



Submission on ACCC Inquiry into NBN access pricing New Street Research, Australia and New Zealand

New Street Research provides well-considered and well-regarded equity investment research on telecommunications companies, including both access seekers and access providers

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Our clients invest significant capital in both access seekers and access providers and regard our research on access pricing and regulation as well balanced and well considered.

Clean slate regulatory process should consider all stakeholder perspectives

As a research analyst specialising in telecommunications regulation and infrastructure investment we were keen to attend and contribute to the industry roundtable on 18 June. We registered to attend the round table. However, we were advised attendance would be limited to selected stakeholders to ensure parties feel comfortable to speak freely and to enable open and productive discussions.

There is extensive concern among institutional investors in Australia and overseas about the efficacy and reliability of the Australian telecommunications access regime. This concern has built up over a long period of time in which investment incentives have been significantly undermined by regulatory processes that are seen to have varied from case to case, between *ex ante* and *ex post* application, and from the objectives of access legislation.

We note the Minister's advice that ACCC Chair Rod Sims has indicated that he is open to taking clean slate approach to NBN pricing and is keenly focused on substantial and meaningful consultation with the industry as part of this process.

Meaningful consultation won't work if the ACCC takes a stage-managed approach to consultation, prefers the views of some stakeholders over others and avoids open and productive discussions with investors. However, we appreciate the recent opportunity we had to discuss the SAU consultation with the ACCC.

Efficient investment requires the willing support for the regulatory process of long term value investors. Sidelining their contribution to the regulatory process raises risk and uncertainty and undermines efficient investment.

Against that we well appreciate this issue shouldn't take an inordinate time to finalise and that it has already been through several inconclusive iterations.

There are four matters central to efficient NBN investment on which we wish to submit views:

- Incentive implications of a RAB/revenue constraint methodology.
- Asset valuation.
- Separation of competitive and non-competitive services.
- The need for consistency and reliability in access regulation.

We also provide some brief responses to questions raised in your discussion paper of 17 June.

Incentive implications of a RAB/revenue constraint methodology

Having spent over A\$70bn on the NBN so far (including the cost of equity funding), two key public policy and regulatory issues for NBN Co now are:

- How to best constrain the NBN's market power in core broadband services, to promote competition in those services without unduly constraining competition in rival infrastructure.
- Beyond those core services, where and how the NBN should best leverage its base of capital invested in infrastructure to pursue new services, without unduly constraining competition.

The first objective is best met by specific clear, consistent and reliable price controls on key NBN services rather than a revenue constraint. If the NBN faces the right price controls on key services then there is no additional value that may be offered by a binding revenue constraint, but plenty of risk that a revenue constraint may significantly distort service outcomes and undermine incentives to invest in and innovate in new uses including those that may be important in

contributing to the digital economy. With clear, consistent and reliable price controls potential rivals have a better opportunity to work out how they are affected and how they should best position themselves to meet market opportunities. And NBN has an opportunity to determine its role in providing infrastructure that supports the digital economy.

The second objective is best met by constraints on cross subsidy including the ability to leverage government-backed capital cost. NBN role in providing infrastructure that supports the digital economy shouldn't be enhanced by its favourable cost of capital or ability to cross-subsidise from regulated services.

Both objectives require a rigorous, reliable approach to regulation. Neither will be achieved by a revenue constraint which is impossible for a non-market agency to get right, which is subject to extensive lobbying and gaming and which is viewed with suspicion by arms-length investors.

Revenue is driven by prices and volumes in terms of connections and traffic, and in (what should be) a growth industry by service innovation including service development and new services. In a growth industry such as broadband and the emerging digital industry – that has network elements with monopoly characteristics – an effective regulatory framework should encourage value in use to be provided by service innovation and expansion rather than by exploiting price power. That model is best met by specific price controls on relevant services rather than a revenue constraint that will likely inhibit service innovation and expansion.

We note the UK regulator Ofcom has steered away from introduction of a revenue cap on BT's fibre business for similar reasons, not only in areas where there is competition but also in areas where competition is limited but may develop, in order not to dis-incentivise such investment and innovation.

