclear whether the recommendations made by forum members and NBN Co's response to them will be included in the report that is published.

NBN Co has flagged the development of a data capped offer for when CVC charging is removed to support low use consumers from potential price shock when CVC charging is removed.[40] However the SAU variation proposal does not appear to contain a firm commitment to do so.

The SAU variation appears to allow the ACCC to object to prices of new products for up to two years (clause 2F.5) although this is not clear, and we propose to consider this further. The SAU variation also proposes that the ACCC could object to the withdrawal of products (clause 2H.6.3) which is an important regulatory safeguard, as product withdrawals have the potential to reduce choice and competition. This can be more so where a WAPC is the principal form of regulatory control, as one means to increase revenues without directly raising price is to withdraw or place non-price limits on access to lower yielding offers. It is notable therefore that NBN Co proposes to continue the exception to the ACCC's power to

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35 These earlier pricing changes were outlined in the ACCC's May 2022 consultation paper, the key pricing changes from the existing SAU being a flat monthly charge construct for residential grade 100 Mbps and higher products, bundled offers for products less than 100 Mbps with provision for a CVC overage charge of $8 Mbps, close pricing alignment of the 12 Mbps and 25 Mbps broadband offers and a $12 per month voice-only offer.

36 The prices are to be $8 per Mbps in 2023-24, $7 per Mbps in 2024-25 and $6 per Mbps in 2025-26.

37 NBN Co, SAU variation, Module 2, Schedule 2B.7.

38 NBN Co, SAU variation, Module 2, Schedule 2B.2.1(f).

39 NBN Co notes its intention to host the inaugural meeting of the Low Income and Digital Inclusion Forum early in 2023 in its draft Statement of Pricing Intent, at p. 6.

40 NBN Co, SAU variation *Supporting submission, Part B: Pricing and price controls*, November 2022, p. 12.

object to the withdrawal of a product not only if the withdrawal is required by law but also when directed by a shareholder minister.[41]

In the post-2032 regulatory period the product and pricing approach described above would not apply. However, a replacement module determination for that period may include maximum prices and a framework for setting or controlling maximum prices (clause 5.10(b)). Where this occurs, the replacement module determination would have to be consistent with Module 3 and relevantly clause 3B.2, which concerns products and pricing.

5.3.2. Preliminary observations

As reflected in NBN Co's BBM, it is yet to achieve the revenues that it requires to recover its forward-looking efficient costs of supplying regulated services, with this forecast to continue over the medium term. Consequently, a key issue for consideration is establishing the regulatory settings that provide NBN Co with a reasonable opportunity to grow its revenues to the levels that an efficient firm would require to continue to invest in and operate the network while not impacting efficient use of the NBN.

In this regard, NBN Co's product and pricing approach appears directed towards growing revenues by increasing overall demand and encouraging uptake of higher speed tiers as far as practicable.[42]

Notably the proposed pricing model involves encouraging end-users to select the 100 Mbps and higher speed tiers by reducing access costs for those speeds tiers both in absolute terms and relative to the prices for the speed tiers that are more popular today.[43] In addition, the proposed pricing model pushes retailers to select higher yielding access products for those consumers who would still not value a higher maximum speed, but who are typically streaming content or accessing similar applications during the busiest hour of the day, in order to minimise CVC overage and overall access cost.

In this regard, retailers could be better off switching access to the 100 Mbps wholesale tier when supplying consumers that require a 50 Mbps maximum speed and have an average daily peak CVC utilisation of 3.2 Mbps or higher. In these circumstances, the flat rate charge of $55 per month would appear more attractive than the proposed wholesale offer for access to the 50 Mbps speed tier.[44] However, there may not be a clear opportunity to upsell the retail consumer within prevailing retail pricing if the customer is satisfied with the price and performance of the 50 Mbps speed retail plan.[45]

Similarly, the proposed pricing model for 12 Mbps and 25 Mbps speed tiers include strong incentives on retailers migrating away use of the 12 Mbps tier to provide low-cost broadband services. This is due to the cost to acquire 12/1 Mbps and 25/5 Mbps wholesale access likely converging from 2023-24 (see Annexure C).

That said, NBN Co is still proposing direct price increases for the 50/20 Mbps speed tier and 12/1 Mbps speed tier, which are respectively the most popular form and entry level form of

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41 NBN Co, SAU variation, Module 2, Schedule 2H.6.4.

42 NBN Co's potential pricing strategies for the initial regulatory period are discussed in its draft statement of pricing intent. NBN Co notes that the final statement would be based on this draft but remains subject to change.

43 This effect could tend to strengthen over the initial regulatory period should NBN Co choose to increase the minimum cost to acquire the 50 Mbps speed tier as the CVC overage charge reduces as the proposed price model and regulatory controls would permit. Some consumers in FTTP upgrade locations may also choose a higher speed tier in return for a zero-cost connection charge rather than pay the $200 upgrade fee that otherwise applies when choosing to move to a fibre connection.

44 NBN Co notes the potential for wholesale optimisation opportunities in its draft statement of pricing intent, at p.7.

45 Previous attempts to migrate consumers to higher speed tiers via time-limited discounts appears have had mixed success. See ACCC, *Communications Market Report 2021-22*, p. 2.

data access in the market today. NBN Co could however continue to use pricing incentives[46] to militate against these increases prompting end-users to potentially disconnect even though they could be efficiently supplied at lower price levels.[47]

The continuation of CVC charging on the most popular speed tiers also appears to conflict with end-user preferences for simple pricing in the form of flat rate unlimited data plans, and so retailers are unlikely to be able to directly apply a corresponding model in the retail market. In this regard, relatively few NBN retail plans now on offer feature time-of-day or usage-based pricing NBN retail plans. The complicated wholesale pricing structure and its mismatch with the prevailing retail price structure likely means that the retailers will continue to bear cost risk until CVC charges are fully withdrawn in July 2026.

There is clear potential for low use consumers to face materially higher prices at the end of the first regulatory period unless new products or offers are first developed. This is because these consumers can be served at closer to the minimum cost of the wholesale bundles under the current pricing model, which would increase when flat rate charging is implemented for the relevant speed tier. NBN Co recognises this potential but the SAU variation proposal does not appear to address it. That said, as NBN Co submits, the potential for possible alternative products such as mobile or fixed wireless services to support low data use households could provide a strong incentive for it to offer a suitable wholesale offer (as it appears now to be doing for voice only access).

NBN Co’s product and pricing approach is discussed further in Annexure D.

5.3.3. Issues / questions for stakeholder views

As with any significant adjustment to pricing, the current proposal will likely have important implications for the efficient use of the NBN. Hence, the ACCC would welcome stakeholder views on the possible implications that they see of the proposed model. In addition, we seek views on the following specific matters:

- are stakeholders supportive of the proposed approach to encourage uptake of wholesale services at higher speed tiers, including migrating 12 Mbps broadband access towards a 25 Mbps speed tier, and more-intensively used 50/20 Mbps services to the 100/20 Mbps tier? Do retailers have the capability to manage individual AVCs onto the wholesale speed tier that would optimise their costs under the proposed pricing model? If not, what assistance might they need to achieve this? What would be the cost outcomes for a retailer that could not optimise in this manner?
- the gap in minimum access costs between the 50 Mbps and 100 Mbps services is relatively small, and narrows further once the cost of CVC overage is factored in. Do stakeholders consider that the proposed wholesale pricing model is suitably calibrated so that both the 50 Mbps and 100 Mbps wholesale speed tiers remain viable inputs that will support retail product and price differentiation?
- the effectiveness of low-income measures could depend on a high level of engagement from low-income representatives, and NBN Co having a strong incentive to respond efficiently to their recommendations. Does the current proposal make these things likely? What other commitments if any could be needed so that low income and other disadvantaged consumers can receive a reasonable level of support?

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46 That is, targeted pricing initiatives could be directed to premises that are not acquiring an NBN service, examples of which are referenced in NBN SAU variation *Supporting submission Part B: Pricing and price controls*, November 2022, p. 30.

47 Importantly, Part IV/Part XIB of the CCA, and NBN Co’s non-discrimination obligations contained in Part XIC of that Act, can protect against these incentives being set at anti-competitive levels.

- does the SAU provide sufficient support for low use customers, particularly those that require maximum speeds of 12 Mbps or 25 Mbps beyond the first regulatory period?
- in relation to the ability to bypass regulatory consideration of product withdrawals, are there sufficient protections against NBN Co pushing wholesale services to higher yielding tiers in future by withdrawing or placing limitations on access to lower yielding tiers?

5.4. Price controls and transparency measures

5.4.1. Overview of NBN Co's proposal

NBN Co has proposed significant changes to the SAU price controls compared to both the current SAU and the March 2022 variation proposal. These feature a WAPC in place of a revenue cap, along with the retention of individual price caps (which serve as limits on price movements for a particular product within the overall WAPC).[48]

The individual price caps provide for:

- annual CPI increases on the entry level offer
- annual pricing increases that are the higher of CPI or 5 percent for other residential grade products.

These differ to the individual price caps proposed in the March 2022 variation of:

- CPI+3 percent for the first regulatory cycle and the higher of CPI or 3 percent thereafter for the flat rate offers
- CPI for all bundled products over the SAU term.

These individual price caps are also subject to the overall CPI price cap. For so long as annual revenue recovery is below the ABBRR, the annual increase in weighted average prices permitted by the WAPC would be set at the annual increase in the CPI. Once this point is reached, an annual ICRA drawdown amount would be added to the annual regulated revenue allowance, and the annual WAPC increase allowance would be determined by an annual CPI-X increase for each subsequent regulatory cycle. Notably, the X in the CPI-X formula could be negative (i.e. so the formula becomes CPI+X) and so real price increases could be possible, where the annual regulated revenue allowance grows faster than CPI.

There is also a proposed new provision for CVC overage charges for bundled traffic class-4 (TC-4) products to be phased down from $8 in 2023-24 to $7 for 2024-25, $6 for 2025-26 and $0 for 2026-27 onwards.[49] The required price reductions for CVC overage could be offset commensurately by rises in the TC-4 bundle charges under the WAPC and the individual price caps. This is because the individual price caps and the WAPC will apply to the combined bundled charge (inclusive of CVC overage charges) for each speed tier on a weighted average basis across retailers, rather than separately to each of the bundled charge and the CVC overcharge charge.[50]

The proposed WAPC and the individual price caps are based on a 'use-it-or lose it' basis that would not permit unutilised historical allowable price increases to be carried over from one year to the next (i.e. the WAPC and individual price caps provide for price increases to prior year actual prices, not prior year maximum allowable prices). This provision would also

48 NBN Co, SAU variation, Module 2, Schedules 2D and 2E.

49 NBN Co, SAU variation, Module 2, Schedule 2E.2.2(d).

50 NBN Co, SAU variation, Module 2, Schedule 2F.4.

apply between regulatory cycles such that no-catch up in prices to meet a forecast revenue allowance for a previous regulatory cycle would be permitted.

There is provision for product additions and withdrawals to be accounted for in the WAPC. We understand that new products would enter the WAPC only when demand data for the period t-1.25 (that is, 31 March of financial year t-1) and price data for periods t-1 and t become available. Withdrawn products would have their demand assigned by NBN Co to successor products, subject to approval of the ACCC (clause 2D.3). These rules could be important to drive accuracy in the measures of effective price movements and discourage the inefficient churn of product offers (to circumvent the price controls on increasing prices for the existing product set).

The SAU variation also contains proposed measures intended to increase pricing certainty in addition to the price controls. These are specified to apply up until 30 June 2032. These include the pricing principles that NBN Co would be required to have regard to in setting new prices or changing prices,[51] and publishing an up-front statement of pricing intent for each regulatory cycle outlining its financial objectives; the pricing strategies it intends to adopt; any intended changes to its price structures; and areas of likely product innovation and development that are expected to influence price changes. The statement of pricing intent could only be varied in limited circumstances after consultation.[52]

NBN Co would also publish by 1 May each financial year a binding tariff list for the forthcoming financial year and a pricing roadmap of prices for that and the subsequent two financial years.[53] The tariff list and pricing roadmap prices for each financial year of the regulatory cycle are required to be consistent with the statement for that regulatory cycle.[54]

Subsequent year tariff list prices for individual products could differ from the pricing roadmap prices previously published for that year but not significantly, due to a pricing relativity commitment that would keep relativities in monthly tariff list prices to within $1 of those in the previous roadmap.[55]

NBN Co would also have to propose, and the ACCC determine, a service for each relevant NBN network as an entry level service for each regulatory cycle of the subsequent regulatory period (other than the first regulatory cycle), which would mean that the service would be subject to a lower annual price increase limit (of CPI) than for other TC-4 services (the higher of CPI or 5 percent).[56] NBN Co has nominated the 25/5 Mbps speed tier as the entry level service for all relevant networks for the first regulatory cycle.[57]

It appears that discounts would not be counted for the purposes of WAPC and individual price cap compliance. This means that changes in the nature or scope of any targeted discounts for certain speed tiers or service locations could not change the degree of pricing discretion that NBN Co would have over pricing its offers more generally. There are also powers for the ACCC to review discount offers (and NBN Co's pricing conduct more generally) where it offers a significant volume of services under temporary discounts or pricing materially departs from the published statement of pricing intent.[58]

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51 NBN Co, SAU variation, Module 2, Schedule 2B.2.1.

52 NBN Co, SAU variation, Module 2, Schedule 2B.2.2.

53 NBN Co, SAU variation, Module 2, Schedule 2B.2.3 and cl 2B.2.4.

54 NBN Co, SAU variation, Module 2, Schedule 2B.2.3(b)(iv) and 2B.2.4(c)(iii).

55 NBN Co, SAU variation, Module 2, Schedule 2C.2.

56 NBN Co, SAU variation, Main body, clauses 5.2(e)(iii), 5.5 and 5.9(a)(ii). Module 2, Schedules 2B.4.1 and 2E.2.1.

57 NBN Co, SAU variation, Module 4, Schedule 4A.4.

58 NBN Co, SAU variation, Module 2, Schedule 2C.4.2.

NBN Co has also proposed a commitment to only withdraw discount measures in accordance with the terms it announced on their introduction,[59] and to limit discounts to a combined value no more than 5 percent of annual pre-discounted TC-4 revenues (but excluding some discounts such as for low income offers).[60]

In the post-2032 period, any price controls and requirements for the publication of pricing and related information by NBN Co for a regulatory cycle will be as determined by the ACCC in the replacement module determination for the regulatory cycle.[61] There is no requirement that particular price control elements specified in Module 2 carry over into the post-2032 period.

