TELSTRA CORPORATION LIMITED

Submission in response to the Commission’s Discussion Paper

“FANOC Special Access Undertaking in relation to the Broadband Access Service - Discussion Paper”

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Overview

The G9 proposal is an expensive, dangerous scheme which:

- degrades services, making customers worse off than they are today;
- forecloses a faster, more innovative broadband future for Australia;
- imposes a tortured, dysfunctional ownership and management structure that will promote collusion ahead of efficiency; and
- perverts the access regime, depriving Telstra of its network so that FANOC can establish a monopoly managed by a cartel.

This assumes, of course, that G9 would actually do what they have offered in the SAU. Optus’ recent candid acknowledgment that the SAU is a strategy to force lower prices from Telstra shows that the SAU is not a genuine offer of access. The Commission should be no party to this ruse.

Seen in its entirety, the G9 proposal is so contrary to the purpose and intent of the access regime that the Commission should dismiss it out of hand.

A backward step for customers

G9’s public posturing about high speed broadband access, in fact, comes to very little in its SAU:

- G9 promises only best efforts 1.5 Mbps minimum speed service. Telstra already offers faster speeds, to more homes than G9 would pass;
- business customers lose access to high quality, high speed services (such as Frame Relay and DDS) on which they rely for mission critical applications, in return for a residential-centric “best efforts” service;
- basic telephone services go backwards as more parties supplying separate inputs struggle to co-ordinate provisioning and maintenance processes which are today seamlessly managed by Telstra;
- wholesale customers lose access to some current wholesale services without adequate substitutes;
• G9’s pricing methodology may result in **higher prices**, as it gives the discretion to add in and pass through a range of additional costs, to allocate depreciation and common costs almost at will, or even to over-recover its costs;

• G9 either **skates over or fails to grasp** the enormity of the technical challenge in migrating the diversity of services on today’s network to an FTTN. G9 is silent on how it will support the 20 – 25,000 public payphones in its FTTN footprint or its migration plan for Sydney’s co-ordinated traffic light network which vitally depends on Telstra’s copper network;

• many of the things G9 says it will do in its submission are simply **missing** from the SAU, such as any commitment to rollout a network past 4 million homes, or for that matter at all.

The enormity of the gamble G9 represents is without precedent, exposing customers to unquantified risks for which the SAU offers no management strategy. Other major service migrations – such as AMPS, CDMA and digital television – involve a transition phase in which the old network runs alongside the new network as a safety net, allowing a gradual ramp-up. However, the G9 proposal requires 4 million customers to go “cold turkey”: once the copper is cut in an exchange area, all current services are lost and customers will be entirely dependent on new systems and processes working together flawlessly, including for emergency calls. The risks of this approach are all the greater given that those who will be conducting the migration have limited credentials in mass local services: OptusVision, for example, struggled for years with its local telephony service on a customer base which numbered in the tens of thousands, rather than the millions.

**Squandering our digital future**

While competing economies have recognised that digital communications technology is now the biggest driver of national productivity and international competitiveness, G9 says Australia should stay out of the broadband fast lane; that a vanilla, low quality, moderate speed broadband service is good enough for Australian consumers.

ADSL2+ is **barely today’s technology**, let alone tomorrow’s. FANOC’s network will not be able to support triple play services which lie at the heart of the digital home. G9’s promise of a best efforts 1.5 Mbps minimum speed service is so modest that it would not even require an FTTN architecture.

By contrast, Telstra’s proposed VDSL2 network will deliver high quality broadband services at speeds more than a dozen times faster than FANOC’s service. But G9 plans to foreclose this
option by depriving Telstra of its copper sub-loops and getting a statutory immunity from competition.

Looking forward, Australia's digital future would be in the hands of an inherently unstable and risky alliance of operators and entrepreneurs of diverse size, structure, ambition and risk appetite. Should it become deadlocked over future network upgrades – which is highly likely given its governance structure – then Australia will end up stuck in a digital dead-end, with a legacy network and no prospect of progress in investment, innovation or services.

If, on the other hand, G9 could ever get its act together to upgrade from ADSL2+ to VDSL2, the cost to the industry and consumers would far exceed that of Telstra's VDSL2 network. That is because G9 would need to cut all 4 million Telstra copper lines a second time into shorter lengths, install thousands more nodes and deploy much more fibre. As a result, the labour and disruption costs would need to be borne twice and many of the initial investments simply wasted.

Telstra proposes to go straight to a VDSL2 deployment, using around 40% less nodes than G9, but delivering better services. As the network owner, Telstra can rationalise the location of pillars, copper runs and exchange buildings before overlaying the FTTN. Telstra can fit the copper network to FTTN, not the other way around as G9 must do.

Telstra can do it once and get it right the first time.

Tortured and dysfunctional

G9's proposal suggests an ownership structure that is untried anywhere in the world, compounded by a management structure that Heath Robinson would admire. To top it off, it has developed a “home brew” pricing methodology that contradicts the known views of the Commission on key issues.

Not only are there inherent risks with an unstable joint venture at the network level, but appointing a committee of wholesale customers to approve capital expenditure and decide on products has been shown to be unworkable in telecommunications and other infrastructure based industries: the Telecommunications Access Forum (TAF) failed to agree on a single product to recommend for declaration.

A more dysfunctional arrangement is hard to imagine. G9's structure is analogous to the TAF running OptusVision.

Should any agreement be reached at all, it is not likely to be in consumers' interests. Potentially, the BAS Manager structure will provide the opportunity for a cartel of retail competitors to enjoy unprecedented opportunity to price-fix and collude, due to their
These gaping inefficiencies can only mean that any services that are delivered will incur high costs, leading to high prices. G9 spares no expense. Its proposal necessarily incurs:

- very high costs, including physical changes to Telstra’s copper network;
- customer dislocation through service closures necessitated by G9’s inferior technical solution;
- dampened investment incentives to maintain or upgrade the copper network; and
- increased transaction costs as a result of the vertical disintegration it imposes.

As international and other industry experience shows, vertical separation generally increases costs, inevitably driving up access prices, and re-integration typically occurs to capture efficiency gains as soon as regulation permits.

Further, G9’s approach to pricing can offer no comfort. The prices it postulates are illusory, as it does not commit to its estimates, and are likely to rise steeply over time. Further, its pricing methodology directly contradicts many of the requirements to which the Commission has held Telstra: G9 uses actual costs and passes through network optimisation costs, both of which the Commission has refused to allow Telstra to do; and G9 has complete flexibility in allocating common costs between services while the Commission has painstakingly reviewed Telstra’s allocations.

Perverting the access regime

G9’s proposal goes far beyond what any competition policy rationale could ever justify and what the access regime legally authorises. Access policy should address what might be reasonably done to improve competition by allowing competitors to use available upstream capacity owned and operated by a vertically integrated firm.

Inherent in this concept is the protection of an access provider’s own use requirements, a principle widely recognised in competition law, and by the Australian Constitution.