In contrast the New Zealand Commerce Commission proposes a heavy handed approach in a detailed and prescriptive maximum allowed revenue (MAR) constraint methodology for Chorus, the main regulated fibre provider in New Zealand. Alongside price caps on a set of anchor products, its prescriptive RAB/MAR model won't achieve anything further in reducing ongoing fibre prices. Instead the main effect of that model is that Chorus will be discouraged from further service innovation and expansion of service offerings that risk breaching its revenue cap. As a result, rather than further investment to generate value the digital economy, it is now considering how it should best return capital to shareholders. In February 2021 Chorus advised investors that if the proposed RAB model came into effect it would not expand its fibre service beyond contracted commitments. It has built a network at a cost of over NZ\$7bn but is now told it must limit the value-in-use that may be generated by it lest it breach an arbitrary revenue cap.

In our experience of RAB/ revenue constraint models in the telecommunications industry in Australia, New Zealand, Singapore and the UK, it is impossible to get the revenue settings exactly right so that they don't undermine incentives to innovate in services. These models require extensive resources, are contentious, highly debated and don't serve a material regulatory purpose beyond those which

could be achieved by well-set price controls. It's all too easy to mis-set the model and create disincentives to invest.

While there is much focus and attention on setting a cost of capital that inhibits excess returns, there is little regard given to a cost of capital that creates appropriate investment incentives. Indeed the RAB model is not well suited to that outcome. To the extent that access seekers, which well-outnumber access providers, see a possibility for lower access prices or to constrain the access provider's revenue opportunities in the market, there is an inordinate incentive for them to work the regulatory process to achieve that outcome. The process itself is enormously disruptive to efficient and worthwhile incentives for an NBN Co to generate value in use (ie value that doesn't rely on its market power for a price advantage).

- **Innovation happens very slowly in a regulated utility model**

For most of the 100 years until the early 1990s, the telecommunications industry was run as a government-owned utility. Prices and services were signed off in an annual budgetary process and annual meetings between the Minister and Managing Director of the operating organisation. In a process not dissimilar to the NBN Corporate Plan process, prices remained high, ostensibly to cover the cost of network expansion. From a contemporary perspective a low rate of service development occurred over 100 years although rates of connection lifted after the war and again following the commissioning of Telecom in the 1970s.

That utility model changed in the early 1990s with the introduction of an effective access regime to support network competition and private capital to fund rivalry in infrastructure. The key to the effectiveness of that access regime was a simple and straightforward regulated access price, well-known and relied on by network operators. Those two policy changes delivered a c100-fold increase in value-in-use over little more than a decade. The bulk of that benefit flowed through to end users with, for various reasons, only a small proportion flowing through to infrastructure investors.

Our point is that a return to an overbearing utility-style regulation of the NBN post completion would be a mistake in terms of efficient outcomes that would benefit end users. In terms of value to end users, the industry remains a growth industry. Demand drivers continue to evolve even after three decades of industry catch-up, and supply innovations are as rapid now as at any time in the past 30 years with further rapid change predicated on an emerging digital economy which in turn requires extensive infrastructure investment.

In this industry context a contrived RAB/revenue constraint regulated access model would inhibit efficient investment to the extent that NBN would be constrained from pursuing new uses and face the uncertainty of what are inherently arbitrary revenue constraints. Rivals may test those service gaps to some extent, but not where they lack the economic scale and scope of NBN Co. Indeed, beyond the key objective of avoiding monopoly pricing of core services, the key efficiency objective is that NBN should be free to explore its best contribution to the digital economy.

Revenue constraints won't achieve that balance between constraining monopoly power without discouraging efficient investment. In contrast, a well-established

price control model would both constrain monopoly pricing and send clear investment signals that leave room for growth in service development and new services.