The ACCC's ability to determine price controls in the post-2032 period could not conflict with the requirements and principles set out in Module 3 which create limitations on the terms and other matters contained in regulatory determinations. These would be relevant to the level of maximum charges that could be specified in a determination as well as the nature of any methods by which to determine those maximum prices. Section 5.2 above discusses these limitations.

5.4.2. Preliminary observations

The price controls proposed for Module 2 appear to provide a certain price path for average prices while NBN Co is yet to achieve its annual building block revenue requirement, and reasonable limits on average cost increases and on the cost of individual speed tiers. The proposed controls should also act to promote more efficient use of the NBN and minimise the scale of disconnections that could result from NBN Co raising costs of access to achieve cost recovery over time.

The various transparency mechanisms that have been proposed also appear to have the potential to provide additional cost certainty to retailers that could assist them in their business planning and developing more competitive retail offers. While NBN Co's draft of the statement of pricing intent for the first regulatory period that has been published with this Consultation paper remains subject to change, it could still assist retailers in better understanding the potential role for these statements as well as provide comment on NBN Co's potential pricing strategy for this regulatory cycle.

That said, from the time that NBN Co reaches its annual cost break-even point, which it projects to occur in the 2030 financial year, and the CPI cap on the WAPC falls away, the path of average prices could become less certain. While the pace of price increases could have been expected to reduce from this point given NBN Co's revenues had 'caught up' to its annual revenue requirement, the commencement of ICRA drawdown could make this outcome less assured. The potential implications of the proposed approach to ICRA drawdown on NBN Co's projected revenues, which would be an input to the allowable price path from when ICRA starts to be drawn down, is discussed below in Appendix E.

Further, the proposal for the entry level product to increase in cost each year by up to CPI is a significant departure from previous experience where this has remained constant, or possibly reduced, over time with changing usage patterns. The cost of the entry level product can be quite significant for low-income households, as well as provide a benchmark for more competitive pricing of higher speed tiers. Consumers that use their broadband services less often than others could also face price shock if a tailored product or offer is not developed during the initial regulatory period.

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59 NBN Co, NBN SAU variation, *Supporting submission Part B: Pricing and price controls*, November 2022, p. 29.

60 NBN Co, SAU variation, Module 2, Schedule 2C.4.3.

61 NBN Co, SAU variation, Main body, clause 5.10(b)(i) to (iii).

5.4.3. Issues / questions for stakeholder views

The ACCC would welcome stakeholder views on the appropriateness of the proposed price control and transparency measures generally, as well as on the following specific matters:

- would better cost certainty and efficiency outcomes be achieved by some limitation being continued on the X factor beyond the annual cost break-even point that NBN projects it will achieve during the 2030 financial year?
  - is there sufficient assurance over the long-term price path?
  - will NBN Co have appropriate incentives to manage demand risks and operate efficiently in the post-2032 period should it be able to drawdown the ICRA balance regardless of the scale of real price increases this could require?
- do stakeholders have views on the operation of the WAPC as specified in the SAU variation proposal, noting the complexity of the formulas, etc.? Would the WAPC operate appropriately in different scenarios such as where new products are added or replace an existing product?

5.5. NBN Co's approach to the BBM

5.5.1. Overview of the proposal

Schedule 2G of the SAU variation sets out the detailed implementation of NBN Co's BBM proposal in the subsequent regulatory period. This forms the basis for the revenues NBN Co will be entitled to recover over this period. Schedule 4B and Attachment J (in Module 4) of the revised SAU variation set out the further details, including proposed values for various inputs into the BBM for the first regulatory cycle. High-level principles regarding the ABBRR and RAB are included in Module 3 for the post 2032 regulatory period.

Further to this, NBN Co have also proposed to introduce several high-level principles for governing the post-2032 arrangements. These include principles relating to how the values for the RAB and ABBRR for core services should be determined (discussed in section 5.2).

The revised proposal adopts a similar approach to the current SAU on the composition of the ABBRR and RAB roll forward, albeit with a different test for the prudency and efficiency of expenditure. 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 through the replacement module process. NBN Co have also provided forecasts of the ABBRR and its components for the first regulatory cycle of three years commencing 1 July 2023 and included them in the SAU variation in Module 4. NBN Co's proposed BBM approach provides the foundation for, or incorporates, other detailed elements, including the recovery of historical losses, cost allocation, criteria for determining prudent and efficient expenditure, and the WACC. These elements are discussed in the following sections of this paper.

NBN Co has provided public and confidential versions of its BBM in Excel format. This is similar to the approach of NBN Co's March 2022 variation proposal. The key difference in the public and confidential versions of the BBM is that the public BBM does not contain information on the build-up of ABBRR for 'competitive' services, while the confidential BBM appears to provide a rather detailed cost allocation procedure for 'core' and 'competitive' services. Compared with the BBM submitted in March, key changes include:

- changes to asset lives for certain asset classes
- grouping detailed asset classes into a smaller number of aggregated asset classes
- removal of the financeability test

5.5.2. Preliminary observations

5.5.2.1. Removal of the financeability test

In the March 2022 variation proposal, NBN Co had proposed a financeability test. This test involved constructing an overall financeability rating, based on benchmark parameters. If the rating fell below the rating necessary to achieve 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.

Some stakeholders raised concerns about this approach, and in particular the aspect involving the automatic adjustment. NBN Co have removed the financeability test in the SAU variation and the revised BBM.

The ACCC does not object to the removal of the previously proposed financeability test regard but notes that a benchmark financeability test is a feature of other regulatory frameworks. Provided these are implemented appropriately they can potentially provide a further check on the suitability of the regulatory allowances. Consequently, the ACCC would welcome any stakeholder views on this aspect of NBN Co's proposal.

Relatedly, we note that in the revised proposal, NBN Co have proposed to adopt an approach for the 'crystallisation' of ICRA and subsequent ICRA draw down over the course of the SAU. NBN Co submits that this will provide them with a meaningful opportunity to achieve and maintain a standalone investment-grade credit rating with a stable outlook.[62]

The ACCC considers that the proposed arrangements intended to provide an NBN Co with a reasonable opportunity to achieve and maintain an investment grade credit rating would likely have important implications for the overall outcomes that the SAU could deliver and will form an important part of its assessment of the SAU.

5.5.2.2. Changes to asset lives and granularity of asset classes

Regulatory and tax asset lives are used for calculating regulatory and tax depreciation respectively. [63] The revised BBM provides information on the regulatory and tax asset lives for each asset class. It appears that there have been changes to standard asset lives for several asset classes from 2022-23. As a result, some asset classes have longer or shorter lives compared with previous years. We note that the March 2022 BBM in contrast did not appear to have adopted any changes to asset lives compared to previous years.

Further, in the revised BBM, capital expenditure (capex) appears to be reported on a more granular level when compared with the March version with over 600 asset classes reported in the '2009-23 BBM'.[64] In the "2024-40 BBM', NBN Co have grouped asset classes into a small number (around 15) of aggregated asset classes. Each aggregated asset class has then been assigned a life, which may be different to the lives of the detailed assets classes it captures. As a result, from 2023-24, calculations of deprecation are only shown at the aggregated asset class level and is no longer available in the BBM for detailed asset classes.

A potential benefit of reporting only high-level asset classes going forward is that this streamlined calculation of depreciation makes the model easier to work with.

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62 NBN Co, SAU variation *Supporting submission Executive summary and key narratives*, November 2022, p. 9.

63 Standard asset lives are used to calculate depreciation. Remaining asset lives show lives of assets that have been depreciated.

64 This information is available in the confidential version of the BBM.

We note however these changes could have potential implication for the depreciation schedule. Because the depreciation schedule may be affected by several factors, including changes to capex profile, changes in asset lives, and aggregation of asset classes, the impact of each is not immediately clear.

Given depreciation expenses are a significant part of the ABBRR, changes to the depreciation schedule could have material effect on NBN Co's cost recovery profile across the SAU period (including draw down of ICRA) and beyond, which may in turn affect relative pricing in an intertemporal sense.

It is also worth noting that the revised BBM has adopted an approach to government funding where any funding for capital expenditure is deducted from capex so that it does not flow through into the RAB. In addition, revenue from funding is explicitly recognised when calculating tax expenses in ABBRR.

5.5.2.3. Transparency in the BBM

The revised BBM (public version) appears to contain more granular information on capex by asset classes when compared with its March 2022 counterpart.

Further, the BBM (public version) shows costs for 'core' services but does not show costs attributed to 'competitive' services (the March 2022 BBM adopted a similar approach in respect of this).

We note however NBN Co has provided some information on the high-level breakdown of capex, operating expenditure (opex) and RAB values for both 'core' services and NBN Co as a whole for the recent actuals and the forecasts for the first regulatory cycle as part of its supporting information (Part F) and in Attachment J of the revised SAU variation. NBN Co has also provide an initial cost allocation manual, which details its methodology for attributing costs (discussed in section 5.8).

5.5.3. Key issues / questions for stakeholder views

We seek stakeholder views on the following issues and any other issues they consider relevant:

- is there sufficient information in the public version of the BBM for stakeholders to meaningfully engage on key aspects of NBN Co's proposed approach to the BBM?
- are the changes to NBN Co's approach to depreciation, including changes to asset lives and categorisation of asset classes, appropriate or seek to reflect the useful economic lives of these assets?

5.6. Recovery of accumulated losses

5.6.1. Overview of NBN Co's proposal

The SAU variation proposes 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 clause 2G.3 and 2G.4 of the SAU variation and governs how NBN Co's accumulated losses, as reflected in the ICRA, would be treated. The SAU variation proposes a range of significant changes to NBN Co's approach to the recovery of accumulated losses compared to current arrangements and the March 2022 variation proposal.

NBN Co proposes a core services ICRA balance of $12.5 billion as of 1 July 2023. NBN Co will seek to recover the $12.5 billion by adding a portion of this amount (the ICRA drawdown amount) to the ABBRR in certain years over the SAU period.

In the subsequent regulatory period, NBN Co would be able to recover approximately $1 billion of the ICRA (in 2022-23 terms). The timing and size of the ICRA drawdown amounts in each year would be determined through the replacement module process. Any portion of this $1 billion that is not recovered by NBN Co by the end of 2031-32 would be extinguished.

NBN Co would then have an opportunity to recover up to $11.5 billion of the ICRA (in 2022-23 terms) in the post-2032 regulatory period. Similarly, the timing and size do the ICRA drawdown amounts would be determined through the replacement module process and any residual ICRA amounts would be extinguished at the end of the SAU period.

Finally, in the period before NBN Co earns enough revenue to recover its ABBRR, no new losses or under-recovered amounts would be included in the ICRA. This differs from the current SAU, where any revenue shortfalls relative to ABBRR would continue to enter the ICRA. It also differs from the March 2022 variation proposal, where 50 percent of revenue shortfalls would be included in an unders / overs account for recovery in later years.

NBN Co states that the proposed arrangements in the SAU variation for the recovery of accumulated losses will provide NBN Co with a meaningful opportunity to earn the revenues it requires over the term of the SAU to pay down debt to achieve and maintain a standalone investment grade credit rating with stable outlook.[65]

NBN Co has examined two approaches for determining the ICRA required to meet this financing objective. The first is the ‘benchmark’ method, which involves calculating the amount of excess debt a benchmark firm would need to repay to reach a benchmark capital structure as a basis for determining the ICRA.[66] The second method is the ‘credit score’ method, which calculates the additional future revenue NBN Co would need to achieve an investment-grade credit rating, as assessed by a quantitative credit rating model such as that used by Moody’s.[67] NBN Co has also provided an expert report by Castalia on the economic effects of the ICRA, which provides further details on these two methods.[68]

5.6.2. Preliminary observations

NBN Co’s proposed approach to the recovery of accumulated losses in the SAU variation represents a significant change compared to the current and previously proposed arrangements.

First, the proposed opening ICRA balance of $12.5 billion has been set based on the objective of providing the opportunity to achieve and maintain a standalone investment grade credit rating. This compares to the current SAU and the March 2022 variation proposal, where NBN Co would carry forward all historical losses incurred to date for potential recovery over the SAU period. The proposed approach also appears consistent with the outcomes identified through the working group process, where recovery of revenue above the ABBRR would be appropriate to the extent it is required to provide NBN Co the opportunity to transition to a standalone investment grade credit rating. The ACCC will closely assess the methods proposed by NBN Co in developing its opening ICRA balance to ensure this balance is reasonably necessary to achieve the credit rating objectives.

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65 NBN Co, SAU variation, *Supporting submission, Executive summary and key narratives*, November 2022, p.9. NBN Co’s proposed approach to the ICRA is discussed in detail in *Supporting submission Part E: Calculation of NBN Co’s regulated revenue requirement*, November 2022.

66 NBN Co, SAU variation, *Supporting submission, Part E, Calculation of NBN Co’s regulated revenue requirement,* November 2022, pp. 8- 9.

67 NBN Co, SAU variation, *Supporting submission, Part E, Calculation of NBN Co’s regulated revenue requirement,* November 2022, p 10.

68 NBN Co expert report, Castalia, *Economic effects of ICRA*, December 2022.

Second, the proposed approach appears to address concerns previously raised by the ACCC about the accumulation of further losses into the cost base. It appears the smaller opening ICRA balance and commitment to exclude any new losses could establish a meaningful constraint on NBN Co's revenue.

Third, the proposal to extinguish any residual ICRA balances at the end of the subsequent regulatory period and the post-2032 regulatory period addresses concerns raised by the ACCC about the potential for a significant residual ICRA balance at the end of the SAU period. This had the potential to create long term pricing uncertainty for industry and regulatory uncertainty about how any remaining accumulated losses would be treated after 2040. The commitment to reduce the ICRA balances to zero on the last day of the SAU term appears to address these concerns with the current SAU and the March 2022 variation proposal.

Finally, NBN Co's proposed approach would allow the profile of ICRA recovery drawdown amounts to be determined ahead of each regulatory cycle, subject to it being able to recover the total amounts specified in the SAU. This differs from the current SAU, where NBN Co is unconstrained in how much ICRA it can recover in any particular year, and the March 2022 variation proposal, where the ICRA drawdown amounts were locked-in in each year. The ACCC sees merit in having the ICRA drawdown amounts considered as part of the replacement module process. This could provide NBN Co and the ACCC some flexibility to have regard to the price path for the upcoming regulatory cycle with a view to avoid price shocks.

The ACCC notes that in considering the ICRA drawdown amounts in the post-2032 regulatory period it could potentially have regard to the criteria that are set out in section 152BCA(1) and other matters that it considers relevant, provided that the residual ICRA can be fully drawn by 2039-40.[69] These criteria include the long term interests of end-users and the legitimate business interests of NBN Co as the access provider and interests of access seekers, amongst other factors.