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1 The G9 proposal also seems to have at its heart an arrangement between competitors to fix the wholesale price for a monopoly input into retail broadband and telephony products. This appears to contravene the prohibition on price fixing in section 45A and the Part XIB competition rule.
G9 proposes unprecedented statutory amendments to rub out this protection and usurp Telstra from its own network. But without them, “access” crosses a legal line to “acquisition”\(^2\) and “competition policy” becomes “industrial policy”. The Commission ceases being a competition regulator and becomes the supreme broadband planning authority, deciding capex, rollout and network design for the deadlocked FANOC/BAS Manager. Further, no access regime can displace the guarantee of “just terms” for acquisitions of property provided by the Australian Constitution.

**The SAU fails the statutory tests**

Even if G9 are taken at their word, the SAU manifestly fails the statutory criteria that an undertaking must be “reasonable” and promote the “long-term interests of end-users”.

- **It does not promote efficient competition.** Instead:
  - It seeks to anoint G9 as a “winner” and award it a protected monopoly, while permanently blocking the asset owner, Telstra, from ever building its own FTTN network;
  - It eliminates current retail and wholesale services on which large numbers of end-users rely, and whose withdrawal would impose substantial costs, including on many small and medium sized enterprises;
  - It imposes inefficiently high costs (including transaction costs of dealing with vertically separated layers), which will transpose to inefficient access prices using a flawed methodology that is contrary to the Commission’s established approach; and
  - As most of the industry will participate at some level in the G9 structure, it not only invites collusive behaviour but requires it for the model to work.

- **It does not encourage the efficient use of infrastructure.** Instead:
  - it disables a functioning network that is already capable of delivering more than G9 is prepared to promise;

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\(^2\) Telstra maintains that the existing ULLS and LSS declarations which are the subject of the current High Court proceedings already cross this line given their terms.
– it requires all customers to undergo a risky migration to a newly built network, with all of its potential teething problems, and foregoing the far safer migration path that Telstra could offer under its own upgrade; and

– it embeds an expensive, transaction-heavy supply chain, the costs of which have not been taken into account by G9 and many of which will not fall on the G9 but on Telstra and on end-users; and

– it allows and encourages the G9 to prices that are not only too high, but also inefficiently structured, as the G9’s economic consultants, NERA, have themselves admitted.

• It does not encourage efficient investment in infrastructure. **Instead:**

– it allows G9 to embark upon an investment in soon-to-be-outmoded technology, foregoing more efficient investment and upgrade paths;

– it puts in place a decision-making structure that resembles that which has resulted in gridlock at Dalrymple Bay and at Port Waratah, and which will be incapable of delivering timely investment in the genuine high speed network Australia needs;

– it undercuts Telstra’s incentives to modernise the copper network to support the next generation of broadband services;

– it irreversibly removes the option for Telstra to itself upgrade to a better copper-based network, and embark upon a more efficient upgrade path; and

– it requires access seekers to inefficiently duplicate facilities and systems not required in the current environment. For example, in the case of emergency services, access seekers using G9’s network would have to incur very substantial additional costs to interface their soft switches to Telstra as the emergency call service provider, or would be limited to providing end-users with a degraded quality of service, the inevitable consequences of which have been ignored by G9.

Finally, the Commission’s framework for reviewing the G9 SAU, as described in its discussion paper, is itself legally and procedurally flawed:

• Reviewing G9’s sub-loop unbundling request and its SAU on separate tracks is highly artificial. The G9’s SAU submission presents its proposal as a bound-up package. G9 concedes that sub-loop unbundling is unnecessary if its SAU is not accepted and its
FTTN does not go ahead. Yet, the Commission ignores the whole house of cards by choosing to look at each card separately and ignoring the need for a change in the law altogether;

- It is disingenuous to say that the Commission can disregard the G9's statements that it will not proceed unless the law is changed. The Commission cannot entertain an undertaking which could not be used or enforced under the law as it currently stands;

- The Commission cannot accept a SAU that is subject to so many substantive uncertainties as to whether G9 will build, what service it will provide, various discretions of FANOC or the BAS Manager, and future decisions of either the Commission or some independent reviewer. Access undertakings are binding and should not be accepted for ill-defined services on uncertain terms. G9's SAU is simply not capable of being reasonable;

- The Commission fails to follow its own approach, such as in the FOXTEL SAU, to identify the counterfactual against which the G9 proposal will be assessed; and

- The Commission does not appear to be holding G9 to the same assurances and commitments it sought from Telstra when reviewing Telstra's previous FTTN proposal.

The emperor has no clothes

In summary, the G9 proposal is a retrograde, inefficient and transparent scheme to capture a protected monopoly at the expense of Telstra's shareholders and Australian consumers. It is unprecedented in the world. It imposes unacceptable costs and unwarranted risks, in return delivering only uncertainty, discontinuity, inefficiency and instability. G9 advocates a cost-benefit test, but their proposal surely fails any such test.

The SAU is simply incapable of being “reasonable” under the law. The Commission has no power to approve it, and even if it did, must dismiss it as profoundly detrimental to competition and to consumer interests.
Introduction

This submission is set out as follows:

- **Part A** sets out why the G9 SAU is fundamentally misconceived. We discuss the principles of access, the purpose of SAUs, and why the G9 proposal is inconsistent with both. We note that it is too speculative and uncertain to be capable of being reasonable. We also discuss the absence of a proper counterfactual analysis in the Commission’s discussion paper.

- **Part B** examines the technology and services impact of the G9 proposal. We put the G9 proposal in some context by describing its unprecedented dimensions, complexity, and risks for consumers. We explain how the G9 proposal threatens basic telephony, undermines crucial business services, disables numerous retail and wholesale services, fails to address a range of special services and compromises customer service levels. We also consider how G9's proposal will provide a much more costly, complex and slow migration to more advanced technologies, such as VDSL2 which Telstra proposes to deploy.

- **Part C** examines the economic issues and explains why the conclusions of the NERA report are incorrect. First, we consider the additional costs and risks involved, many of which relate to layers of vertical separation G9 requires to be created, compounded by the complex governance structure proposed. Next, we consider how these added costs flow into higher access prices (that could exceed current prices) and explain why G9's pricing methodology is deeply flawed, and inconsistent with the Commission's previously applied views. Finally, we consider impacts on downstream competition when competitors collaborate as closely as G9 requires, including the risk of collusion and price-fixing.

- **Part D** summarises Telstra's case for rejection of the G9 SAU, addressing the legal criteria using the format in the Commission's suggested submission template.