We note the Commission has brought into its telecommunications regulatory team experts with a background in other regulated industries. We're concerned that that may lead to application of a prescriptive utility-based regulatory model based on preconceptions that are not appropriate to the telecommunications sector in an emerging digital economy. There are a number of significant differences between the two industries; we think there is a big risk that a prescriptive RAB model would undermine the efficiency of investment in this industry

- **Well established price controls send a clearer investment signal than a RAB/revenue constraint model**

Current price controls on NBN in its SAU are ineffective as a constraint given the bulk of usage of the NBN now occurs through bundled prices set well within the price cap envelop. However, bundled prices indicate a good starting point for price controls in a new SAU because:

- They are well known by RSPs and allow a significant consumer surplus.
- They provide an established entry level service for users that prefer such a service.
- While margins are tight for RSPs, they allow for a positive return, or would do more clearly if the CVC component was removed.
- They cover NBN Co's cashflow needs in the foreseeable future.
- They provide a clear signal for rivals or potential rival networks in many geographic settings.
- They provide an incentive for NBN Co to encourage RSPs to deliver better value-in-use and therefore encourage take up of higher value services.
- They provide an incentive for NBN Co to drive value through service innovation, better packages and so on, rather than drive this through price increases.
- They provide a good starting point for a 5 year price path that provides an incentive for NBN Co to improve its productive efficiency.

Initial wholesale price caps for entry level and core services set at these levels may then guide a price path over an initial five year price control period based on expected productivity. That might see entry level pricing maintained in real terms while core prices might reduce as a function of uptake and network utilisation. That productivity trend would also be achieved if NBN Co was able to leverage its joint network infrastructure to develop and introduce new services as the digital economy emerges (subject to cross-subsidy constraints); an outcome that is likely to be constrained with a revenue constraint.

A regulatory model based on specific price controls is far more beneficial to end users, investors and the economy than one where outcomes are restricted to a

revenue constraint retro-fitted to a prescribed valuation, particularly one which is arbitrarily contrived after investment is committed.

- **CVC Capacity pricing would not be sustained in a competitive market**

Excessive CVC capacity pricing is only possible because the limit placed on NBN points of interconnection (Pols) establishes a market power that would not otherwise exist, or if it did would be subject to prospective competition in many areas. That constraint requires RSPs to buy aggregation capacity from NBN Co, at prices well above cost, even on aggregation routes where there may be alternatives, or where alternatives could be efficiently developed.

Limiting points of interconnection was a tactic used by incumbent operators in the 1960s and 1970s to make it harder for rival networks to interconnect efficiently. As such it was a means to establish market power where it might otherwise not have existed, or may have been competed away. That is the reason the 3rd leg of the LTIE test (any-to-any connectivity) was established; it remains a blot on the ACCC's reputation as a competition regulator that it not only agreed to this anti-competitive arrangement but willingly promoted it.

Putting a regulatory constraint on the number of Pols rather than encouraging rivalry not only fails the third leg of the LTIE test but also risks distorting rival investment that might otherwise support the digital economy given that such transmission capacity could be used jointly for both purposes.

To put it plainly, CVC capacity pricing would not be sustained in a competitive market where rival access suppliers have an incentive and capability to differentiate in service quality by investing in their own aggregation capacity, or buy it from alternative suppliers.

If competition is free to emerge in aggregation networks it is possible the market may establish a more efficient form of pricing for such transmission (where it is not absorbed in the access component) such as traffic pricing; that is pricing per GB, or per GB beyond a flagfall charge.

Asset valuation: get the prices right, valuation will follow

With given initial prices and a known (maximum) price path NBN's value is then a function of how well it delivers services and manages resources within those price constraints.

In contrast a revenue constraint methodology requires a measured initial base of invested capital including the contentious value of start-up losses. We don't have a meaningful measure of NBN's initial asset base given extensive over-investment. We are not going to get a workable valuation by arbitrarily knocking out of consideration those NBN expenditures that the regulator or RSPs seize on opportunistically and retrospectively. The time for that debate is long past.

Instead, post completion, we are now at a point where we have a better understanding of service demand and we know the prices that drive that demand and meet the various price objectives listed above. Knowing those things now would inform a better decision on what level of capital should be invested. In other words, value is a function of prices, service take up and so on, not the other way around. Get the prices right, valuation will follow.