However, as discussed previously in this Consultation paper, under Module 3 it is proposed that the ACCC could not set a revenue allowance that is less than the amount required to provide NBN Co a reasonable opportunity to achieve and maintain, for the duration of that regulatory cycle, a stand-alone investment grade credit rating with a stable outlook. It appears this limitation could have the potential to override in a practical sense the ACCC's consideration of the broader criteria that are specified in section 152BCA(1) when determining the appropriate ICRA drawdown amount for a regulatory cycle. The ACCC's other current concerns regarding this apparent limitation on its power to determine the revenue allowance has been discussed previously in this Consultation paper.

5.6.3. 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:

- whether the proposed methodologies NBN Co has used in developing its proposed opening ICRA balance of $12.5 billion represents an appropriate approach to achieving and maintaining a standalone investment grade credit rating.
- whether the proposed arrangements would likely promote efficient investment in and use of the NBN

69 NBN Co, SAU variation, Main Body, clause 5.8(b) and the drafting note at clause 3B.3.6.

- whether the commitments to extinguish residual ICRA balances at the end of the subsequent regulatory period and the post-2032 regulatory period would resolve concerns around future price and regulatory uncertainty beyond 2040
- whether the proposal to determine ICRA drawdown amounts ahead of each regulatory cycle, subject to the condition that the total amounts specified in the SAU can be recovered, provides a suitable safeguard against price shocks or prices that are higher than needed given the more fundamental limitation proposed on the ACCC's power to make a determination in the post-2032 regulatory period.

5.7. Expenditure criteria

5.7.1. Overview of NBN Co's proposal

The SAU variation proposal includes a number of requirements that would govern the way in which NBN Co's proposed and actual operating and capital expenditures would be determined and recovered from customers of its 'core regulated services' over time. These requirements would apply, in varying ways, to NBN Co's replacement module applications, to its expenditures on government-directed projects, to forecasts of its operating and capital expenditures (opex and capex, respectively), as well as to the scope for NBN Co's core services revenue to be adjusted during a regulatory cycle in response to changes in its costs. Some of the key requirements reflect feedback provided by stakeholders on the March 2022 variation proposal, as outlined in further detail below.

Clause 5.8 of the SAU variation would allow the ACCC to make a replacement module determination and, for this purpose, to determine forecasts for NBN Co's opex and capex that comply with the provisions in Schedule 2G of the SAU variation. In making such a determination, the ACCC may either determine those forecasts to be as proposed by NBN Co in its replacement module application or otherwise as determined by the ACCC in accordance with the SAU. In so doing, the ACCC would have to take into account the matters set out in section 152BCA(1) of the CCA (which specifies the matters the ACCC must take into account when making an access determination) and would need to publish its determination, together with its reasons, on its website.

As noted above, the SAU variation proposal introduces a new Module 3 that would govern how NBN Co's proposed and actual operating and capital expenditures would be recovered from customers from 1 July 2032 to the end of the SAU term. Module 3 provides for the ACCC to issue a statement of approach, which may set out it's proposed approach to determining a number of matters, including the values of annual regulated revenue allowances and forecast nominal ABBRR. In relation to the setting of the ABBRR and the establishment of the real RAB, Module 3 provides that these values must relevantly include, at a minimum, forecast or actual prudent and efficient opex and capex.

5.7.1.1. New consultation obligation

Clause 5.7 of the SAU variation proposal introduces a new obligation for NBN Co to consult with access seekers and consumer advocacy groups prior to submission of a replacement module application for a regulatory cycle on the relevant expenditure (meaning capex and opex) which NBN Co proposes to undertake in that regulatory cycle. NBN Co would be required to give these parties reasonable notice of, and a reasonable opportunity to participate in, the consultation. NBN Co would be required to provide to the ACCC a report that summarises the views put to NBN Co during consultation and NBN Co's response. In preparing the report, NBN Co would also be required to take into account the range of feedback received during consultation. This obligation to consult was not contained in the March 2022 variation.

5.7.1.2. Deeming of Government-directed expenditures as prudent

Clause 5.9 and Schedule 2G of the SAU variation would have the effect of deeming actual capex incurred and opex forecast to be incurred pursuant to a government policy project notice as ‘prudent’ to the extent those expenditures are incurred in a manner that implements the details of the project or program as specified in a notice. Expenditures outside or beyond any such specified details would be assessed as to whether they reflect the prudent expenditure that an operator in NBN Co’s position would incur. This broadens the scope of the expenditures on Government-directed projects that would be subject to a prudency (as well as efficiency) review compared to the scope provided in the March 2022 variation.

5.7.1.3. Meaning of ‘Regulatory Requirement’

Attachment C (Dictionary) of Module 0 of the SAU variation defines regulatory requirement as “any legal or regulatory obligation or requirement (including those arising from an administrative act or decision) to the extent that it materially affects, or is reasonably anticipated to materially affect, the supply of products or services by NBN Co”. Compared to the March 2022 variation, the submitted SAU variation definition no longer includes compliance with Government policy or other Government directions. This narrowing of the definition has implications for the assessment of opex and capex and cost pass-through applications (see below).

5.7.1.4. Forecast opex and capex

Under clause 2G.2.5(b) of the SAU variation, to the extent that NBN Co’s forecast opex and capex incorporated in its forecast nominal ABBRR and nominal core services ABBRR are based on demand forecasts, those forecasts would have to be based on an appropriate forecasting methodology, be based on reasonable assumptions about the key demand drivers, be determined using the best available information, and be determined taking into account current demand and economic conditions. This proposed requirement has been introduced since the March 2022 variation proposal. This provision would permit the ACCC to adopt updated forecasts (if applicable) when making a replacement module determination.

Under clause 2G.2.5(c) of the SAU variation, NBN Co’s forecast opex and capex need to “reasonably reflect the prudent and efficient expenditure that an operator in NBN Co’s position would incur in achieving” a set of objectives referred to as the ‘expenditure objectives’. These objectives are, in summary:

- meeting expected demand for products and services
- complying with all ‘regulatory requirements’ (see above)
- implementing projects and programs the subject of a government policy project notice, and
- maintaining and improving the quality, reliability, safety, security and integrity of supply of products and services, including by meeting benchmark service standards.

In forecasting prudent and efficient expenditure to meet these objectives, regard needs to be had to a range of ‘expenditure factors’.

Both the expenditure objectives and factors have been modified and, in general, streamlined and narrowed since the March 2022 variation proposal. NBN Co’s changes mostly appear to respond to issues raised by the ACCC in our consultation paper on the March variation. Some of the changes respond to specific ACCC feedback. For example:

- the removal of an expenditure objective that explicitly provides for the inclusion in expenditure forecasts of the costs of ‘preparing’ for regulatory requirements or regulatory change events
- the removal of a standalone expenditure objective of maintaining ‘ubiquitous access’, given the ambiguity of this term, with NBN Co to focus on meeting demand in line with customer willingness-to-pay (see below);
- the removal of the expenditure factor referring to allowances for reasonable risks and sensitivities, and
- the removal of the expenditure factor referring to applicable benchmarks.

One of the key changes to the expenditure factors is a new reference to expected end-user willingness to pay (as opposed to simply end-user demand) for NBN Co’s products and services, including as to connections, speed requirements, data volumes, quality and reliability.

Another change reflected in the latest SAU variation is the removal of definitions for what would constitute expenditures that a prudent and efficient operator in NBN Co’s position would incur. NBN Co’s current proposal is that “prudent” and “efficient” be interpreted in accordance with their ordinary meaning.

5.7.1.5. Ex post review of capex

As part of the replacement module and RAB roll forward process, under clause 2G.5.10 of the proposed SAU variation the ACCC must review NBN Co’s actual capex for prudency and efficiency prior to the end of a regulatory cycle. 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 in achieving the expenditure objectives and having regard to the expenditure factors. The ACCC’s assessment would need to be based on the prevailing circumstances, and information and analysis that an operator in NBN Co’s position could reasonably have been expected to have considered or undertaken, at the time NBN Co incurred the relevant capex. An accompanying note[70] clarifies that this informational constraint would apply only to the extent that NBN Co *has incurred* the relevant capex; it would not apply to the extent that the ACCC’s determination relates to capex *yet to be incurred*. Capex incurred or likely to be incurred on government policy project notices is deemed to be prudent in so far – and only in so far – as it implements the details of that project or program as specified in the notice. Such capex would still be assessed for efficiency. If a notice specifies a maximum amount of capex for a financial year, the ACCC may cap the amount of capex to be included in NBN Co’s RAB at that specified maximum amount.

This provision is similar to the corresponding provision in the March 2022 SAU variation, subject to the changes NBN Co has subsequently made to the expenditure objectives and factors and the removal of the definitions of prudency and efficiency.

5.7.1.6. Cost pass-through

Clauses 2D.4 to 2D.6 of the proposed SAU variation would enable or oblige 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 materially higher or lower costs as a result of a variety of specified changes or events,

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70 NBN Co, SAU variation, Module 2, Schedule 2G.5.10(b)(vi).

being tax changes, changes in regulatory requirements, a change relating to (including the issuing or withdrawal of) a government policy project notice, a defined natural disaster or terrorism event, and changes in benchmark service standards initiated by either the ACCC or by NBN Co. The materiality threshold is met where the change in total costs of supplying WAPC charge components (as distinct from the change in building block cost elements[71]) in any financial year is equal to or greater than 1% of NBN Co's forecast nominal core services ABBRR for that financial year, or the ACCC otherwise determines.

NBN Co would have to submit a cost pass-through application within 90 business days (or longer if the ACCC grants an extension of time) of:

- the occurrence of a 'positive change event' (being an event that results, or is likely to result, in NBN Co incurring materially higher costs than it would have but for that event), and
- becoming aware of the occurrence of a 'negative change event' (being an event that results, or is likely to result, in NBN Co incurring materially lower costs than it would have but for that event).

The ACCC may notify NBN Co of a negative cost pass-through event if NBN Co does not submit a cost pass-through application for the event during the relevant time window.

A cost pass-through application should specify the total amount of the cost change attributable to the relevant change or event, as well as the amount to be passed-through each financial year.

The ACCC would have 40 business days to make a determination on a cost pass-through application or a negative change event that the ACCC notifies to NBN Co, which could be extended by the ACCC for up to two months at a time.

In making a determination on a cost pass-through application, the ACCC:

- may cap amounts relating to opex and capex on a government-directed project at the maximum amounts specified in the relevant government policy project notice; and
- would have to take into account (among other things):
    - for a positive change event - the efficiency of NBN Co's decisions and actions in relation to the risk of the event including: whether NBN Co could have reasonably taken actions to mitigate the magnitude of the cost increase; and whether it took or failed to take actions that increased the magnitude of the cost increase
    - whether the costs of the cost pass-through event have already been factored into the calculation of the revenue requirement, and
    - any other factors the ACCC considers relevant.

If the ACCC does not make a determination within the relevant time (including any extensions) the deemed total and yearly pass-through amounts would be those submitted by NBN Co for a positive change event and zero for a negative change event.

Finally, NBN Co may withdraw a cost pass-through application relating to a positive change event at any time prior to the ACCC making a determination.

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71 The total cost of supplying the WAPC charge Components would be the sum of the relevant capital and operating expenditure, whereas the BBM components for the relevant year would likely be less as the capital amount would comprise the return on capital and depreciation charge.

5.7.2. Preliminary observations

In considering the merits of NBN Co's SAU variation, the ACCC has had regard to the key outcomes identified by the ACCC following the working groups in 2021, stakeholder feedback on NBN Co's March 2022 variation, and the changes made by NBN Co since its March proposal.

Participants in the 2021 working group process emphasised the need for more rigorous scrutiny of NBN Co's future opex and capex than had occurred during the rollout. Stakeholder feedback on the March proposal acknowledged the progress made by NBN Co towards enabling greater transparency and scrutiny of its expenditures, while highlighting continuing concerns around:

- the breadth and scope of the proposed expenditure objectives and factors and cost pass-through triggers
- the more constrained scrutiny applicable to expenditures on government-directed projects, and
- the lack of a process that would require NBN Co to consider broader costs and benefits when developing its expenditure proposals.

The current proposed SAU variation appears to respond to issues previously raised by stakeholders and the ACCC on the March 2022 variation proposals. In particular, the ACCC notes the following changes since the March proposal:

- the inclusion of a new obligation to consult with access seekers and consumer advocacy groups prior to submission of a replacement module application on NBN Co's proposed opex and capex in the relevant regulatory cycle.
- the deeming of capex incurred and opex forecast to be incurred pursuant to a government policy project notice as 'prudent' only in so far as they implement the details of the project or program specified in the notice.
- the narrowing of the definition of regulatory requirement, which widens the scope of expenditures on government-directed projects and programs that are subject to reviews of prudency as well as efficiency.
- the streamlining and, in general, narrowing of expenditure objectives and factors, which should help reduce the difficulty of assessing the appropriateness of NBN Co's relevant expenditures.
- the inclusion of a new expenditure factor referencing end-user willingness-to-pay for NBN Co's services. The ACCC notes that while end-users may be willing to pay for high-quality services, given that such services may already or otherwise be provided by the market, the question from the perspective of the LTIE is whether there is a willingness to pay for NBN Co to expend resources on the provision of *its own* products and services.
- the narrowing of cost pass-through events by replacing a broad force majeure event definition with more specific events relating to natural disasters and terrorism, as previously accepted by the Australian Energy Regulator in relation to electricity network, and more symmetrical treatment of cost changes from relevant pass-through events.

More generally, the submitted SAU variation incorporates changes to narrow the scope of cost pass-through applications, including by introducing a materiality threshold that requires the relevant cost change in a financial year to be equal to or greater than 1% of the forecast nominal core services ABBRR for the financial year (except where the ACCC otherwise determines). Notably, this threshold applies to the *total* increase or decrease in costs relating to the cost pass-through event, rather than the change in the annual building block cost elements.

Finally on cost pass-throughs, the proposed SAU variation deems total and annual amounts to be passed through in relation to positive cost pass-through events to be those submitted by NBN Co, and in relation to negative cost pass-through events to be zero, if the ACCC does not make a determination within the required timeframes. The ACCC could however mitigate the risk of inappropriate deeming of a decision on a cost pass-through application by extending the period in which to make a determination by up to two months per notice of extension, regardless of whether that period had been extended previously.[72]

In contrast, the proposed SAU variation's regulatory module determination process does not include a 'stop-the-clock' mechanism for delays in NBN Co submitting a regulatory module application or when the ACCC is awaiting responses to its information requests. In Module 2, where the ACCC does not make a replacement module determination in the prescribed time, a replacement module determination will be taken to be in effect in the terms proposed by NBN Co in its replacement module application. This could introduce a material point of weakness into the process.