The annexes contain further detailed material:

- Annex 1 provides a technical analysis, including detailing the threat to basic telephony, and explaining the differences between the FANOC network and the FTTN network that Telstra has proposed it would deploy;

- Annex 2 attaches a report by CRAI providing economic analysis of vertical integration vs. separation, and a detailed examination of the vertical separation and governance experience in the US, the UK and in other industries. It shows substantial flaws
inherent in the G9 approach, imposing substantial efficiency losses which mean that it cannot be consistent with the statutory criteria. In its Technical Appendix, this report provides formal economic analysis of the likely effects of G9’s proposal relative to a scenario where vertical disintegration is not imposed;

• Annex 3 sets out Telstra’s understanding of how the G9 pricing model works and our main concerns. That analysis shows that the G9’s proposed pricing terms are merely “smoke and mirrors”. They leave substantial room for steep price increases going forward, even for the very limited service G9 commits to provide (a service that falls far short of what is currently available). Moreover, they are manifestly inconsistent with the standards the Commission has applied to previous Telstra proposals;

• Annex 4 attaches a report by CRAI which analyses issues with the WACC. While the G9 claim that their proposal is superior because it involves a low cost of capital, this too proves to be “smoke and mirrors”. In effect, the G9 proposal contains no assurance that the network could or would be financed at the WACC; and even if it were, there is no assurance that the same WACC would apply were the network to be upgraded to provide more than the underwhelming service the G9 is willing to commit to;

• Annex 5 shows how the concerns that G9 and NERA express about vertical integration are already addressed in the current regulatory environment;

• Annex 6 lists the matters set out in G9’s submission which are not included or are inadequately resolved in the SAU; and

• Annex 7 provides our answers to the questions set out in the Commission’s discussion paper.
A The G9 SAU is fundamentally misconceived

A.1 The G9 proposal is “out of bounds”

1 G9’s proposal goes far beyond what the Commission can approve, or should even entertain, under Part XIC of the Trade Practices Act 1974 (TPA). Put simply, it is “out of bounds” for an access regime to be used to create and secure a new monopoly, disable operating networks, cut off customer services, deny an owner the use of its assets and promote collusion.

2 The Commission cannot have grasped the true nature of the G9 proposal because it has approached the SAU with conscious disregard for its related parts, such as its unprecedented sub-loop unbundling request and the need for the law to change before both the sub-loop unbundling or the SAU could take effect. When all parts are seen together in wide-angle, the real picture emerges of a profoundly anti-competitive scheme that runs directly contrary to Part XIC’s raison d’être. The Commission cannot, by blinkering itself to the wider realities of the proposal, escape giving proper consideration to its effects.

3 Even if this proposal could properly be entertained, this SAU is so riddled with uncertainty, dysfunction and inappropriate discretions in favour of FANOC that it cannot conceivably meet the basic legal requirements of an undertaking, much less be judged to be in the long term interests of end-users (LTIE).

4 The SAU commits to so little that it essentially amounts to the authorisation of a cartel with no offsetting benefits. The authorisation G9 seeks under Part XIC would, in any event, be incomplete because it fails to deal with the price fixing potential inherent to the SAU, which would breach other provisions of the TPA.

5 In the following sub-sections, we explain in more detail:

(a) why G9’s proposal falls beyond the reach of an access regime;

(b) why the SAU does not square with the intended purpose of SAUs;

(c) why the SAU is too speculative and uncertain to constitute a lawful SAU, or to be capable of being “reasonable”, and effectively asks the Commission for an advisory opinion; and

(d) why the Commission’s conceptual approach is flawed in failing to apply an appropriate counterfactual analysis.
A.2 The G9 proposal is not about access

6 At the heart of the G9 proposal is a massive extension of the existing compulsory unbundling of Telstra’s local loops, which Telstra maintains already amounts to an acquisition of property other than on just terms contrary to section 51(xxxi) of the Constitution. This matter is the subject of current proceedings before the High Court.

7 Further, G9 has said it will not access the Telstra sub-loops nor provide the access service under the SAU unless the provisions of the TPA\(^3\) that protect Telstra’s own reasonably anticipated use are nullified. This would be achieved by an amendment to the TPA which allows the Minister to waive these safeguards.

8 These statutory safeguards are more than inconvenient hurdles to G9 taking control of the Telstra network. They are the embodiment of how the TPA conceives access. For example:

(a) the Hilmer Report recognised that the legitimate interests of the infrastructure owner must be protected in the implementation of any access regime;\(^4\)

(b) this principle was also embodied in the Competition Principles Agreement\(^5\), which protected the legitimate business interests of the owner, and existing contractual obligations for the use of the facility; and

(c) the TPA’s essential facilities access regime also contains safeguards to protect the existing and legitimate future interests of owners of facilities; as noted in the explanatory memorandum.\(^6\)

9 This fundamental access principle – protecting the anticipated usage and legitimate interests of the owner/investor – was explicitly translated into the telecommunications-specific regime. Section 152AR(4)(b) carves out from the

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\(^3\) See sections 152AR(4) and 152CQ of the Trade Practices Act 1974 (Cth). Telstra maintains that the existing ULLS and LSS declarations which are the subject of the current High Court proceedings already cross this line given their terms.

\(^4\) In particular, it stated that “With privately owned facilities, in particular, it would be appropriate to ensure that an obligation to provide access does not unduly impede an owner’s right to use its own facility, including any planned expansion of utilisation or capacity.” Professor Frederick Hilmer et al, “Report by the Independent Committee of Inquiry into a National Competition Policy for Australia” (the Hilmer Report) (1993) 256.


\(^6\) Competition Policy Reform Bill 1995, Explanatory Memorandum (House of Representatives) 32: “This section specifies a number of constraints on the Commission in making a determination in relation to an access dispute. If a determination by the Commission breaches any of the constraints it is of no effect. The constraints basically relate to existing rights and the ownership of the facility used to provide the declared service.” (emphasis added).
standard access obligations anything that would usurp an access provider’s own use for its reasonably anticipated requirements. Section 152CQ(b) backs this up by ensuring that an access determination cannot be used to achieve the same end.

10 Without these boundaries, the telecommunications access regime would cross the line from “access” to “acquisition”. The access provider would lose all effective control and use of its own property. This is precisely the outcome sought by G9. The G9 proposal reaches so far beyond the constitutional and policy boundaries of a proper access regime which are the Commission’s statutory remit that the Commission should not be a party to it. G9’s transparent strategy is to bootstrap the Commission’s approval of the SAU into the legislative changes it seeks. The Commission should not allow the Part XIC processes to be misused in such a way, much less explicitly or implicitly lend its support to G9’s strategy.

11 G9, of course, is not proposing that the Part XIC safeguards would be suspended for its own access service under the SAU – even though its access service depends for its existence on the removal of safeguards for Telstra’s sub-loops. Under G9’s approach, the very same line would be treated differently depending on whether FANOC was buying or selling. That is, “heads we win, tails you lose”.

A.3 The G9 Proposal is not consistent with the purpose of SAUs

12 The G9 proposal perverts the purpose of the SAU regime, which was designed to allow network owners to commit to terms of supply of access services provided over their own infrastructure thus providing the certainty necessary for investment to proceed.6

13 However, G9 is seeking other types of certainty. G9 seeks:

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7 Telstra maintains that the existing ULLS and LSS declarations which are the subject of the current High Court proceedings already cross this line given their terms.