It is wrong for a regulator to write down the value of NBN Co, or force a write down, in order to achieve a preferred price outcome. Instead, it is up to NBN Co to determine what capital should be invested to meet its objectives given the prices in the market or, in the absence of market prices, regulated prices. Get the prices right, valuation will follow.

It is wrong for a regulator to write down the value of NBN Co. If NBN Co was a market-based operator rather than a government-owned one, such a disregard by the regulator for capital invested in good faith would cause further distrust and uncertainty among infrastructure owners and investors about the regulatory model. Among global and Australian institutional investors looking at such infrastructure in Australia, there is a wide recognition of this risk and concern about this becoming an ongoing feature of such regulation in this sector.

Although it is wrong for a regulator to write down the value of NBN Co, a write down is necessary. It has to come from the NBN Co board recognising that the expected value is less than the value booked given the cashflow generated from an established price path and expected service take up. A board decision rather than a regulator driven process is the right approach in a market economy.

The worst outcome for competition and investment in this sector would be for that decision on NBN's regulated value to be influenced by the views of RSPs. We are shocked and dismayed that the ACCC has canvassed the views of RSPs on this matter. Of course they are going to argue down the value: they have no skin in the NBN game and have their own return on invested capital to think about. (But it would be interesting to reconcile these views with their views in 2010 on the investment case for the NBN.) It is hard to imagine anything that would disincentivise investment in regulated infrastructure more than the risk that the regulated asset base would be influenced post commitment by the views of access seekers. You might as well hand over the capital *ex ante*.

We say that having recently reviewed the UFB RAB/ revenue constraint methodology in New Zealand, which turned into an orchestrated pile-on by RSPs onto Chorus' invested capital base. And next to the NBN it was a model of efficiency that well exceeded initial targets for a small fraction of the cost. That circus is best avoided, and readily avoided by focussing on initial prices and the price path.

Having said that, it is well known by long term value investors that there is significant over-capitalisation in the NBN and that a write down is inevitable at some point. However, that should be driven by the NBN Board after considering the long term price path and the other factors that drive expected cashflow.

That revaluation would better reflect the capital that should have been invested in the NBN, at least given what we now know. And that revaluation could then guide the asset base to be used for any regulatory monitoring of returns and other measures that may guide price controls in the following regulatory period.

Separation of competitive and non-competitive services

In a model that relies on specific wholesale price constraints in services for which NBN Co has substantial market power, it is imperative for effective competition in other parts of the market that NBN Co be constrained from cross-subsidisation

from one to the other set of activities. Those constraints should extend to the ability of NBN Co to draw competitive advantage from taxpayer-backed cost of capital.

There is an economic benefit to the community in NBN Co being able to draw on infrastructure that is jointly able to serve competitive and regulated services. So it should be free to seek to do this within well-established, clear and consistent rules.

There is no economic benefit and substantial competition risk if the NBN model is expanded into markets where competitive infrastructure is well established and there is no established NBN infrastructure supporting its declared service.

We are certain that the ACCC is well aware of this, and has great expertise in assessing and managing cross-subsidy issues. But we are concerned that the ACCC has shown little inclination to manage this matter so far beyond a few broad statements. That lack of interest indicates a lack of willingness to regulate NBN Co on its merits.

If the Commission doesn't address this issue in the same timeframe as a revised SAU then we doubt there will be much faith by market operators in the price control arrangements that eventually apply to NBN Co. The two issues, effective price control and regulation of cross-subsidy, are inseparable parts of the same competition and market power issue.

The need for clarity, consistency and reliability in access regulation

The ACCC has taken a different approach to access regulation at each of its main fixed access determinations since it took on the role in 1997. Notably, it has reversed key decisions on asset values at successive FADs, as well as price structures and price levels. It has reversed commitments previously given, and undermined investment made in good faith.