The ACCC would be interested in stakeholder views on what alternative arrangements could be considered where regulatory decisions are unable to be made within time and how the 'gap' in the regulatory framework could best be filled while the relevant decision is yet to be made.

In relation to ex post reviews of incurred capex, the ACCC agrees that such reviews should not have regard to information that only became available after the capex had been incurred. However, the ACCC would be interested in stakeholder views as to whether it is sufficiently clear that the ACCC could take account of analysis of NBN Co's capex decisions that was commissioned and/or prepared subsequent to the investment being incurred, so long as it was based on information available at the relevant time, etc.

Finally, there appears to be aspects of the proposal where stakeholders have raised issues for NBN Co's consideration, but NBN Co has not proposed any further changes from the March 2022 proposal in response.

The proposed SAU variation does not set out the type of supporting documentation NBN Co would be obliged to submit with a replacement module application. However, the ACCC notes that it would have the ability to request information under clause 6.3.

The proposed SAU variation does not incorporate any requirement for NBN Co to submit either a cost-benefit analysis or a business case in support of any planned expenditures as part of its replacement module application. However it does now require NBN Co to consult with stakeholders on its planned expenditures which could provide an alternative means by which broader costs and benefits could be identified and taken into account by NBN Co in developing its regulatory applications.

The ACCC notes that NBN Co would in any case need to be in a position to demonstrate during the SAU's expenditure reviews that its management had followed a robust process and given due consideration to the prudency and efficiency of its planned expenditures. We expect this will likely require it to have prepared and retained a detailed business cases as part of documenting the basis of its decisions, and some proposals may require NBN Co to have documented the likely impacts on the interests of its customers or retail competition to

[72] NBN Co, SAU variation, Module 2, Schedule 2D.5.4(d). Other clauses allow time extensions for some but not all other decisions that the ACCC could make under the SAU; for example clauses 2D.3.2(b), 2G.6.3(d), 2H.6.3(e), 2I.6.2(c).

make clear the prudency and efficiency of the decision. Although these might not be submitted as part of its regulatory module application, we expect the ACCC or its expenditure consultants could reasonably require this material to be provided as part of its review.

The ACCC would be interested in stakeholder views as to the matters that should be addressed in supporting analysis of this type so the ACCC could conduct a rigorous prudency and efficiency assessment of NBN Co's relevant expenditures.

5.7.3. Issues / questions for stakeholder views

We seek stakeholder views on the following questions and any other issues they consider relevant:

- what alternative process measures could be considered to safeguard against a regulatory module coming into effect without proper regulatory assessment?
- how important is the preparation of a business case to enabling assessment of the prudency and efficiency of major planned capex expenditures?
- if a business case would be valuable, what key requirements would it need to incorporate so that it could be relied upon in expenditure reviews that are undertaken pursuant to the SAU?

5.8. Cost allocation and accounting separation

5.8.1. Overview of the proposal

NBN Co proposes to establish an accounting separation framework under the SAU.

Importantly, NBN Co would establish separate cost bases for 'core' and 'non-core' services using cost allocations. This provides for the ABBRR, RAB and ICRA to be allocated between the two categories of services.[73] Services supplied by NBN Co in competitive markets would be categorised as non-core services, while all other services supplied by NBN Co are categorised as core services.[74]

NBN Co has categorised enterprise ethernet, business satellite and satellite mobility services as non-cores services (unless and until the ACCC re-categorises them as core services). All other services, including all services supplied to residential premises, are initially categorised as core services.

Core services are subject to SAU requirements including maximum regulated prices, price controls, benchmark service standards and product withdrawal restrictions. Non-core services are not subject to SAU regulation and NBN Co can set prices and other terms for these services outside of the SAU framework.

The SAU variation sets out cost allocation principles that NBN Co will follow to allocate costs between core and non-core services.[75] The SAU variation also requires NBN Co to submit to the ACCC, within 30 days of the variation being accepted, a proposed cost allocation manual.[76] This manual describes the methodology NBN Co will use to allocate costs between core and non-core services.[77]

73 NBN Co, SAU variation, Module 2, Schedule 2G, Part A & Part B.

74 NBN Co, SAU variation, Module 2, Schedule 2G.

75 NBN Co, SAU variation, Module 2, Schedule 2G.6.2.

76 NBN Co has submitted a public version of an initial (not yet approved) cost allocation manual with its SAU variation proposal.

77 NBN Co, SAU variation, Module 2, Schedule 2G.6.3.

The ACCC has the power to approve a proposed cost allocation manual in either the form it is submitted or a form that incorporates reasonable changes made by the ACCC.[78] In addition, the ACCC can, at any time after the SAU variation is accepted, direct NBN Co to submit a revised cost allocation manual to the ACCC.[79]

The categorisation of services between core and non-core services and allocation of costs to these services for the subsequent regulatory period can be determined before the start of each regulatory cycle through the replacement module process for that period.[80] NBN Co may propose that a product or service be re-categorised as a core or non-core service as part of the replacement module process.[81] However NBN Co must propose the ABBRR, RAB and ICRA values that account for the proposed re-categorisation, in accordance with the cost allocation principles and the cost allocation manual.[82] The ACCC would also have the power to re-categorise a product or service as a non-core or core service through a determination under the replacement module process for the subsequent regulatory period.[83]

The SAU variation requires NBN Co to submit, by 31 March 2024, a document setting out the procedures and methodology for establishing and maintaining consolidated and separate accounts for key products and services supplied under the SAU, and associated reporting and external assurance arrangements.

The SAU variation further imposes obligations on NBN Co in relation to establishing and maintaining consolidated and separate accounts.[84] The ACCC may direct NBN Co to propose changes to the accounting procedures for approval or amendment by the ACCC.[85]

5.8.2. Preliminary observations

Cost allocation and accounting separation arrangements should provide transparency that costs are being allocated in accordance with appropriate cost allocation principles and methodologies to prevent inappropriate cross subsidy and anticompetitive outcomes.

A cost allocation framework can therefore be a crucial component in determining the efficient regulated cost base and for safeguarding against cost advantages in the supply of competitive services. Although cost allocation principles are important, the implementation of the principles and the methodologies adopted for cost allocation are likely to have a material impact on determining the respective cost bases of monopoly and competitive services.

NBN Co has submitted a public version of an initial (not yet approved) cost allocation manual with its SAU variation proposal. We are interested in stakeholder views on whether the allocators for shared costs specified in the initial cost allocation manual are suitable. Shared costs are costs that are not specific to one cost category or cannot be directly assigned to a specific cost category.

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78 Pursuant to Module 2, Schedule 2G.6.3(c), if the ACCC does not notify NBN Co of its decision in 3 months (or such longer period for notification of the ACCC's decision as a result of the ACCC extending time), the applicable cost allocation manual will be the proposed manual submitted by NBN Co.

79 NBN Co, SAU variation, Module 2, Schedule 2G.6.3(e).

80 NBN Co, SAU variation, Module 2, Schedule 2G.6.4(c) to (f). Alternatively, pursuant to clause 2G.6.4(b), if NBN Co proposes to introduce a new product or service or vary an existing one, and that product or service, if so introduced or varied, would fall within the scope of a product or service that has already been categorised, then the relevant product or service will be categorised in the same way as the existing one.

81 NBN Co, SAU variation, Module 2, Schedule 2G.6.4(c).

82 NBN Co, SAU variation, Module 2, Schedule 2G.6.4(c) and (d).

83 NBN Co, SAU variation, Module 2, Schedule 2G.6.4(e) and (f).

84 NBN Co, SAU variation, Module 2, Schedule 2I.6.3 & 2I.6.4.

85 NBN Co, SAU variation, Module 2, Schedule 2I.6.5.

We note that the initial cost allocation manual allocates shared capital costs between core and non-core services proportionally as either 'shared', 'shared among fixed line networks' or 'overhead' based on (one of) the number of premises passed, the number of premises connected or the amount of provisioned bandwidth. The operating costs would be allocated through a ratio based on revenue proportions. That is, by taking the total actual or forecast value of core services revenue, or revenue in connection with non-core services (as the case may be) in the relevant year, divided by the total actual or forecast revenue in that year.

5.8.3. Issues / questions for stakeholder views

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

- would the proposed cost allocation principles and framework for the subsequent regulatory period provide for effective accounting separation of NBN Co's competitive services from its monopoly services?
- is the initial cost allocation manual submitted by NBN Co fit for purpose and clear in its approach to cost allocation between NBN Co's core and non-core services?
- are the proposed cost allocation principles for the subsequent regulatory period, and cost allocation manual, likely to reflect relevant cost drivers and appropriately allocate costs between NBN Co's core and non-core services?
- are the processes for periodically reviewing cost allocations for the subsequent regulatory period through the replacement module process, and for considering cost allocations for new services in the subsequent regulatory period, appropriate and adaptable to changing market and other conditions?
- do the proposed cost allocation framework and accounting separation procedures achieve the right balance between appropriate flexibility on implementation and effective ACCC oversight, regulatory control, and recourse where necessary?

5.9. 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 similar 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 WACC.

5.9.1. Overview of NBN Co's proposal

Under the SAU as varied, the rate of return for each financial year of a regulatory cycle in the subsequent regulatory period and the post-2032 regulatory period (other than the first regulatory cycle) would be determined by estimating a nominal vanilla WACC[86] for that financial year which is:

- commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to NBN Co, having regard to:[87]

[86] A nominal vanilla WACC is a weighted average of the pre-tax cost of debt and the post-tax cost of equity.

[87] NBN Co, SAU variation, Module 2, Schedule 2G.2.4(d) and Module 3, Schedule 3B.3.2(c). Also *Supporting submission, Part E: Calculation of NBN's Regulated Revenue Requirement*, November 2022, p. 19.

- the objective of producing reliable estimates of the market cost of capital in a wide range of plausible market conditions
- the objective of promoting stability in the rate of return over time, and

- in respect of any regulatory cycle of the subsequent regulatory period (other than the first regulatory period), calculated in accordance with the following formula:

  $R^{nominal} = R_e \times (1 - G) + Rd_t \times G$

  Where:

  $R^{nominal}$ is the nominal rate of return for each Financial Year (t)

  R_e is the expected return on equity

  Rd_t is the expected return on debt for each Financial Year (t)

  G is the benchmark proportion of debt in total financing (i.e. the benchmark gearing ratio).

NBN Co proposes that, subject to the above requirement, the ACCC would have discretion as to the WACC methodology in determining the rate of return in a replacement module determination for a regulatory cycle.[88]

The variation specifies WACC values for the first regulatory cycle including a nominal vanilla WACC for each financial year that has been calculated in accordance with the requirement for other regulatory cycles described above.[89] NBN Co's proposed WACC values for the first regulatory cycle are set out in **Error! Reference source not found.** of Annexure F, together with the parameter values used by NBN Co to estimate these proposed WACC values.

5.9.2. Preliminary observations

For the first regulatory cycle, NBN Co's nominal WACC is 7.7 percent in 2023-24, 7.7 percent in 2024-25 and 7.8 percent in 2025-26.[90] These values have been estimated by NBN Co using a different approach to that reflected in the current 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 percent risk margin.

For comparison, applying the risk-free rate of 3.9 percent used by NBN Co in estimating its proposed WACC values for the first regulatory cycle, the SAU Module 1 methodology implies a current nominal rate of return of 7.4 percent. The latter methodology corresponds to the prevailing 10-year risk free rate of 3.9 percent plus a risk margin of 3.5 percent. When expressed as risk margins alone, the NBN Co-proposed nominal WACC for 2023-24 implies a risk margin of 3.8 percent (7.7 percent minus the risk-free rate of 3.9 percent).

NBN Co proposes the ACCC have discretion, subject to the requirement described above, as to the WACC methodology applied in determining the rates of return for each regulatory cycle following the first regulatory cycle in making a replacement module determination for the regulatory cycle.[91] This is consistent with current arrangements under Module 2, where the ACCC has discretion in calculating the WACC.

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88 NBN Co, SAU variation, *Supporting submission, Part A: Executive Summary and Key Narratives*, November 2022, pp. 7-8.

89 NBN Co, SAU variation, Module 2, Schedule 2G. See also NBN Co, SAU variation *Supporting submission, Part E: Calculation of NBN's Regulated Revenue Requirement,* Table E5, pp. 24-25.

90 NBN Co, SAU variation, Module 4, Attachment J, pp. 348-349.

91 NBN Co, SAU variation, *Supporting submission Part A: Executive Summary and Key Narratives*, November 2022, pp. 7-8.

The WACC methodology used by NBN Co in estimating its proposed WACC values for the first regulatory cycle is different from the approach adopted by the ACCC in other recent decisions in different contexts, such as ACCC's decision on Australian Posts' 2022 price notification and Domestic Mobile Terminating Access Service Determination made in 2020.[92] The key parameters where there are differences in methodology include: the calculation and estimation of the market risk premium (MRP), the nominal risk free rate, the return on debt, and expected inflation.

Although the WACC methodology applied by NBN Co in estimating its proposed WACC values for the first regulatory cycle 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 values, and for this purpose the methodology and input parameters used by NBN Co in estimating those proposed WACC values, against the legislative criteria for acceptance of the variation, considering submissions raised by stakeholders.

5.9.2.1. Return on equity approach

NBN Co proposes a value for the allowed return on equity for the financial years of the first regulatory cycle that it has estimated 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
- applying equal weight to each estimate.

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

Market risk premium

In estimating its proposed WACC values for the first regulatory cycle, NBN Co has used a MRP of 7.2 percent for the financial years of that regulatory cycle. This estimate is an average of the current MRP of 7.9 percent, estimated using four differently specified Dividend Growth Models, and a long-term MRP of 6.5 percent based on the arithmetic average of historical excess returns for Australia.

NBN Co's MRP estimate differs from the ACCC's methodology adopted for previous determinations, which used the long-term average of realised historical excess return, including a consideration of relevant forward-looking evidence such as surveys. The ACCC's and AER's MRP estimates typically range between 6.0 percent and 6.8 percent.[93]

Risk free rate

In estimating its proposed WACC values for the first regulatory cycle, NBN Co used an estimate of the prevailing risk-free rate for that regulatory cycle of 3.9 percent. NBN Co used

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92 Recent examples of the ACCC's WACC methodology may be obtained from the ACCC's decision on Australian Posts' 2022 price notification and ACCC's Domestic Mobile Terminating Access Service Determination. ACCC (2022), *Decision on Australia Post's 2022 price notification,* December 2022; ACCC (2020), *Public inquiry on the access determination for the Domestic Mobile Terminating Access Service*, Final Report, October 2020.