8 “The explanatory memorandum introducing the SAU provisions noted:
"The purpose of the proposed amendments is to provide certainty for potential investors in telecommunications infrastructure and services in relation to access to that infrastructure or service in the future by allowing the Commission to rule on whether the terms of a proposed undertaking are acceptable prior to the investment being made."
Similarly, in the second reading speech, the bill was described as:
“encouraging further investment in the telecommunications infrastructure required for broadband and other key communications services, by enabling potential investors to obtain up-front certainty, through undertakings to the Commission about access prices and terms and conditions that will apply to their future investments.”
(a) certainty that it can exclusively use all of Telstra’s sub-loop infrastructure, by eliminating Telstra’s ability to rely on the legislative safeguards in section 152AR(4) and section 152CQ(b)\(^9\)

(b) certainty in being able to count on revenue from Telstra’s wholesale traffic to help finance the G9 FTTN. As Annex 3 shows, the G9 proposal appears to be dependent upon cutting over all of Telstra’s wholesale and retail traffic, without which access prices would need to increase to unsustainably high levels in order to recover costs. G9 therefore must assume that it will secure Telstra’s traffic, either because it will be the monopoly fixed-line gatekeeper, or because it will seek the Commission’s intervention to require Telstra to buy G9 wholesale services under s152CP(2)(b). In either case, the anti-competitive nature of the proposal is evident; and

(c) certainty that should G9 lose any of Telstra’s traffic, prices to remaining users could be increased to make up for the loss. The proposed revenue cap, as discussed in Part C, allows FANOC to secure compensation for such consequential losses by increasing prices to its remaining captive users.

14 However, in its SAU, G9 offers no certainty in return.\(^10\) Instead, FANOC is reserved wide discretion by the SAU. FANOC may not build at all, since it requires legislative changes to secure immunity from competition before it will proceed, or if it does build it may not deploy a complete FTTN architecture, since it promises only 1.5 Mbps services.

15 In fact, the only certainty G9 offers is the certainty of the costs it will impose on others, including the cost of destroying investment incentives, damaging downstream competition through its network monopoly and management cartel, and the very high opportunity cost of foregoing any alternative network development. These outcomes could not be more inimical to the purpose of the SAU regime.

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\(^10\) This is addressed more fully below in Section C of this Submission.
A.4 The G9 SAU is too speculative and uncertain

The SAU is riven with cascading uncertainties. The most fundamental of these go to the heart of whether G9 will deliver anything at all even if the SAU were to be approved:

(a) there is no assurance that the investment would proceed since G9’s proposed capital-raising auction may or may not succeed – and G9 has not committed to fund any shortfall; and

(b) the relationship between the BAS Manager and FANOC is left to an agreement to be negotiated after the SAU is approved, and over which the Commission has no oversight. Given the multitude of interests involved on both sides, there must surely be a substantial prospect that no agreement can be reached.

Should either of these scenarios eventuate, end users will inherit the worst of all possible worlds. Telstra’s network will be handed over, and it will be blocked from building its own FTTN – but G9 may never get off the ground. \(^{11}\)

As a result, any consideration of the factual must take into account that a material risk that the G9 network deployment may not occur.

There are other gaping uncertainties that further demonstrate that the SAU is incapable of being reasonable:

(a) the service descriptions for the initial BAS Products are so skeletal that access seekers would have difficulty working out what they are buying and how to interconnect. For example, the blank cheque FANOC has written for itself in the service descriptions to impose “other limitations and requirements as may be specified by FANOC from time to time” means, in effect, that FANOC can fundamentally change the Initial BAS Products; \(^{12}\)

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\(^{11}\) Generally, this submission assumes, in favour of G9, that the investment would proceed if the SAU were to be accepted – since this best enables its reasonableness to be tested at the margins. However, that is not an assumption that can be properly made by the Commission, which must surely discount the factual for the possibility that build will not occur.

\(^{12}\) The SAU may well provide that the Basic Telephony Access Service cannot be withdrawn during the term of the SAU, but this reserve discretion would allow FANOC to fundamentally alter the service. It is also unclear how this apparently unilateral FANOC power of variation is properly made by the Commission, which must surely discount the factual for the possibility that build will not occur. In any event, the Commission also does not have a dispute resolution role under the SAU over disputes between the BAS Manager and FANOC in respect of non-price terms and service descriptions.
(b) non-price terms are left to a future process between the BAS Manager and FANOC over which the Commission has no direct oversight;

(c) the SAU also seeks to cover unknown future services;

(d) access prices are unknowable because the pricing formula reserves so much to the discretion of FANOC; and

(e) the SAU also requires the Commission to make ultimate decisions regarding business plans and expenditure based on ill-defined criteria that are unknown to Part XIC, such as those contained in the definition of “Commercially Prudent”.

19 The G9 SAU is so highly conditional, incomplete and speculative that it fails to meet the description of an undertaking for the purposes of section 152CBA(1) and (2): there is simply no defined “service” nor any “terms and conditions” which G9 undertakes to comply with. Any consideration of the SAU in its current form would effectively involve giving an advisory opinion. This is contrary both to the Commission’s expressed policy across its whole range of functions, and to good regulatory practice.\(^\text{13}\)

20 Moreover, it is as yet quite uncertain that G9 can even apply for a SAU. To give a SAU, FANOC\(^\text{14}\) must be a person who “is, or expects to be”, a carrier or carriage service provider supplying that service.\(^\text{15}\) Where the expectation by a person lodging a purported SAU is predicated on (among other things) legislative amendment, it cannot be said that such an expectation is reasonable.

21 The purpose of limiting the class of people who can lodge an SAU obviously has public interest implications. Once a SAU is validly given to the Commission, the Commission is obliged to take a number of administrative steps, including public

\(^\text{13}\) In the context of informal merger clearance, for example, the Commission encourages parties to approach it only once there is a “real likelihood” that a proposed acquisition may proceed. In enforcement areas, the line is even clearer: the Commission will not give guidance to persons about whether conduct which might be engaged in would breach the TPA. Similarly, in February 2006 the Commission made public statements about whether it would maintain injunction proceedings against Toll Holdings Limited to prevent it acquiring Patrick Corporation Limited, in circumstances where Toll’s lawyers had suggested that Toll may let its bid lapse. The Chairman of the Commission said: “If Toll no longer intends to proceed with its bid for Patrick, either now or in the future, we need to know so that the matter before the court is not simply hypothetical. Any court action over a completely hypothetical merger would just be a waste of court time and public money”.

\(^\text{14}\) It is not even clear whether the entity making the SAU application, FANOC Pty Limited, will ultimately be the owner or operator of the network or will even be the parent company of the owner and/or operator: see definition of FANOC Ownership Entity, clause 1.1, G9 SAU.