Capital markets work well to guide efficient investment by considering factors that will influence returns including things like rollout, take up, service mix, costs and risks related to these. With so many agents in capital markets considering these issues, weighing them and managing them, capital markets are very good at achieving valuable outcomes. And, if prices are set to avoid monopoly pricing, the economy and consumers benefit from this process to the point where nations with effective capital markets outperform nations with weak capital markets.

However, what capital markets can't do well is second guess opportunistic regulation that changes the regulatory model post-commitment. That approach to regulation has overshadowed all of the other factors that investors may consider and manage to the point where inconsistent and unreliable regulation is the key risk faced by investors in regulated fixed telecommunications infrastructure. There is enormous value in a regulatory model that sets a clear, consistent and reliable price framework.

Responses to price control questions

Question 1: Regarding the three high level price principles, what additions, deletions or refinements would you recommend?

Efficient use and investment of NBN infrastructure isn't aided by an overly prescriptive regulatory approach to product structure and pricing arrangements. The New Zealand UFB fibre model has worked well with two key consumer products contracted for ten years, an entry level product benchmarked to copper prices (in 2011) and a higher level product.

If NBN can do better than that in a given regulatory period then it should be free to do so, with constraints on gaming such as a minimum duration for any new offers and, of course, that these be available to all RSPs.

2. What ideas do you have so that NBN Co and access seekers can have reasonable certainty over their wholesale average revenues per user and access costs respectively?

Set a long term price path in 5 year price control period and tell them to get on with running their business.

It is not a purpose of access regulation to provide certainty over average revenue and access costs per se. The purpose should be to avoid prices that avoid a mark-up driven by market power, and a known price path through a regulatory period. Any variation in average revenue should then be a market outcome realised through demonstrating more or less value in use across products. That is a market outcome, not a regulatory prescription.

Reasonable certainty would be provided in an Ofcom style CPI-x price-control framework with a five year review mechanism.

3. What suggestions do you have to preserve the breadth of retail products that are in market in the event that volumetric CVC charges were to be withdrawn or scaled back?

The purpose of regulating access pricing is to remove the potential for a monopoly pricing element, not to have a regulator determine the product set (beyond a minimum set).

Beyond two benchmark wholesale products at entry level and mass market, and aspirational market-driven products that offer further potential value-in-use, variations may arise as a result of a contrived rationing that wouldn't be sustained in most of the market in a notional competitive model.

Such rationed products may be inevitable in rural and regional parts of the market that face difficult long distance transmission investment cases. That reality shouldn't dictate outcomes in the rest of the market. As well, if there was an open access approach to Pops then it would likely be less rationing of transmission and access products in regional and rural markets as investment opportunities are explored by a growing number of rival regional infrastructure companies.

4. Should we consider regulatory controls to safeguard against discounts again becoming the principal means by which NBN access products and pricing are implemented? What form could these take?

No. The starting point for wholesale price controls should be set at an efficient level (meeting established price objectives) and the price path reflect expected productivity gains. That may be well indicated by current bundled price settings given the points noted above.

If NBN Co thinks discounts add some value beyond that, those discounts should be available to all RSPs, apply for a minimum period and not structured to favour RSPs of a particular type or size.

5. Do you support a cheaper broadband product for low income earners? What form should it take and how should it be funded?

It is not a purpose of access regulation to provide lower prices for low income earners; or favoured prices for any particular group. Access prices are not a means to influence the slicing of the pie (to use Rod Sim's CEDA metaphor); they are not a mechanism for redistribution.

To pursue this outcome through access price regulation undermines the efficiency and certainty objectives of access regulation and potentially distorts competition. It is inherently an arbitrary and opportunistic approach to regulation to favour one group over another.

There are other market and policy processes that better target such outcomes if they are considered worthwhile. Where low income earners needs are not met sufficiently by a commercial approach to this market segment, those particular needs should be assessed directly in budget context.

Don't we have enough complexity in access pricing without adding another layer?

Responses to revenue control questions

Question 1: Do you have any views on the ACCC's objectives for the SAU revenue control mechanism? Are there any other objectives that should be considered?

The first two revenue objectives discussed in the framing paper would be well met if NBN faces a reliable price control path in a 5 year price control period.