93 See ACCC, *Decision on Australia Post's 2022 price notification*, December 2022, pp. i-ii; ACCC, *Public inquiry on the access determination for the Domestic Mobile Terminating Access Service – Final Report*, October 2020, p 82; AER, *2018 Rate of Return Instrument – Explanatory Statement*, December 2018; AER, *2022 Draft Rate of Return Instrument – Explanatory Statement*, June 2022.

a 40-business day average of the prevailing annualised yield on 10-year Commonwealth Government Securities. NBN Co also used a long-term nominal risk free rate that is based on historical average bond rate. The long-term risk-free rate is estimated by averaging 10-year Commonwealth Government Securities yields from 1 April 1993 to 31 December 2021.

The method for estimation of the risk-free rate used by NBN Co differs from the ACCC methodology adopted for previous determinations in different contexts. The ACCC's previous approaches have estimated the prevailing nominal risk free rate, based on the average of the annualised yield on 10-year Commonwealth Government Securities over 20 business days.

5.9.2.2. Return on debt approach

"On the day" versus "trailing average"

NBN Co's proposed values for the return on debt for the first regulatory cycle have been estimated by it 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 methodology for estimating its proposed return on debt values differs from the ACCC's methodology adopted for previous determinations in different contexts, being an 'on the day' approach that uses 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.

5.9.2.3. Gearing and beta

NBN Co proposes a value for each of the gearing ratio and the return on equity that it has estimated using a first principles analysis for the selection of benchmark firms for the estimation of gearing and beta. This approach is in two stages – first, the systematic risk factors relevant to NBN Co are determined, and second, the risk factors are used to determine the appropriate inclusion, given relevant risks, of firms in the sample.

NBN Co has conducted this analysis and determined that 77 telecommunication firms be included in the sample. NBN Co proposes a benchmark gearing estimate of 37 percent for the first regulatory cycle and a value for the return on equity for that regulatory cycle that has been estimated using a benchmark equity beta estimate of 0.66. The ACCC's current view is that the sampling approach that NBN Co has proposed may not result in a suitable benchmark that adequately reflects its risks.

The ACCC notes that NBN Co may face systematic risk that is materially different to telecommunication firms more generally given its operations are limited to the supply of wholesale only access. In these circumstances, restricting the selection of firms to those with functions more closely matched to NBN Co or else expanding to also include utility firms that provide wholesale access may provide a more representative benchmark than NBN Co has proposed.

While the ACCC invites comment on NBN Co's proposed WACC sampling approach and how it has been applied to select the initial sample, during the upcoming regulatory cycle the sample is unlikely to have a material impact on NBN Co's regulated prices. This is because for the period NBN Co's revenues are forecast to remain below its annual building block revenue requirement its prices are capped at CPI rather than being subject to the outputs of the building block model. Consequently, the materiality of this issue could depend on it being clear that the sampling approach, and the firms to be included in the sample, would be revised in subsequent regulatory determinations. That is, the sample used for the initial regulatory cycle would not establish a precedent for future decisions when the WACC is more likely to have an impact on NBN's regulated revenues and prices.

NBN Co also submits that, as part of each replacement module application, it would undertake a new first principles analysis, which would reassess the existing relevant risk parameters and subsequently, the sample of firms.

5.9.2.4. Gamma

NBN Co's proposed value of gamma for the first regulatory cycle is 0.585.[94]

NBN Co proposes that, for the regulatory cycles of the subsequent regulatory period other than the first regulatory cycle, gamma be set at zero if the value of the sum of taxable profit (at time t) and tax losses carried forward (at time t-1) is negative.[95] If the value of the sum of taxable profit (at time t) and tax losses carried forward (at time t-1) is positive, then the value of gamma would be proposed by NBN Co in its replacement module application for the relevant regulatory cycle and determined by the ACCC in any ACCC replacement module.[96]

NBN Co's approach to gamma in the subsequent regulatory period differs from the current arrangements for gamma under the NBN Co SAU Module 1. Under these arrangements, 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 arose.[97]

NBN Co's gamma value for the first regulatory cycle is consistent with the value used in recent ACCC and AER decisions. For example, the ACCC's final report on the access determination for the Domestic Mobile Terminating Access Service adopted a gamma of 0.585.[98] The AER proposes to continue to use this value in its 2022 draft rate of return instrument.[99]

5.9.2.5. Expected inflation

NBN Co's proposed methodology for estimating expected inflation for each regulatory cycle of the subsequent regulatory period (other than the first regulatory cycle) differs from the ACCC's methodology adopted for previous determinations in different contexts. 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 Reserve Bank 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.[100] At 5 years ahead, an anchor forecast inflation rate of 2.5 percent is assumed, that is adjusted upward (downward) by 0.25 percent if the Reserve Bank's 2 year ahead forecast inflation rate is 3 percent and above (2 percent and below).

The ACCC's methodology for previous determinations adopts a 10-year geometric average of the Reserve Bank forecast inflation rate for 1 and 2 years ahead and the midpoint of the

[94] NBN Co, SAU variation, Module 4, Attachment J.

[95] NBN Co, SAU variation, Module 2, Schedule 2G.7.4; Frontier report paragraph 10 says that the value of gamma in this situation is unspecified. This Consultation paper uses the variation's wording.

[96] NBN Co, SAU variation, Module 2, Schedule 2G.7.4.

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

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

[99] AER, *Draft Rate of Return Instrument – Explanatory Statement*, June 2022, p. 243.

[100] NBN Co, SAU variation, Module 2, Schedule 2G.1.4(b).

Reserve Bank's inflation target band for 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 matches the term of the risk free rate of 10 years. Under NBN Co's proposal, the horizon of inflation expectations matches the length of the regulatory cycle.

5.9.3. Issues / questions for stakeholder views

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

- NBN Co's proposed objectives to which regard must be had in estimating the nominal vanilla WACC for the purposes of all regulatory cycles of the subsequent regulatory period and the post-2032 regulatory period (other than the first regulatory cycle):
  - producing reliable estimates of the market cost of capital in a wide range of plausible market conditions
  - promoting stability in the rate of return over time.
- NBN Co's proposed WACC values for the first regulatory cycle, including with respect to the scope of the benchmark firms and other aspects of the methodology and input parameter values used by NBN Co in estimating its proposed WACC values.
- whether the proposed sample of benchmark firms used by NBN Co for the estimation of gearing and beta are appropriate. In particular, whether the resulting benchmark would be reasonable to adopt for NBN Co as a wholesale access provider.

5.10. Incorporating other access technologies

5.10.1. Overview of NBN Co's proposal

The current SAU only covers the FTTP, fixed wireless and satellite networks. This is approximately only 25.2 percent of NBN services in operation.[101]

The SAU variation would have the effect of broadening the scope of the SAU to include the multi-technology mix (MTM) technologies (FTTN, FTTB, FTTC and HFC networks) and introducing network boundary points for the included technologies.

Specifically, the variation:

- includes the MTM networks in the service descriptions in the SAU. This also includes explanations of network boundary points for these connection types; additional terms for the FTTC network; and terms covering the installation of FTTB/N/C and HFC access services have been included under Schedule 1C[102]
- expands the dictionary to include the new technologies and terms that support the regulation of the MTM[103]
- includes the new technologies in Attachment D (initial products). Schedule 1A also contains new inclusions covering the MTM on the implementation of NBN Access Service, Ancillary Services and the Facilities Access Service[104]
- NBN Co has also inserted terms for the co-existence period, which refers to the period where FTTB/N/C coexists with ADSL services and other non-fibre services except VDSL. During the coexistence period, objectives have been established for

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[101] ACCC, NBN Wholesale Market Indicators Report, September 2022.

[102] NBN Co, SAU variation, Module 1, Schedule 1C and Annexures 3, 4, 5 and 6.

[103] NBN Co, SAU variation, Main Body, Attachment C.

[104] NBN Co, SAU variation, Module 1, Schedule 1A.

the peak information rate, covering the FTTB/N/C networks.[105] Further objectives have been established for the committed information rate, covering FTTB and FTTN networks.[106]

5.10.2. Preliminary observations

We propose to consider as part of our assessment whether the incorporation of the MTM technologies into the SAU is in the LTIE. In our consultation paper on NBN Co's March 2022 variation proposal, we raised for discussion NBN Co's intention to incorporate the multi-technology mix MTM technologies into the SAU.[107] The ACCC also previously considered variations to NBN Co's SAU that focused on the incorporation of MTM technologies in 2016[108] and 2017.[109] The current and March 2022 proposals both appear to seek to respond to issues raised by the ACCC during 2016 and 2017.

We consider the efficiency and effectiveness of the SAU partly dependent on clear and accessible service descriptions and related terms. Clarity is required in relation to the scope of regulated services, and to determine 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.[110]

The clarity of the included network boundary terms in the SAU variation is also important. Network boundaries determine where NBN Co's responsibility for the network ends and where the customer's responsibility begins. NBN Co have included different network boundaries for different technologies.

5.10.3. Issues / questions for stakeholder views

The ACCC notes that definitions in the dictionary have been added to encompass MTM technologies and terms of the SAU have been extended to cover those technologies. We are seeking stakeholder views regarding the clarity of drafting on the included MTM definitions and service descriptions. Specifically, we are seeking feedback on NBN Co's proposed network boundaries for each of the new MTM networks.

5.11. Service quality

5.11.1. Overview of NBN Co's proposal

NBN Co's SAU variation incorporates a framework for specifying benchmark service standards for each regulatory cycle. This is a new feature compared to the SAU currently in operation, and NBN Co's March 2022 variation proposal, in which service standards did not explicitly form part of the SAU framework. NBN Co submits that the fundamental purpose of including benchmark service standards in the SAU is to establish a price-quality link to ensure that it is not incentivised to reduce service standards to increase margins.[111]

Under the SAU variation, NBN Co must include a service standards proposal for each regulatory cycle, other than the first regulatory cycle, in its replacement module application to

105 NBN Co, SAU variation, Main Body, Attachment C and Module 4, Attachment I.

106 NBN Co, SAU variation, Module 1, Schedule 1A.4.

107 ACCC, Consultation paper on NBN Co 2022 Variation, 23 May 2022, pp. 44 - 46.

108 ACCC, NBN Co SAU Variation May 2016.

109 ACCC, NBN Co SAU Variation 2017, November 2018.

110 ACCC, Draft decision on NBN Co 2016 SAU variation, 28 March 2017, p. 21.

111 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.9 & 13.

the ACCC until 2032.[112] The service standards proposal must, in turn, include a set of proposed benchmark service standards and a date by which NBN Co proposes to include in its standard form of access agreement an obligation to meet or exceed service standards which are no less favourable to access seekers than the proposed benchmark service standards.[113]

In the event that the ACCC does not accept NBN Co's replacement module application, an ACCC replacement module determination would have to determine the benchmark service standards for the relevant regulatory cycle and the date by which NBN Co must reflect in its standard form of access agreement the benchmark service standards determined by the ACCC.[114]

Under the arrangements that would apply from 2032, NBN Co would have the option of including proposed benchmark service standards in a replacement module application but is under no obligation to do so unless requested by the ACCC in its statement of approach. Regardless, the ACCC would have the option, but not the obligation, to specify benchmark services standards in a replacement module determination.[115]

Finally, we note that a failure by NBN Co to achieve any service standards included in a standard form of access agreement (benchmark or otherwise) would not be a breach of the SAU, although NBN Co may be required to pay a rebate or undertake corrective action.[116] Additionally, NBN Co will determine service standards in respect of competitive services.[117]

5.11.1.1. Mid-regulatory cycle review of benchmark service standards

Schedule 2I.2 of Module 2 enables the ACCC and NBN Co to initiate a mid-regulatory cycle review of benchmark service standards in the subsequent regulatory period.

The ACCC may initiate a review of benchmark service standards if a systemic service standard event[118] occurs or if a retail service standard regulation[119] is made or varied during a regulatory cycle.[120] NBN Co must (once notified by the ACCC) provide reasons on whether it considers a change to benchmark service standards to be necessary and, where relevant, the details of those changes as well as the proposed date by which any amendments to the standard form of access agreement will be made to reflect those changes (a service standards response). NBN Co may also make (or be required to make in relation to a negative change event) a cost pass-through application under clause 2D.5.1 on the ACCC accepting a service standard response or making a service standard determination.

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112 NBN Co, SAU variation, Main Body, clause 5.2(e)(iv).

113 NBN Co, SAU variation, Main Body, clause 5.6.

114 NBN Co, SAU variation, Main Body, clause 5.9(a)(ii) and (e).

115 NBN Co, SAU variation, Main Body, clauses 5.2(f)(iv) and 5.10(b)(iv).

116 NBN Co, SAU variation, Module 2, Schedule 2I.2.1 (c).

117 NBN Co, SAU variation, Module 2, Schedule 2I .2.5. Under the SAU competitive services are defined as NBN Co Enterprise Ethernet, NBN Co Satellite mobility for large commercial passenger aircrafts and NBN Co business satellite service (unless re-categorised as a core regulated service in an ACCC replacement module determination) and any other product or service categorised as a competitive service under clause 2G.6.4.

118 A systemic service standard event means a new event or circumstance: (a) arising during a regulatory cycle that results in a recurring material adverse impact on access seekers' access to a service standards product due to a matter for which NBN Co is responsible; and (b) in respect of which the ACCC considers, acting reasonably, that NBN Co has not taken reasonable steps to address the recurring material adverse impact on access seekers. NBN Co, SAU variation, Main Body, Attachment C (Dictionary), p.68.

119 A Retail Service Standard Regulation means any legal or regulatory obligation or requirement that: (a) imposes or changes a mandatory service standard on one or more Access Seekers in relation to the standard or standards of one or more access seeker products they provide; and (b) necessitates a change to one or more of the then applicable benchmark service standards if those access seekers are to be capable of complying with that mandatory service standard. SAU variation, Main Body, Attachment C (Dictionary), p.67.