\(^\text{15}\) See Trade Practices Act 1974 (Cth) section 152CBA. The test of whether a person “expects to be” a carrier or carriage service provider supplying a proposed service must be an objective test which falls to be assessed on the basis of whether the asserted expectation is reasonable in the circumstances. Significantly, section 152CBA does not refer to a person who merely “claims it will be” a carrier or carriage service provider supplying a proposed service.
consultation and assessment of the application. The Commission should not be wasting public resources on a moot exercise. If, as is the case here, a SAU is put forward by someone not entitled to do so, the Commission should notify that party that it has not been validly lodged and refuse to further consider it. This is the approach that the Commission should have adopted in the present case, rather than requiring third parties to go to the expense of responding to an invalid undertaking.

22 That G9’s SAU is an empty shell is hardly surprising given G9’s obvious ulterior purpose. Optus has made it clear that they envisage a world where the SAU is accepted, but that Telstra builds rather than G9. In its July 2007 regulatory update, Optus described the implications of the SAU for Telstra. Tellingly, it did not mention having to adjust to a new industry structure or migrate its customers to new arrangements. It talked only of the impact on Telstra’s FTTN access pricing:

“Once [the] ACCC accepts G9 access pricing, [it] will be unlikely to allow higher pricing to Telstra.”

23 In other words, Optus is candidly acknowledging what we all suspect: G9 has no intention to build. The SAU is not a genuine offer of access. G9 is merely misusing the SAU process as a tool to lever cheaper access from Telstra, based on the illusory prices in its SAU.

A.5 Needs to compare with the counterfactual

24 Even assuming that the Commission can validly entertain the G9’s SAU, it has failed, in accordance with its own previous practice, to construct a counterfactual based on the world absent the proposed SAU, in order to assist in considering whether the SAU terms and conditions are reasonable.

25 The Commission has previously stated that the “with or without test” is appropriate in assessing SAUs:

“The Commission believes that it is appropriate to use the “future with and without” test expressed in the Sydney Airports case. The Commission notes that in the Seven Network Ltd case, the Tribunal was of the view that the “with

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and without" approach provides helpful guidance in applying the LTIE test. Similarly, the Commission considers it an appropriate analytical tool in having regard to a number of the reasonableness criteria set out in s.152AH(1) of the Act (which includes the LTIE test).”

Although the “with or without test” should not be used as a substitute for a comprehensive and objective consideration of whether the SAU is reasonable, Telstra considers that the counterfactual is particularly crucial in this case because the G9 proposal will foreclose it when the copper is cut. This is not a theoretical exercise. There will be no going back. The value of the counterfactual, therefore, defines the minimum quantum of the opportunity cost that G9’s proposal will necessarily incur.

Absent G9’s proposal, it is clear that Telstra would continue to operate its existing network, and retain the option to upgrade its network to some form of FTTN such as VDSL2, and ultimately to a FTTH network. On upgrade, Telstra would offer the smooth migration path that only the owner of a PSTN fixed network could offer, including wholesale service migration, POTS emulation and the use of the existing systems as a safety net in the event of migration difficulties.

While Telstra may continue to be vertically integrated, it is equally clear that substantial regulation will continue to apply, such as its long-standing standard access obligations (including non-discrimination provisions), and the operational separation obligations that were recently designed to address any Telstra-specific vertical issues (detailed in Annex 5).

Another important element of the counterfactual is the vertical integration efficiencies that Telstra currently realises. Although these are constrained by regulation, those which are currently realised and which would be lost under G9’s proposal form part of the opportunity cost.

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18 The G9 proposal acknowledges this in Part 7 of its submission in support of the SAU “...without the Undertaking the HFTP network may not be built by FANOC...or may be built by a third party, such as Telstra...” It is equally appropriate to treat the Telstra VDSL network as part of the counterfactual as it is to treat the G9 proposal as the factual. While Telstra has said that its VDSL network depends on appropriate regulatory certainty, G9 has said it won’t build its network without legislative change.

19 see discussion of the PSTN emulation service in Annex 2.
Pricing in the counterfactual must also be used to benchmark the methodology suggested by G9. Here the Commission should adopt assumptions consistent with other decisions – that is, that the prevailing prices absent the SAU will be likely to lie within a reasonable bound of the Commission’s known views, as applied through its arbitral powers.\(^\text{20}\)

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B Technical and Service Aspects of the G9 Proposal vs the Counterfactual

B.1 Introduction

This section compares the technical and service aspects of the G9 proposal with:

a) the existing Telstra network and the services it carries; and

b) the option for Telstra to deploy a FTTN based on VDSL2 technology, the deployment of which is foreclosed if FANOC deploys its proposed FTTN network.

In order for the SAU to be reasonable, it must meet a number of technical requirements which are consistent with the LTIE and good engineering practice. At a minimum, any new network should consider the following technical principles:

(a) future technology: no major network investment project should close off the option to use or develop future technologies for the sake of a short term deployment;

(b) practical working: a network should consist of solutions which are effective, practical, economic and capable of implementation for customer connection, assurance and repair;

(c) back of house impact: local direct connect networks require “industrial strength’, highly efficient databases, systems, processes and human resources to support provisioning, customer inquiries and billing;

(d) best practice: a network should use global standards and practices rather than being unique to Australia (to benefit from economies of scale and avoid negative cost lock-in implications); and

(e) low risk migration: transferring customers from existing to new networks needs to be as seamless, simple and low risk for customers as possible, especially when lifeline services are involved.

If these simple engineering principles are used to test the limited technical specifications provided in the SAU, then the SAU fails miserably.
B.2 Transaction dimension and migration history

The deployment of a full FTTN will be one of the largest civil works projects undertaken in Australia’s history, requiring significant resources in terms of capital and appropriately qualified and skilled personnel. Even if it is conservatively estimated that the FANOC footprint represents annual PSTN revenue of $5 billion, then the net present value of the project over 15 years at today’s risk free rate is $48 billion. By any measure, it is a large project, and the magnitude of the consequences must be borne in mind when considering the risks G9 would necessitate.

Network migration is a risky process which is fraught with difficulties. Most migrations are performed on an incremental basis. This allows the new network to be “tuned” in live conditions, back office systems to be ramped up incrementally, customer help inquiries to be kept at a manageable level and the existing network to be kept as a safety net in case migration problems arise.

Even with the benefit of this incremental approach, mass network migrations are complex and difficult exercises. For example, the migration from AMPS to GSM and CDMA occurred over several years. The current migration from CDMA to NextG is a 3 year process. Telstra’s roll out of hybrid fibre coaxial cable was also based on the addition of incremental customers. The OptusVision experience shows the unanticipated problems which can occur even with a modest ramp-up in customer numbers. The closedown of the One.Tel network illustrates the problems which can arise when an entire customer base has to be migrated in “one hit” to a new network.