We don't see any additional merit in a binding revenue constraint but extensive risk that it dis-incentivises worthwhile product development and service expansion. It risks limiting NBN finding its efficient role in the digital economy and so risks undermining options for cost recovery and efficient investment.

If the right price path is established the treatment of accumulated losses is a matter for the NBN Co Board. The level of accumulated losses is a matter of fact, not a matter for regulation (*ex post*) and certainly not a matter for RSPs.

A good price control framework would leave NBN Co free to recover costs to the extent it is efficient and, provide incentive for further efficient investment.

2. What do you think would be an appropriate approach for incorporating ICRA in a BBM for the SAU?

In the price control approach we have outlined, the ICRA is no longer relevant. In a BBM RAB model any revaluation of the ICRA is inherently arbitrary and opportunistic. It is a circular outcome in that you can make it whatever you

like to reach a preferred price outcome. That is the concern of investors for instance in the case of the NZ Commerce Commission RAB model where investments were made on one basis in commitments made in 2011, and then revalued on a very different basis after 2019.

There is no regulatory decision that does more to undermine investor confidence than an opportunistic reduction in invested capital after investment is committed. (Except, more so, where that decision is driven by RSPs after commitment.) Investors in this sector have already been through several rounds of that revisiting of committed investment, costing them A\$10bns in invested capital. Let's move to a more fundamental approach of simply taking the market power out of NBN access prices rather than revising investment decisions after the event.

If, for some reason, the Commission prefers to go down the path of a BBM RAB model there are a couple of fundamental valuation issues that need more thought:

The high level of NBN's ICRA is not driven by payments to Telstra and Optus for subscriber migration, or decommissioning of copper and HFC connections. That was an efficient investment decision without which the NBN ICRA would be much higher, to the point where NBN would not have gone ahead without them.

The NBN ICRA is far higher than it should be due to:

- the outside-in build, which magnified the gap between capital outflow and cash inflow;
- the start-up nature of NBN Co which magnified risk of achieving Corporate Plan targets;
- the politicisation of the NBN at the time which among other things led to an initial Corporate Plan which lacked investment credibility and increased risk in the projected cashflow;
- the requirement to set entry-level prices to match copper access prices; and
- the extensive investment in non-commercial infrastructure mostly in rural and remote areas served by fixed wireless and satellite.

Any revaluation of the ICRA is primarily a matter for NBN Co, and, if that fails it may be a policy matter which should be taken by government which is also the investor in the NBN.

Such a RAB model should also incorporate the value of ISA lease payments as a capital item rather than operating cost as it is a committed payment that delivers long term benefit to NBN. We think the value of that commitment at current rates is in the order of A\$25-30bn. That represents a call on taxpayers as equity investors in the NBN but it is not clear if this capital commitment compounds in the ICRA given its treatment as an operating cost. (ie the annual operating cost component does, but does the total commitment?)

3. What would be an appropriate approach to ensure NBN Co has appropriate incentives to upgrade its network in a timely and efficient manner?

The most appropriate incentive is a commercial incentive indicated by value-in-use monetised in a consistent and reliable long term price path. Get the price path right, valuation and investment incentive will follow.

The most inappropriate approach is a building block model in which the amount invested can be opportunistically reset retrospectively by the regulator. Or worse, RSPs. (See our comments on the ICRA.)

5. What reporting or transparency requirements should be established to support arrangements under a revised SAU?

Efficient investment and competition objectives favour reliance on a price control model set in a five year regulatory period with initial prices benchmarked to current bundled prices.

The initial value of NBN's invested capital would then be a function of such prices and expected outcomes.

Reporting arrangements should include a comprehensive annual reporting of return on invested capital for the regulated business and the group. Trends in ROIC (return on invested capital) against benchmark costs of capital (in a predetermined range) may then be the first indication of the extent to which price controls may be adjusted and, if needed, extended to substantial new products in the following price control period.

Reconciling the long term ROIC trend between regulated and group activities would also provide some initial transparency or oversight of the extent of any cross-subsidy between regulated and competitive activities.