120 NBN Co, SAU variation, Module 2, Schedule 2I.2.2

The ACCC has the power to accept or reject NBN Co's service standard response. In the event that the ACCC rejects NBN Co's service standard response, it may make a determination which sets out changes to benchmark service standards that are necessary for access seekers to be capable of complying with the new or changed mandatory service standard that is subject to the retail service standard regulation; or changes to the extent that are necessary and proportionate to address the systemic service standard event. In both cases, the determination must set a date by which amendments to the standard form of access agreement are to be made to reflect any changes to the benchmark service standards.[121] However, if the ACCC does not accept or reject a service standard response or issue an ACCC service standard determination in the prescribed times, there is no change to the benchmark service standards.[122]

NBN Co may propose changes to benchmark service standards at its discretion. NBN Co is required to consult with access seekers on its proposed amendments prior to submitting to the ACCC, together with any related cost pass-through application. The ACCC has the power to accept or reject the change proposal, but not issue its own determination in response. Additionally, the change proposal will not take effect unless the related cost pass-through application is accepted, or taken to have been accepted, in full by the ACCC, or NBN Co provides notice that it is willing to proceed anyway.[123]

The ACCC must, when making a decision on service standards[124], take into account the same matters that it must take into account when making an access determination under section 152BC of the CCA[125] and, any other matters it thinks relevant to the decision. The ACCC must also not make a decision if it would have the effect of the matters set out in sections 152BCB(1) and (4A) of Part XIC the CCA, which also apply when it makes an access determination.[126]

5.11.1.2. Benchmark service standards for the first regulatory cycle

NBN Co proposes WBA4 service levels, and associated performance objectives and rebates, as the benchmark service standards for the first regulatory cycle of the subsequent regulatory period[127]. The benchmark service standards are at Attachment I to Module 4 of the proposed SAU variation.

Proposed benchmark service standards appear to include the improvements relative to WBA4 service levels that include:

- higher performance objectives for completion advice for connections delivered within 30 minutes and service transfers completed in either 15 minutes or 1 hour.[128]

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[121] NBN Co, SAU variation, Module 2, Schedule 2I.2.2(e)(iii)-(v).

[122] NBN Co, SAU variation, Module 2, Schedule 2I.2.2(g)).

[123] NBN Co, SAU variation, Module 2, Schedule 2I.2.3(h).

[124] Such as a decision to accept or reject a Service Standard Response or Benchmark Service Standards Change Proposal given by NBN Co, or an ACCC Service Standards Determination.

[125] The matters that the ACCC must take into account when making an access determination are set out in set out in section 152BCA(1), Part XIC of the *Consumer and Competition Act 2010*.

[126] NBN Co, SAU variation, Module 2, Schedule 2I.2.4.

[127] Benchmark service standards for the First Regulatory Cycle are to be included in the standard form of access agreement on 1 July 2023 except for the performance objective for utilisation management and the utilisation threshold reports which commence on the price transition date (clause 4A3(c) of Schedule 4A, Module 4). Clause 2B.1.4(a) provides that the price transition date is on or before the latter of 1 July 20232 and 3 months following the second SAU variation date.

[128] NBN Co, SAU variation, Module 4, Attachment I, clauses 4.1 and 4.2.

- reduced activity timeframes for delivery of completion advice for connections and service transfers[129], access component modifications (that do not require the attendance at the premise) and CVC modifications.[130]
- lower service fault dropout thresholds for services on the FTTN and HFC Networks, from greater than nine to greater than seven in 24 hours.[131]
- changes to the utilisation management commitments proposed in its March 2022 variation proposal that include a lower utilization measurement threshold (from 95 percent to 90 percent) and longer measurement timeframe (from 15 to 30 continuous minutes on three separate days within a rolling 30-day period).[132]
- reporting on network utilisation and the inclusion of operational reporting in proposed benchmarks.[133]

We note that proposed benchmark service standards also appear to omit WBA4 performance objectives for network activities, voiceband reinstatement and transition reversals; service levels for services that NBN Co no longer provides (such as multi-cast services) or services that are provided on an individual contractual basis (such as enhanced fault rectification), and operational targets, which are non-binding and aspirational.

5.11.2. Preliminary observations

The ACCC welcomes NBN Co's proposal to include service standards within the SAU framework. We consider that NBN Co's proposed framework seeks to address many of the concerns previously raised by stakeholders in relation to the lack of specific service quality commitments within the current regulatory framework.

We note that under the proposed SAU variation, NBN Co's prices and service quality for each regulatory cycle of the subsequent regulatory period (other than the first regulatory cycle) would be considered within a single regulatory process, either at the beginning of each regulatory cycle or mid-cycle via the cost pass-through mechanism. Benchmark service standards are also more likely to provide clarity on the minimum service standards that end-users can expect when purchasing NBN Ethernet services. Importantly, it appears that the ACCC review powers provide it with some ability to consult on, and set, benchmark service standards that may better promote the LTIE, either at the beginning of or during a regulatory cycle.

Under the variation, NBN Co would have to include in the standard form of access agreement an obligation to meet or exceed service standards that are no less favourable to access seekers than the benchmark service standards. As such, it would be open to NBN Co and retailers to agree to more favourable service standards under the WBA. We would also expect that improvements be built into the benchmark service standards within a reasonable time of them becoming commercially available, particularly should NBN Co seek a cost pass-through to fund those improvements.

The proposed service standards framework does not include an explicit performance incentive scheme, which would provide NBN Co with direct financial benefits for exceeding service standard commitments that inform the regulation of its prices and costs for falling short of those commitments. We note that such incentive schemes are a key feature of other regulatory frameworks, including for Australian energy networks. NBN Co submits that

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129 NBN Co, SAU variation, Module 4, Attachment I, clauses 4.1 and 4.2.

130 NBN Co, SAU variation, Module 4, Attachment I, clauses 11.1 and 11.2.

131 NBN Co, SAU variation, Module 4, Attachment I, clause 23.

132 NBN Co, SAU variation, Module 4, Attachment I, clause 13.4.

133 NBN Co, SAU variation, Module 4, Attachment I, clauses 16.1(b),16.4 and 24.

commercial incentives from competing fixed line and fixed wireless networks and ACCC review powers will provide it with the impetus to continue to drive improvements on the network in order to meet consumer expectations.[134] Although there could be stronger incentives with such a scheme, we will consider the need for one in light of the commitments NBN Co is already offering as well as stakeholder submissions on these matters.

Further, we note that NBN Co is not proposing to increase service standards in line with the proposed price increase for the 50/20 Mbps speed tier. NBN Co submits that the price-quality link of a single speed tier should not be assessed in isolation, as it would not take account of the trade-offs that have been made across the product suite as a whole (i.e., foregone CVC revenue on higher speed tiers in the short term and on lower speed tiers in future). In addition, NBN Co submits that it does not take account of the fact that NBN Ethernet prices were introduced at below cost, and new price points are a consequence of the introduction of TC-4 flat rate pricing.[135]

We consider that there could be benefits if NBN Ethernet product service pricing and corresponding service standards were considered in a holistic manner, particularly given the trade-offs mentioned by NBN Co and diversity of speed tiers currently purchased by retailers to meet end-user demand. However, we also note that the 50 Mbps speed tier accounted for 55.4 percent of the market in June 2022[136] and as such, it may not be unreasonable for retailers to expect improvements to benchmark service standards in line with rising prices.

5.11.2.1. Benchmark service standards mid-regulatory cycle review

Under the SAU variation, benchmark service standards may be changed during regulatory cycles in the subsequent regulatory period (including the first regulatory cycle) in specific circumstances. We also envisage that NBN Co initiated changes could arise in relation to, for example, commercially negotiated improvements under the WBA.

We are interested in stakeholder views on whether they consider the proposed mid-regulatory cycle review mechanisms to be sufficiently effective and robust to ensure that benchmark service standards remain sufficiently fit for purpose to promote the LTIE. Additionally, whether clause 5.10(b)(iv) and (d) in the Main Body of the SAU would allow the ACCC to include a mid-regulatory cycle review mechanism in any replacement module determination for a regulatory cycle in the post 2032 regulatory period.

In terms of the proposed drafting, we would be interested in stakeholder feedback on whether the definition of 'systemic service standard event' should, in addition to referring to the impact on access seekers, refer to the impact on end-users if the mid-regulatory cycle review mechanism is to promote the LTIE and be reasonable.[137]

Lastly, the SAU variation provides the ACCC with a limited ability to extend a deadline where necessary to make a decision or determination, despite the presence of a deeming provision. The clock may be stopped where the ACCC requires (and has not yet received) further information from NBN Co under clause 2I.2.4(b) (Schedule 2I, Module 2) but not in the event that the ACCC requires information from other parties or sources.

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134 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, p.11.

135 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.16-17.

136 As at June 2022 there were 4,836,307 services in operation for the 50 Mbps tier speed out of a total of 8,722,459. NBN SIO Disclosure tables are available on the ACCC website.

137 Under the variation, a systemic service standard event is defined as meaning "a new event or circumstance: (a) arising during a regulatory cycle that results in a recurring material adverse impact on access seekers' access to a service standards product due to a matter for which NBN Co is responsible; and (b) in respect of which the ACCC considers, acting reasonably, that NBN Co has not taken reasonable steps to address the recurring material adverse impact on access seekers."

5.11.2.2. Benchmark service standards for the first regulatory cycle

The proposed benchmark service standards for the first regulatory cycle of the subsequent regulatory period appear to mirror most of the service standards that currently sit in the Service Levels Schedule for the NBN Ethernet Product Module under WBA4. As such, many of the service standards that were agreed to in 2020 under WBA4 would continue until 2026. We would be interested in stakeholder views on whether the proposed benchmark service standards for the first regulatory period would likely address current issues that could be impacting NBN consumers and, whether they are reasonable.

NBN Co submits that WBA4 provides the baseline on which it has determined its pricing for the first regulatory cycle, even though it has also considered enhancements to WBA4 commitments that are consistent with its network investment strategy and, would not, in its view, introduce substantial cost (driving increased prices).[138]

We note that NBN Co's core strategy for increasing service standards on, and reliability of, its services is its ongoing upgrade of copper services to fibre.[139] While stakeholders have sought improvements to service standards (relative to WBA4), NBN Co submits that higher service standards on access technologies that are subject to overbuild would divert capex that is more efficiently spent on upgrading the network, or would impact NBN Co's ability to maintain the network to meet existing service quality commitments.[140] For this reason it argues against widening current rebates, or introducing new ones.[141] Additionally, we note that NBN Co is not proposing a new service level for outage processes, although we understand these are being reviewed in a working group established by the Communications Alliance.

NBN Co has nevertheless proposed improved service standards (relative to WBA4) for service faults, completion advice and modifications, and network utilisation management. These improvements appear to be a subset of changes which are being considered for the next iteration of its wholesale broadband agreement (WBA5).[142]

In relation to service faults, we note that NBN Co has lowered the minimum dropout threshold for services on the FTTN and HFC networks. Additionally, NBN Co submits that FTTN and HFC services with fewer dropouts than the fault dropout threshold may be investigated and rectified by NBN Co under the performance incident regime.[143]

The lowering of the dropout threshold would mean (if implemented) that services on the FTTN and HFC networks with 8 or 9 dropouts per day will be able to be rectified in less time under WBA4 service fault rectification timeframes than they would have under performance incident rectification timeframes. However, we note that neither the proposed lower fault thresholds or performance incident regime currently apply to fixed line services on the FTTB/C/P networks or services on the fixed wireless network[144].

[138] NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.11 & 13.

[139] NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, p.10.

[140] NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.10-11.

[141] NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.15-16.

[142] NBN Co released a second consultation paper to stakeholders on 12 December 2022 with changes to service standards.

[143] NBN Co, *NBN SAU variation 2022 - Supporting submission Part C: Non-Price Terms*, November 2022, p.14 Under current thresholds, a service on the FTTN or HFC network will be considered to have a performance incident requiring investigation by NBN Co if it performs below a minimum speed (generally between 12/1Mbps and 25/5Mbps) and/or at least 4-9 unexpected dropouts within 1 calendar day, occurring in the current day or any of the 2 previous calendar days (5.2.17 of the WBA Operations Manual).

[144] NBN Co has a roadmap for the rollout of the performance incident regime for FTTC/B/P and wireless services.

In terms of the proposed utilisation threshold[145], we note that the revised 90 percent threshold is lower than the threshold proposed in the March 2022 variation proposal (95 percent) and higher than WBA4 (70 percent). However, the measurement timeframe of 30 (or more) continuous minutes on 3 (or more) separate days within a rolling 30-day period is a longer measurement timeframe than that proposed in the March proposal and WBA4.[146]

NBN Co submits that the revised utilisation threshold of 90 percent is based on: the historical performance and experience of the NBN, NBN Co's testing of Layer 3 performance, international standards established by the Metro Ethernet Forum, and comparison with the New Zealand market.[147] We would be interested in stakeholder views on whether the proposed threshold is reasonable and set at a level that promotes the LTIE. In particular, whether it promotes efficient use of, and investment in, the NBN while also ensuring sufficient capacity to support end-user services.

Overall, we would also be interested in stakeholder views on whether the benchmark service standards for the first regulatory cycle should, as far as possible, be included in a standalone document that does not incorporate by reference aspects of other documents. In this respect, we note that some of the definitions of capitalised terms have the meanings given to them in the standard form of access agreement as at 22 November 2022[148] however we query whether these may be difficult for stakeholders to locate, particularly once the standard form of access agreement is varied.

Current drafting of clause 4A.3(b)(ii) (Schedule 4A, Module 4), for example, provides that that where the benchmark service standards in Attachment I includes provisions that otherwise refer to other provisions which are not set out in Attachment I, those other provisions do not form part of the benchmark service standards.

Additionally, we note that while clause 23 of the benchmark service standards specifies the service fault dropout threshold for NBN ordered products on the FTTN and HFC networks, there appears to be a lack of clarity in terms of the location of fault dropout and speed thresholds for NBN ordered products on the other networks in the current standard form of access agreement.

5.11.3. Issues/questions

The ACCC seeks views on whether the service quality framework and benchmark service standards for the subsequent regulatory period by NBN Co in the SAU variation are reasonable and promote the LTIE.

In particular, the ACCC seeks views on:

- whether the proposed regulatory oversight is sufficient to promote the adoption of benchmark service standards that reflect more closely end-user service requirements and willingness to pay
- whether clause 5.10(b)(iv) and (d) (Main Body of the SAU variation) would permit the ACCC to establish a mid-cycle regulatory review mechanism and/or introduce a service performance incentive scheme for a regulatory cycle of the post-2032 regulatory period

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145 NBN Co, SAU variation, Module 4, Attachment I, clause 13.4.

146 The SAU variation proposal in March 2022 proposed a timeframe of 15 continuous minutes on three separate days within a rolling 30-day period. Under WBA4 it is 30 continuous minutes or more on 3 or more separate occasions during any fixed 21-day period (Clause 15.4(b)(i) of the WBA4 Ethernet Product Module Service Level Schedule).

147 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, pp.26-28.

148 NBN Co, SAU variation, Module 4 Schedule4A.3(b).

- whether proposed regulatory safeguards provide sufficient flexibility during a regulatory cycle to respond to unforeseen events, and
- whether the proposed benchmark service standards for the first regulatory period address current issues that could be impacting NBN consumers and, are reasonable. In addition, whether there is sufficient clarity and certainty with regards to service quality in the proposed benchmark service standards.