The G9 submission shows no understanding of the enormity of the task and the size of the risks confronting FANOC, which is hardly surprising given the lack of expertise amongst G9 members in mass market local services. There will be no opportunity for an incremental migration because, once the copper is cut in a G9 node area, customers will irreversibly lose access to all of their existing services. The FANOC carriage services, the FANOC operations support systems, interconnection with access seekers and the individual access seekers’ back office and customer support systems will need, individually and collectively, to operate flawlessly, otherwise customers could lose service. Failure is more than a case of customer inconvenience – customer safety could be affected if lifeline services are not seamlessly transferred from the Telstra network to the FANOC Network and then made available with the same reliability.
B.3 FANOC’s network isn’t a Next Generation Network

What G9 is proposing is no Next Generation Network (NGN). The Broadband Access Service described in the SAU is no more than a vanilla, low quality, moderate speed DSL service. The proposed service barely requires the deployment of many nodes. It may not involve the deployment of much fibre; G9 has sought continued access to Telstra copper to local exchange buildings in its unbundling request. It probably will not require much additional investment in DSLAMs as G9 members will use those located at existing Telstra exchanges. Given the thin layer of investment which FANOC’s SAU suggests it is not surprising that the SAU contains no specific investment commitments.21

The defining features of an NGN are:

(a) high upstream and downstream speeds;

(b) capacity to support diverse services simultaneously (e.g. triple play of IP telephony, IPTV/VOD and High Speed Internet);

(c) capacity to provide differential quality of service (QoS);

(d) the ability to cater for increasing bandwidths for customers over time; and

(e) the ability to integrate new technology into the NGN over time allowing increases in network traffic handling efficiency and investment efficiency.

As Figure 1 shows, the proposed FANOC network fails these criteria for an NGN, and delivers no improvement over Telstra’s current ADSL broadband network or that provided by other carriers using ULL. The FANOC network falls a long way short of what could be delivered if Telstra has the option to deploy its VDSL2 network.

Figure 1: Comparison of FANOC network and the counterfactual.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>FANOC SAU</th>
<th>Current Telstra ADSL broadband network22</th>
<th>Telstra proposed VDSL2 network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target minimum downstream rate</td>
<td>1.5 Mbps</td>
<td>1.5 Mbps</td>
<td>25 Mbps</td>
</tr>
<tr>
<td>Maximum downstream rate</td>
<td>24 Mbps</td>
<td>24 Mbps</td>
<td>100 Mbps</td>
</tr>
</tbody>
</table>

21 See Annex 6.

22 Telstra’s copper network supports other data services, such as ATM and frame relay, which would not be available on the FANOC network: see discussion in B.4.
### Table

<table>
<thead>
<tr>
<th>Parameter</th>
<th>FANOC SAU</th>
<th>Current Telstra ADSL broadband network&lt;sup&gt;22&lt;/sup&gt;</th>
<th>Telstra proposed VDSL2 network</th>
</tr>
</thead>
<tbody>
<tr>
<td>on shorter line</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target minimum upstream rate</td>
<td>None</td>
<td>256 kbps</td>
<td>4 Mbps</td>
</tr>
<tr>
<td>Maximum upstream rate</td>
<td>1 Mbps</td>
<td>1 Mbps</td>
<td>50 Mbps</td>
</tr>
<tr>
<td>Multicast support for triple play</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>QoS</td>
<td>Not specified</td>
<td>Best effort</td>
<td>Layer-2 Ethernet Transport QoS&lt;sup&gt;23&lt;/sup&gt;</td>
</tr>
<tr>
<td>Ability to cater for increasing bandwidths for customers</td>
<td>No (limited by ADSL2+)</td>
<td>No (limited by ADSL2+)</td>
<td>Yes (VDSL2 technology roadmap&lt;sup&gt;24&lt;/sup&gt;)</td>
</tr>
<tr>
<td>Ability to integrate new technology</td>
<td>potentially difficult</td>
<td>easier (access seeker controls layer 3 and above)</td>
<td>Yes (access seeker controls layer 3 and above and QoS)</td>
</tr>
<tr>
<td>Homes passed</td>
<td>4 million</td>
<td>FANOC 4 million already served by Telstra</td>
<td>5 million</td>
</tr>
</tbody>
</table>

### B.4 Backward step for broadband and data

40 The proposed FANOC Broadband Access Service will support fewer services than are currently available, will introduce high risks in the supply of telephony, will expose access seekers to additional costs and will degrade current levels of customer service. Thus the SAU is not capable of being reasonable.

41 High quality broadband services currently available to end-users and wholesale customers on the Telstra network simply cannot be supported by the best effort FANOC Broadband Access Service, as Figure 2 shows:

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<sup>22</sup> Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic over various technologies, including Frame Relay, Asynchronous Transfer Mode (ATM), Ethernet and 802.1 networks, SONET, and IP-routed networks that may use any or all of these underlying technologies. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled jitter and latency (required by some real-time and interactive traffic), and improved loss characteristics. Also important is making sure that providing priority for one or more flows does not make other flows fail. QoS technologies provide the elemental building blocks that will be used for future business applications in campus, WAN and service provider networks. Because of the bursty nature of voice/video/data traffic, congestion-management tools address these questions. Tools include priority queuing (PQ), custom queuing (CQ), weighted fair queuing (WFQ), and class-based weighted fair queuing (CBWFQ).

<sup>24</sup> Open standard which is currently being developed for higher speeds beyond 50 Mbps.
Figure 2: Comparison of FANOC Services and Telstra Broadband Services

<table>
<thead>
<tr>
<th>Current Telstra product</th>
<th>FANOC SAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail: Residential best effort broadband access (BigPond) at various bitrates</td>
<td>✓</td>
</tr>
<tr>
<td>Retail: <strong>Business DSL service</strong> at committed service levels at symmetric bit rates</td>
<td>✗</td>
</tr>
<tr>
<td>Wholesale: Layer 2 DSL best effort service at various bitrates</td>
<td>✓</td>
</tr>
<tr>
<td>Wholesale: <strong>Business DSL service</strong> at committed service levels at symmetric bitrates</td>
<td>✗</td>
</tr>
</tbody>
</table>

The FANOC proposal is very residential centric because the FANOC Broadband Access Service lacks two essential requirements for business grade data services:

(a) **Upstream data rate**: Business applications typically require a higher upstream data rate than consumer applications (for example, transferring large files from branch offices to the head office). The ADSL2+ standard does not specify bit rates higher than 1 Mbps in the upstream direction; and

(b) **Committed Information Rate (CIR)**: The FANOC service is “best effort” only. Another way of describing “best effort” is that the provider will do nothing that will actually prevent the delivery of data packets but no more. It does not guarantee that a particular data rate (or CIR) will be achieved.

The Telstra local network currently supports copper-based data services to business customers which provide guaranteed speeds of up to 2 Mbps in each direction and business grade service level agreements (SLA). These services include DDS, Frame Relay, ATM and BDSL. Telstra’s Business DSL product also supports a guaranteed symmetric bit rate of 4 Mbps by combining together two copper pairs.

Business customers will either need to migrate to services designed for higher capacity requirements (at increased cost and significant migration cost) or lose these services without any adequate substitutes on the FANOC network (see Figure 3).
Figure 3: Comparison of Current Telstra Business Services and FANOC Services

<table>
<thead>
<tr>
<th>Current Telstra business service</th>
<th>Can the FANOC network support this service?</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDS/DDN</td>
<td>✗</td>
</tr>
<tr>
<td>CustomNet (centralised PABX</td>
<td>✗</td>
</tr>
<tr>
<td>service)</td>
<td></td>
</tr>
<tr>
<td>BDSL</td>
<td>✗</td>
</tr>
<tr>
<td>Frame Relay</td>
<td>✗</td>
</tr>
<tr>
<td>Asynchronous Transfer Mode</td>
<td>✗</td>
</tr>
</tbody>
</table>

45 The loss of critical business services without adequate substitutes is likely to have a significant impact on national economic activity and on end-users. On this basis alone, the SAU is incapable of being reasonable.

46 Telstra’s VDSL2 network will support both symmetric and asymmetric services and CIR Services. As Telstra upgrades its network, current business services will be migrated to substitute services, rather than “falling off” the network as in the case of the G9 proposal.

B.5 The threat to basic telephony

47 The FANOC SAU proposes a point to point service which provides analogue voice from the premises, conversion to IP at the node and delivery of the VoIP service to a local access point or transit access point (Basic Telephone Access Service). Access seekers are solely responsible for switching.

48 Beyond this, G9 says very little about how telephony would be provided on the FANOC FTTN. FANOC’s service description is simply not detailed enough for an access seeker to understand the technical interconnection requirements for and costs of providing PSTN-like calls to end-users. Among other things, the SAU fails to address:

- technical standards to be used for the VoIP service;
- the node vendor’s requirements for switch interfacing; and
- a mechanism by which voice traffic is presented separately from DSL traffic at the point of interconnection.
From the little we do know, the G9 model will fundamentally transform the current architecture of telephony interconnection and the nature of the telephony-related access services acquired by downstream competitors, particularly resellers. The industry will have to shift to a decentralised model in which individual access seekers will need to replicate switching platforms, interconnection with a larger number of points of interconnection and undertake its own emergency call handling. This introduces extra costs, while the benefit is unclear.

G9 appears to anticipate that access seekers will introduce soft switches. However, no other country has replaced large parts of its PSTN with softswitches and the technology has not been deployed on any scale for voice services (although BT commenced such a migration in November 2006 in a process which is expected to take 2 to 3 years). Some new entrants are beginning to use such switches but are carefully managing the expansion of their voice services off a small base. An incumbent in Telstra’s position would follow a more incremental migration pathway which kept the existing time division multiplex (TDM) switching architecture as a safety net.

The risks of the G9 telephony approach are higher still because there is little global experience with the application of VoIP technologies such as Session Initiation Protocol (SIP) to public telephony services supplied by multiple soft switches “sharing” a single access network. The required standards are immature, complicating the interconnection of multiple providers with different vendors to the FANOC network.

The reliability and costs of emergency services also will be impacted. Currently, access seekers re-supplying Telstra telephony services can leave the routing of 000 calls entirely to Telstra. Access seekers will need to invest in points of handover in each call collection area (CCA) within the FTTN footprint for emergency calls to ensure that the call is delivered to the emergency service centre located nearest to the calling party. If access seekers do not make this investment, emergency calls would be routed to emergency service centres which are unable to dispatch appropriate help.

The uncertainty and risks surrounding the fate of the basic telephone services of 4 million subscribers under the G9 proposal is enough in itself to render the SAU incapable of being reasonable, and to require its rejection by the Commission.

**B.6 The threat to switched and special services**

It is also important to look beyond the standard or “vanilla” telephony services to the special services which are likely to pose special problems in migrating to an FTTN. The SAU ignores these services and on these grounds alone should be rejected.
These services fall into two groups:

(a) services which are not switched but which are delivered using the copper pairs in the customer access network (special services like telemetry and control services, low speed data services, voice grade dedicated lines); and

(b) other switched services (like PSTN InDials, Spectrum network PABX, and Faxstream).

An example is the traffic system used by the Roads and Traffic Authority (RTA) in NSW. The Sydney Co-ordinated Adaptive Traffic System (SCATS) co-ordinates more than 3,400 traffic lights. Both traffic flow and volume are measured at each intersection by sensors embedded in the road. This information is delivered to regional centres using the Telstra voice grade dedicated line (VGDL) service. The regional computers analyse the information, calculate the best possible traffic signal timings, co-ordinate intersections and adjust the signal times accordingly. FANOC will need a technical solution for systems such as SCATS because it assumes cut over of all loops at any node. Its SAU offers none.

Payphones are another example of a service not addressed by FANOC. There are 20 - 25,000 payphones in the FANOC footprint. Payphones operate using signalling from the local exchange in order to both collect money at the payphone (whether in cash or from a card) and to send metering pulses so that the correct amount of money is collected for the type of call being made.

The impact of the implementation of the G9 proposal is that Telstra would be unable to deliver the payphone services which it is currently obliged to provide in the FANOC service area. Given that BT addressed the payphones issue as an early part of its consideration of deploying the 21CN next generation network, there is no reason why FANOC should not have considered this issue as part of its SAU if it was a serious proposal.

The failure to consider these services raises serious concerns about G9’s technical competency and the completeness of their proposal, and warrants rejection of the SAU as incapable of being reasonable.

B.7 The threat to wholesale services

As Figure 4 sets out, a raft of wholesale services currently offered by Telstra will vanish if the FANOC FTTN is implemented, with no adequate substitutes.
It is also difficult to assess what the FANOC services will cost access seekers compared to the present Telstra wholesale services. Currently, Telstra Wholesale provides an end-to-end DSL Layer 2 service, from a central point of interconnect (PoI or hub) in a capital city out to a DSL Modem at the end user’s premises, for a single price. Whilst the G9 prices appear superficially cheaper than those from Telstra Wholesale, they only cover the service from the end user to the Local Access Point (LAP). Although the network diagram in Schedule 1 of the SAU refers to a Transit Access Point (TAP), the SAU service descriptions (see “interfaces”) defines the B end as the LAP. The SAU does not contain any commitment to offer TAPs.

As a result, access seekers will either need to build their own network to each LAP and TAP or acquire a wholesale carriage service to each LAP and TAP. It is unlikely that this service would fall into the service description of a current declared transmission service. The charge for this backhaul service is not set out in the SAU and would fall outside of the Commission’s supervision. This is likely to mean additional costs or investment for access seekers, decreasing industry efficiency.