5.12. Reporting

5.12.1. Overview of NBN Co's proposal

The SAU variation in Module 4, which sets out NBN Co's proposed commitments for the first regulatory cycle of the subsequent regulatory period, includes several service quality and network performance related reporting commitments by NBN Co. These reporting commitments generally mirror those set out in NBN Co's WBA4.

In addition, NBN Co commits to providing monthly network utilisation reporting in relation to each shared network resource that exceeds the utilisation threshold for that month[149] and quarterly reporting on the shared network in respect of which NBN Co undertook to increase available capacity.[150] NBN Co submits this would provide increased transparency regarding investment in network capacity and performance.

However, we note that NBN Co has removed previous commitments (proposed in its March 2022 variation proposal) to:

- provide 6-monthly reporting to the ACCC on network capability, outages and recurring faults
- maintain its existing monthly reports to retailers, or via its website, relating to congestion, network availability, and connection and assurance performance.

NBN Co has submitted that the removal of this commitment is due to the ACCC's and other stakeholders' proposals that NBN Co be subject to a comprehensive set of reporting commitments through a record keeping rule.[151]

5.12.2. Preliminary observations

The proposed SAU variation reporting commitments generally mirror reporting arrangements currently under WBA4.

NBN Co submits that additional operational and process reporting are best addressed through the WBA arrangements, rather than the SAU, given expected ongoing changes to reporting processes and potential delays to implement such changes if implementation processes are embedded in the SAU.[152]

The ACCC supports the ability for ongoing improvements to operational reporting between NBN Co and retailers but would be interested in stakeholder views on whether the SAU should also contain appropriate minimum reporting arrangements to support the monitoring of benchmark service standards (without restricting the potential for future improvements).

149 NBN Co, SAU variation, Module 4, Attachment I, clause 16.4(a).

150 NBN Co, SAU variation, Module 4, Attachment I, clause 16.4(b).

151 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, p 30

152 NBN Co, SAU variation, *Supporting submission Part C: Non-Price Terms*, November 2022, p 18 & 19

We note that additional reporting proposed by NBN Co in its March 2022 variation proposal is not included in the SAU variation on the basis of the proposed development of an ACCC record keeping rule, which could enable a future public reporting framework. The ACCC is currently consulting on the development of a service quality and network performance record keeping rule for the NBN and other fixed line superfast broadband networks.[153]

As any public reporting that could be enabled through a record keeping rule would not be expected to be implemented until 2024 and would also be subject to future consideration by the ACCC. We would be interested in views on whether NBN Co should continue its own public reporting on congestion, network availability, and connection and assurance performance, among other things, for the foreseeable future.

5.12.3. Issues / questions for stakeholder views

We seek stakeholder views on whether NBN Co's proposed performance and operational reporting commitments for the first regulatory cycle are appropriate and in the LTIE.

5.13. ACCC functions and powers

5.13.1. Overview of NBN Co's proposal

The current SAU confers a range of functions and powers on the ACCC. The SAU variation would expand the nature and scope of ACCC functions and powers in relation to several matters. The matters which additional ACCC powers and functions would be conferred under the SAU variation include the following[154]:

- assessment of replacement module applications
- ACCC statement of approach for the post-2032 period
- deviations from NBN Co's statement of pricing intent and discounts threshold
- cost pass-through applications
- ex-post reviews of capital expenditure
- categorisation of services between core and non-core services
- approving NBN Co's cost allocation manual and associated accounting measures
- benchmark minimum service standards
- requesting information from NBN Co that it considers reasonably necessary to exercise its functions and powers under the SAU
- consulting with third parties on matters arising in connection with the SAU.

5.13.2. 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. In doing so, the 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.

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153 See ACCC Record Keeping Rule Consultation paper here.

154 These ACCC functions and powers are discussed in further detail in chapter 14 of NBN Co's SAU variation, *Supporting submission Part D: ACCC roles and powers* and in previous sub-sections of this paper.

We note that the SAU variation significantly expands the nature and scope of the ACCC functions and powers under the SAU, and appear to respond to some of the issues raised by the ACCC in relation to the March 2022 variation proposal and in stakeholder submissions. In the consultation paper on the March proposal, we outlined the approach the ACCC would adopt in assessing the proposed functions and powers. The ACCC proposes to adopt a similar approach to the current SAU variation, and would include considering the following matters[155]:

- whether the conferred functions and powers are sufficient, in nature and scope, to deal with situations that could not be anticipated in advance
- the relative need for powers to review effectiveness of controls and to require changes where the controls have been found to be ineffective in bringing about the intended outcome
- whether there are matters where the ACCC has no functions or powers, but where ACCC functions and powers would likely be required for the SAU variation to promote the LTIE, or to ensure the terms and conditions of the variation are reasonable, over the term of the SAU
- the reasonableness of any limitations imposed on ACCC functions and powers, including in relation to the information the ACCC may or may not have regard to, and timeframes by which the ACCC must complete its exercise of power or function
- the clarity with which the function or power is conferred (including, for example, whether the ACCC can exercise the function or power on its own initiative or only if assessing an application or notification from NBN Co)
- 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, so that decisions can be made on an informed basis, and that this occurs in an open and transparent process.

On this final point, we note NBN Co has include some general provisions within the SAU variation that allows the ACCC to request information from NBN Co that it considers reasonably necessary for it to exercise its functions and powers under the SAU, or to administer and assess NBN Co's compliance with the SAU.[156] The SAU variation also includes a new clause providing for the ACCC to consult with interested parties on matters arising in connection with the SAU, including on matters arising in connection with the exercise of its functions and powers under the SAU.[157]

5.13.3. Issues / questions for stakeholder views

The ACCC seeks comments from stakeholders on the proposed ACCC functions and powers under the SAU variation. In particular, the ACCC seeks comments on the following issues:

- 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

[155] See ACCC, *NBN Co SAU variation Consultation paper*, May 2022, pp. 47-51.

[156] NBN Co, SAU Variation, Main Body, Clause 6.3.

[157] NBN Co, SAU Variation, Main Body, Clause 6.1 and 6.4.

- 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 the proposed new clauses providing for general powers for the ACCC to request information in relation to its exercise of functions and powers and consult with third parties will ensure decisions are made on an informed basis, and that this occurs in an open and transparent process.

Annexure A: Overview of current NBN Co SAU

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,[158] 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, 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 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.

In the absence of a revised SAU, Module 2 would start on 1 July 2023 and sets out long-term arrangements for determining NBN Co's required revenue for the remainder of the SAU, which runs until 2040. 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 ICRA.

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158 NBN Co's SAU variation and the ACCC final decision on the variation are available on the ACCC website.

Annexure B: The long-term interests of end-users

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
- 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[159]

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

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
- 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

[159] CCA, s. 152AB(2).

- the economically efficient operation of a carriage service, telecommunications network or facility.

In relation to the objective of encouraging economically efficient use of, and investment in, infrastructure, the ACCC will examine efficiency from an economic perspective consistent with its long-standing approach. 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.

Annexure C: Price path analysis for the 12 Mbps and 25 Mbps speed tiers

Outlined below is the ACCC's analysis of allowable price paths for the 12 Mbps and 25 Mbps bundled product speed tiers if NBN Co were to price up to the level of the individual price caps, and assuming it would meet the WAPC across all products. Analysis for 50 Mbps and higher tiers is excluded because of the added complexity of modelling the interaction between the individual price caps for these products and the WAPC. The analysis is based on NBN Co's CVC utilisation assumptions for the two bundled products, along with some initial product take-up and distribution assumptions made by us.

The focus is on pricing in the shorter term (over 6 years), including the expected change from existing WBA4 prices for 2022-23. It also reflects, for the purpose of the price caps, the bundled product and CVC overage charges on a combined basis, including treatment of the 12 and 25 Mbps services as a single group for average utilisation and price control purposes as provided for under the terms of the SAU variation. The analysis is an average representation, so will not represent the prices or costs incurred by individual access seekers or for individual access lines, that have peak CVC utilisation levels that differ substantially from the average.

The analysis uses NBN Co's average CVC utilisation numbers for its 12 Mbps and 25 Mbps services as provided for in its supporting submission at July 2022. It adopts NBN Co's short term utilisation growth forecast of 9 percent per annum over the period CVC is charged for (2022-23 to 2025-26), and allowance for the rise in CVC utilisation allowances for the 25 Mbps services through 2023-24 to 2025-26 of half this level (adjusted on a half yearly basis) as provided for in the SAU variation (noting the SAU variation provided for no increase in the allowance for the 12 Mbps service which remains at zero). It relies on Treasury estimates of inflation between 2022-23 and 2025-26, and the Reserve Bank's midpoint of its target range after this period.

Figure 2: Average access charges with utilisation growth and full advantage of individual price caps ($ nominal)

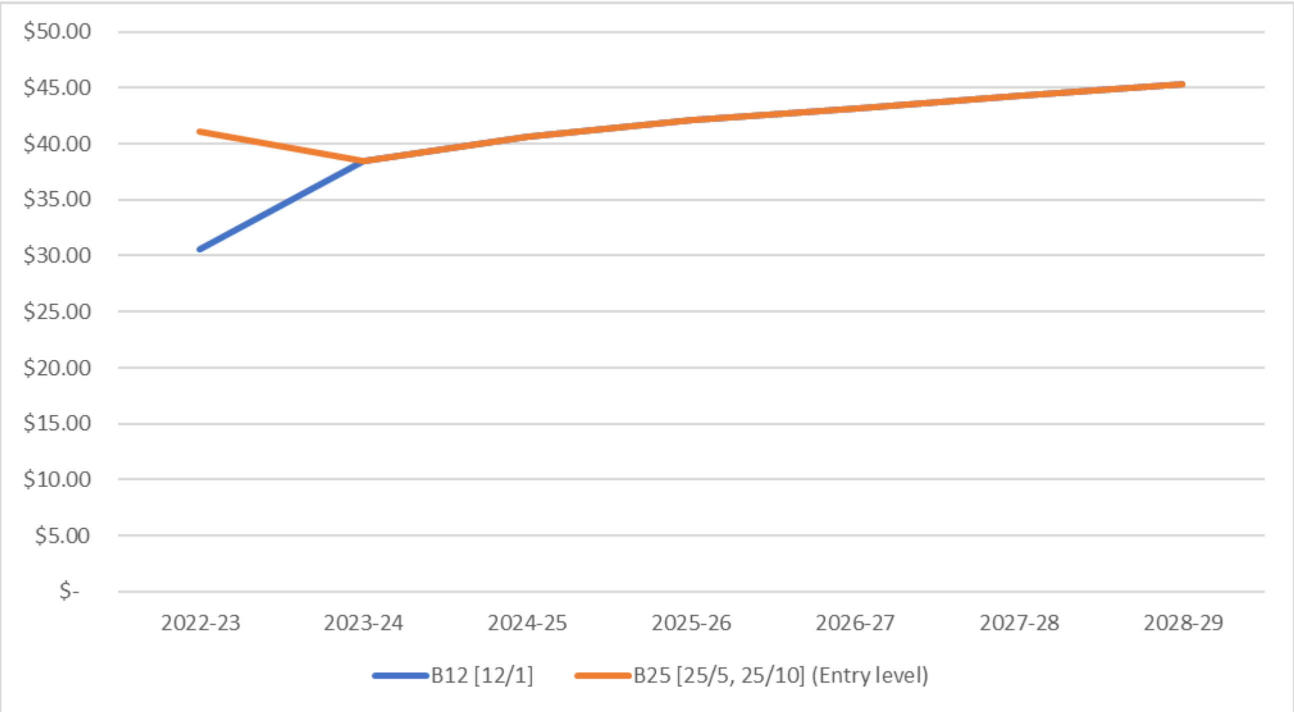
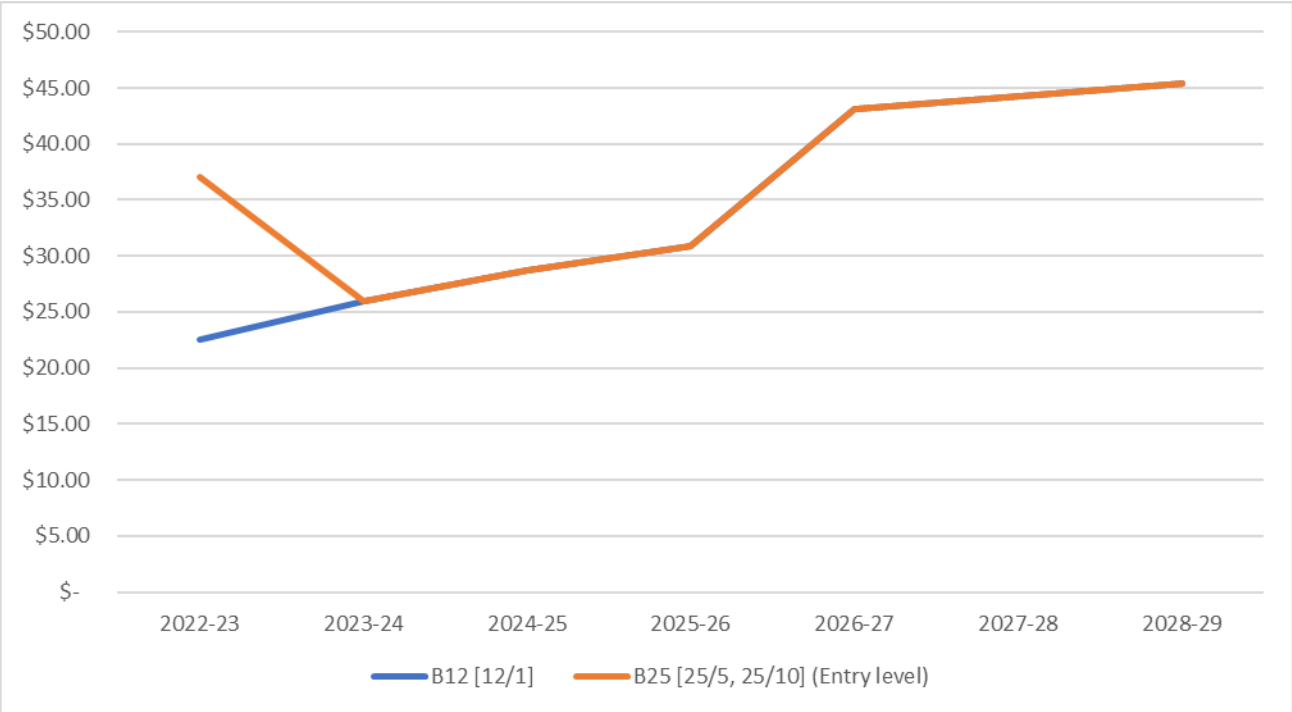


Figure 2 above shows the expected price paths for the total charges. It indicates the initial expected reduction in the price of the 25 Mbps service, followed by a steady increase in subsequent years. The 12 Mbps services rises in price from the beginning, and under the assumption of the same average utilisation between it and the 25 Mbps service as provided for by the combined charge formula, becomes uneconomic to offer compared to the 25 Mbps service by the end of 2023-24 (and hence the converging of the price path of this service to that of the 25 Mbps service as shown in Figure 2).

A further issue of note is the quite large average access cost jump (of around $8 per month) that occurs for the 12 Mbps tier in 2023-24. This allowed because of the higher CVC utilisation that is attributed to the service (and the lower utilisation attributed to the 25 Mbps tier) under the operation of combined charge formula on which its individual product price cap and the WAPC is based. This potentially raises issues for product affordability and the avoidance of price shocks. If the utilisation levels of the 12 Mbps and 25 Mbps were separately accounted for in the combined charge formula, this would moderate the initial price increase allowed, and keep the 12 Mbps as a separate service in the market.

Another feature of the combined charge formula for the inclusion of the bundled and overage charges in the price caps is that there is scope for quite a large price jump in the minimum charge (i.e. the bundled charge excluding overage) once the CVC charge is abolished at the end of 2025-26, even though the price caps will be met for the overall charge on an average basis. This could present provide a price shock concern for services supplied by access seekers that have low CVC utilisation. This is evident in Figure 3 below.

Figure 3: Minimum average access charges with utilisation growth and full advantage of individual price caps ($ nominal)



There is scope for the rise in minimum charges to be exacerbated if there is movement from lower speed to higher speed plans (such as form the 25 Mbps to 50 Mbps tier) that result in the average CVC utilisation falling. This results in higher minimum charges because there is more scope to raise these under the operation of the combined charge price cap. This is a downside in providing an overall charge cap to project from unexpected CVC growth, noting that the overall charge cap does not change with changed utilisation levels.

Annexure D: Preliminary assessment of the proposed pricing and product construct measures and the Module 2 price control arrangements

The ACCC has completed a preliminary assessment of the proposed pricing and product construct proposal, as well as the proposed price control and transparency arrangements for the subsequent regulatory period, against each of the five outcomes that were identified in the 2021 working groups. The ACCC would welcome stakeholder views on this assessment.

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

The proposed pricing model for the initial regulatory period should better allow NBN Co to increase its revenues to align more closely with the efficient costs of providing access[160], provided it will increase demand including for higher yielding access without prompting material rates of disconnections or downgrading of maximum speed selection.

The proposed move to a WAPC should better encourage NBN Co to grow demand and revenues over time, including by providing additional flexibility to rebalance prices subject to the constraints of individual product price controls that have been proposed.

NBN end-users are protected from price shocks and from prices that are higher than necessary in later years

NBN Co has proposed price controls that limit increases in the WAPC to CPI until it achieves revenues that recover its costs on an annual basis, currently projected for 2029-30. Individual pricing offers could increase in line with their nominated price controls (either CPI for entry level data access, or the higher of CPI and 5 percent for other forms of access), provided there were offsetting reductions in other offers that allowed the WAPC basket control to be met.

The ACCC notes that the proposed treatment of the access and overage charges as a combined charge for price control compliance purposes would allow the minimum access charge for the entry level data and most popular data access offers to rise as the CVC overage charge is reduced and then removed over the initial regulatory period. This could enable from July 2027 a material uplift in the minimum cost to serve consumers, particularly those with more basic data connectivity requirements (in terms of their maximum speed and data download needs). NBN Co intends to develop a new product offer to support those consumers with basic data needs (as it has recently proposed for voice only access), but this intention sits outside the proposed SAU variation.

There appears there could be further potential for price shocks in the later years of the SAU when the ICRA drawdown amounts become available to NBN Co. These drawdowns are projected to become available from 2029-30, with the bulk (around $11.5 billion of the $12.5 billion total as expressed in 2022-23 terms) available in the post-2032 period. From that time the WAPC can move in line with changes in the annual revenue allowance inclusive of the ICRA drawdown amount, rather than being limited to increases that are no higher than CPI. That said, although it appears likely that revenues above those currently projected in NBN Co's BBM could be required to fully draw down the ICRA, the potential changes required to regulated pricing to achieve this revenue uplift are less clear and could depend in large part on total demand for NBN Co services and its mix between higher yielding and lower yielding access products then on offer.

[160] These costs would be derived from the proposed building block model and subject to ACCC oversight and determination at regular intervals.

The regulatory framework provides incentives for NBN Co to operate efficiently and promote use of the NBN

The WAPC would appear an improvement over the previously proposed hybrid revenue cap form of regulatory control because it would allow NBN Co to retain the additional revenues it earns from bettering reasonable demand targets, or conversely carry additional downside risk should these demand targets go unmet.

That said, it is less clear that the arrangements proposed for the post-2032 period would have similar efficiency properties. Instead, those arrangements appear to incentivise NBN Co to prioritise recovery of historic losses including by way of material real price increases that could impede efficient use of the NBN. The proposed principles that limit the ACCC setting lower regulatory allowances than NBN Co nominates to achieve its financial targets could also weaken incentives to invest and operate efficiently.

The detailed working of the WAPC could also have important implications for NBN Co's incentives to operate efficiently. There is potential for a WAPC to incentivise inefficient product development to raise average revenue per user without price changes. Hence, the rules on product withdrawals and how quickly and at what prices replacement products are added to the WAPC can drive the overall degree of pricing discretion that is available.

NBN access seekers have greater certainty over the costs that they will face when using the NBN.

The proposed SAU variation provides a range of measures aimed towards providing additional price and cost certainty to retailers including

- The removal of all CVC variable (overage) charging by the end of 2025-26, thereby insulating access costs from uncertainty in growth in daily peak CVC utilisation rates.
- Specifying regulated maximum prices that are in line with list prices, and imposing restrictions on discounting that potentially threatens cost certainty on withdrawal
- Restricting changes in average access costs on both a weighted average basket and individual wholesale offer (speed tier) bases, with increases in the WAPC capped at CPI until around 2029-30.
- Additional transparency measures over immediate and longer-term pricing intentions in the form of pricing principles, tariff lists, pricing roadmap and a statement of pricing intent commitments as discussed further in the next section.

In addition, in the initial regulatory period, price control compliance would be based on the combined charge for those speed tiers still subject to CVC charging.[161] This should give additional cost certainty to retailers over the costs they will incur to access these speed tiers. Notably if demand for CVC is higher or lower than the rate NBN Co currently envisages of around 10 percent per annum then this would not impact the maximum permitted level of the combined AVC and CVC charge.

However, the average price path available to NBN Co is less clear from the time it is forecast to recover its annual BBM costs, currently projected to occur during 2029-30. While the WAPC establishes a direct link between prices and costs and ICRA drawdown amounts in this period via the X-factor that is incorporated into the CPI-X annual increase allowance, this X-factor can be either positive or negative and is not otherwise constrained.

[161] NBN Co, SAU variation, Module 2, Schedule 2F, clause. 2F.4.

There is a clear and robust quality of service framework so that retailers and end users know what to expect from NBN services

NBN Co has proposed incorporating benchmark service standards into the SAU, in addition to specifying the proposed price offers for the initial regulatory period and the rules by which maximum price increases would be determined over time, including to reflect improvements to the service standards.

It is however unclear that the proposed benchmark service standards and prices for the initial regulatory period have been developed in a coordinated manner, as these have largely resulted from commercial processes in which NBN Co could potentially exercise considerable market power.

Further, NBN Co is yet to reach a point where it is recovering its costs from access revenues when viewed on an annual basis. In addition, although retailers face similar access charges to acquire a given speed tier offer, the quality of access that they receive can differ materially on a service-by-service basis. Further retailers have previously raised concerns over NBN Co's adherence to certain service levels and other quality measures.[162]

In these circumstances reaching annual cost recovery objectives more quickly could conflict with efficiently improving service quality for impacted consumers and it might not be reasonable for revenues that NBN Co receives from permitted price increases to be applied only towards meeting NBN Co's annual cost recovery objectives more quickly. However, deferring cost recovery until all existing quality problems are addressed could lead to higher prices again for all consumers due to higher debt servicing costs.

[162] From earlier stakeholder engagement it appears that the concerns over existing service quality centre on consumers on FTTN lines, or in locations that are subject to network remediation or augmentation activities that result in outages that have not been notified sufficiently in advance.

Annexure E: Estimation of the mark up to currently projected revenues to fully draw down the proposed ICRA balance by end of 2039-40.

The ACCC has undertaken an assessment of the level of revenues that could be required for the proposed 1 July 2023 ICRA balance of $12.5 billion to be fully drawn down by the end of 2039-40.

Although no new losses can flow into the ICRA, the balance will accumulate in nominal terms in line with CPI growth until such time as NBN Co's revenues exceed the annual building block revenue requirement. While CPI growth would continue to influence the ICRA balance, as shown in the NBN Co's BBM from the time that ICRA draw down amounts become available this balance would be expected to steadily reduce.

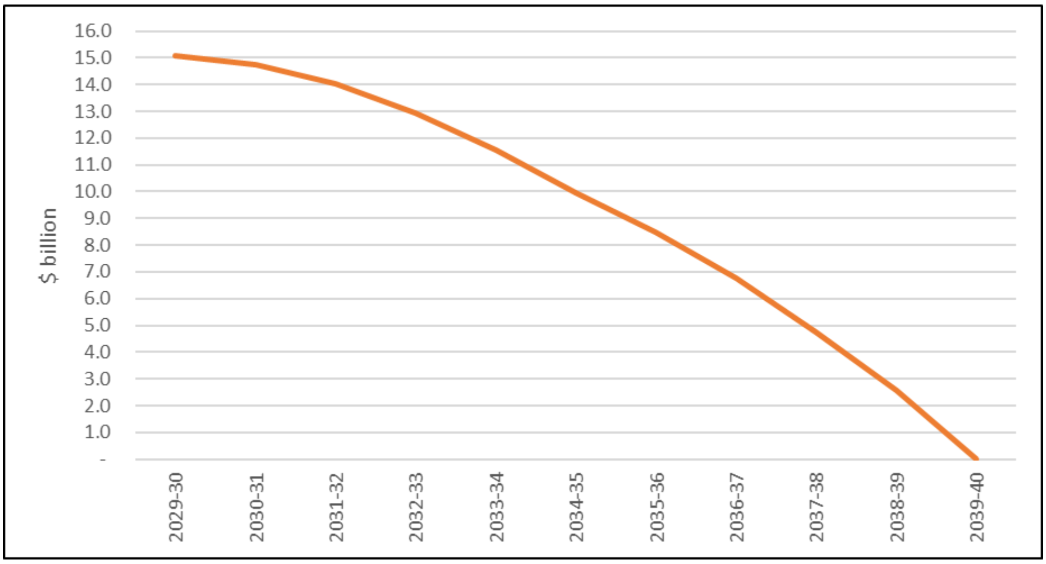
Based on NBN Co's current BBM and estimates for CPI to grow at 3.69 percent between 2023-24 and 2025-26 and then 2.5 percent thereafter, the nominal ICRA balance could be expected to peak at $15 billion in 2029-30. The ICRA balance would then steadily reduce when ICRA drawdowns become available. However, based on the projections included in the BBM, the ICRA would not be expected to be fully drawn down by 2039-40.

The ACCC currently estimates that should ICRA drawdown commence in 2029-30 a markup of around 2.5 percent would need to be applied to the BBM's nominal annual core revenue projections from that time, all other BBM projections being held constant, for this full draw down to occur by 2040.

The resulting annual ICRA balance path with this uplift in projected BBM revenue is shown in Figure 4 below.

This assessment is based upon the long-term projections that have been included in NBN Co's BBM and the forecasts we have adopted for growth in the CPI. The actual revenues that would likely be required to draw down the ICRA in full by the end of 2039-40 would depend upon the reasonableness on average of these projections and assumptions. For instance, should NBN Co's annual building block revenue requirement be higher or lower than currently projected in the BBM, or the growth in the CPI depart materially from the assumptions that the ACCC has applied, then the required revenues could be higher or lower than the ACCC has estimated.

Figure 4: ICRA balance from 2029-30 with 2.5 percent mark up to BBM revenue projections ($ nominal)



Annexure F: WACC values for First Regulatory Cycle

The variation specifies WACC values for the first regulatory cycle in Attachment J, and Part E, including a nominal WACC for each financial year that has been calculated in accordance with the requirement for other Regulatory Cycles.[163] The proposed WACC is based on individual estimates for all key parameters, such as risk-free rate and market risk premium. NBN Co's proposed WACC values for the first regulatory cycle are set out in **Error! Reference source not found.**, together with the parameter values used by NBN Co to estimate these proposed WACC values.

Table 1: WACC Values for First Regulatory Cycle

Parameter	Current estimate	Long-term estimate	Midpoint estimate
Risk-free rate	3.9%	5.0%	4.5%
Equity beta	0.66	0.66	0.66
Market risk premium	7.9%	6.5%	7.2%
Return on Equity (nominal, post-tax)	9.1%	9.3%	9.2%
Return on Debt (FY24, nominal, pre-tax; incl. allowance for debt raising costs)	5.0%	5.0%	5.0%
Return on Debt (FY25, nominal, pre-tax; incl. allowance for debt raising costs)	5.1%	5.1%	5.1%
Return on Debt (FY26, nominal, pre-tax; incl. allowance for debt raising costs)	5.3%	5.3%	5.3%
Gearing	37%	37%	37%
Nominal vanilla WACC (FY24)	7.6%	7.8%	7.7%
Nominal vanilla WACC (FY25)	7.6%	7.8%	7.7%
Nominal vanilla WACC (FY26)	7.7%	7.9%	7.8%
Inflation (3-year regulatory period)	3.7%	3.7%	3.7%
Gamma	0.585	0.585	0.585

Source: Attachment J to SAU variation; NBN Co, *NBN Co Special Access Undertaking*, pp. 249-250; 348-351; *NBN Special Access Undertaking Variation 2022 – Supporting submission, Part E: Calculation of NBN's Regulated Revenue Requirement, Table E5*, pp. 24-25. Frontier economics, *return on capital and inflation - Prepared for and in collaboration with NBN, table 9*, 7 December 2022.

[163] NBN Co, SAU variation, Module 2, Schedule 2G (pp. 249-250) and Module 4, Attachment J (pp. 348-349). See also *Supporting submission Part E: Calculation of NBN's Regulated Revenue Requirement, Table E5*, pp. 24-25.