Access seekers will face a “Catch-22” on their choice of switching platforms. If an access seeker uses software-based switching, it will also need to install media gateways if it wishes to interconnect with Telstra or others or to acquire ancillary telephony services, such as operator and directory inquiry services. Conversely, if the access seeker uses TDM switches, it will be able to interface with Telstra’s network but need a media gateway to interface with the FANOC network. Whichever switching solution they adopt, access seekers face added investment costs in order to maintain interconnection.

see Annex 1 of this submission.
The deployment of the proposed FANOC network will also require access seekers to develop new IT systems and processes to purchase services from FANOC. Existing IT systems and processes which are designed to interface with the Telstra Wholesale systems will have to be replaced or retired, including billing interfaces, fault reporting and CRM. This cost imposed on wholesale customers needs to be taken into account in evaluating the reasonableness of the G9 submission. There is a direct cost added to the Access Seekers by this SAU and in the case of Telstra the need to write off of some IT systems and processes. This is also an unreasonable additional cost on Telstra's business.

The added costs that wholesale customers will face may force some providers from the market. According to the TIO website there are currently 927 internet service providers,\(^{26}\) many of whom are smaller providers. It is highly likely that some of these providers will be unable or unwilling to invest in the new systems required to interface with FANOC.

While the G9 proposal is trumpeted as promoting wholesale competition, it is likely to have the opposite effect and the SAU should be rejected as incapable of being reasonable.

**B.8 Complex operations and maintenance processes**

The G9 proposal substitutes Telstra's current integrated network management processes with a web of inter-relationships which are fraught with complexity, high transaction costs and risks of overlapping effort or disputed responsibility. This will reduce industry efficiency and expose customers to poor service.

Figure 5 shows a simplified approach to fault handling between the end user, access seekers, FANOC and Telstra. There are real risks of unnecessary and duplicative service work by FANOC and Telstra. For example, if the FANOC sub-loop test results are inconclusive, there need to be service calls by both Telstra and FANOC to identify whether the source of the fault lies in the access seeker’s network, the FANOC node, the FANOC cabling, the Telstra cabling to the end user premises or the wiring within the end user premises. If the fault turns out to be at the customer premises, there may need to be a third service call from the access seeker. The additional complexity

\(^{26}\) Note that this number does not include members under administration, receivership or liquidation and is therefore not the same as the number of official registered members. http://www.tio.com.au
created by the FANOC network in the middle of a currently integrated network will decrease industry efficiency and is unreasonable.

Figure 5: Interoperation Processes under G9 Model

The fault rectification model introduces delays as FANOC is performing a mail box function in one case and a testing function in the other. It is likely that the access seeker will demand service level agreement performance from FANOC. In turn, FANOC will expect to be able to meet these service levels by requiring that Telstra perform fault rectification on a rapid basis. However, the silo approach means that Telstra will have no visibility of the access seeker's requirements and would need to rely solely on FANOC in order to rectify a fault. The example below indicates the complexity and hand-offs potentially needed. This will inevitably result in poorer service to customers. This is harmful to end-users and is another reason why the SAU should be rejected as unreasonable.

An end-user, Paul, acquires voice from service provider A and data from service provider B. Paul discovers that his DSL service appears to be “slower than usual”. He first calls service provider A which can check that the service is not being “throttled” in accordance with a cap. If Paul is calling on a phone service from service provider A, then there is nothing catastrophic in the network. Service provider B considers that the fault is not in its network. However, before Service Provider B reports a fault to FANOC, a technician may need to be sent to the end...
user premises (a truck roll) by service provider B to ensure that the fault is not in the customer premises beyond the network boundary point. For example, the fault may be in Paul’s customer wiring or caused by a noisy device (such as a faulty cordless phone) connected to the line. If the fault is neither in Paul’s house nor in service provider B’s network, then service provider B will send a trouble ticket to FANOC. FANOC can establish that the node is operating properly and isolate the fault to downstream of the node. If FANOC’s tests find no fault in its network, FANOC then conducts tests on the line and sends the results to Telstra. Telstra will then analyse the results. If the results are inconclusive, then both FANOC and Telstra will coordinate a truck roll to the node. It is still possible that the fault is in Paul’s wiring, in which case each of Telstra and FANOC will need to recover their costs.

Telstra anticipates that this transaction-heavy process will threaten the ability of access seekers to deliver on the customer service guarantees (CSG). As the providers of the standard telephone service, the access seekers, and not FANOC, will be responsible for the CSG. Telstra Wholesale currently provides access seekers with back to back service guarantees with the CSG, but the SAU contains no such commitments from FANOC.

This lack of clarity of responsibilities has an impact on Telstra and other access seekers and other end-users, and on this basis the SAU is incapable of being reasonable and should be rejected.

B.9 FANOC proposal does not secure Australia’s broadband future

The implicit assumption underlying the FANOC proposal is that a best effort, 1.5 Mbps service is “good enough” for Australian consumers. ADSL2+ is today’s broadband technology which is already being overtaken by market and technology developments. Yet the SAU would lock Australia into an ADSL2+ service for 15 years with no commitment to upgrade and an incentive structure, that is likely to lead to deadlock over decisions about upgrading.

A recent study by a UK broadband industry group of residential broadband demands has found that: by 2008, the bandwidth demand for most bandwidth intensive homes (34% of users after the early adopters) could reach 18 Mbps downstream and 3 Mbps upstream.  

In Australia, the Internet Industry Association suggests that by 2010, 80% of the population should have access to 10 Mbps downstream service and 67% should have access to 24 Mbps or faster. Another study suggested that a family of five people would require between 58 and 113 Mbps.

At the heart of a digital home lies the triple play concept. This combines voice, video and data applications, including telephony, standard and high definition video (both scheduled and video on demand) and High Speed Internet (HSI). Alcatel has suggested that a likely mix between triple play services in a typical home today is as set out in Figure 6.

**Figure 6: Triple Play Bandwidth Requirements**

<table>
<thead>
<tr>
<th>Service Today</th>
<th>Bit rate</th>
<th>Service in 15 years</th>
<th>Bit rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDTV main channel for the home</td>
<td>8 Mbps</td>
<td>HDTV multi channel for the home</td>
<td>20 Mbps</td>
</tr>
<tr>
<td>HDTV main channel for PVR use</td>
<td>8 Mbps</td>
<td>HDTV multi channel for PVR use</td>
<td>20 Mbps</td>
</tr>
<tr>
<td>SDTV second set use</td>
<td>3 Mbps</td>
<td>HDTV second set use</td>
<td>8 Mbps</td>
</tr>
<tr>
<td>SDTV third set use</td>
<td>3 Mbps</td>
<td>HDTV third set use</td>
<td>8 Mbps</td>
</tr>
<tr>
<td>Gaming</td>
<td>0.256 Mbps</td>
<td>Advanced Gaming</td>
<td>2 Mbps</td>
</tr>
<tr>
<td>Voice with video (messaging)</td>
<td>0.768 Mbps</td>
<td>Video telephony</td>
<td>2 Mbps</td>
</tr>
<tr>
<td>High speed internet access (with ability to burst to line rate)</td>
<td>1.5 Mbps</td>
<td>High speed internet access (with ability to burst to line rate)</td>
<td>10 Mbps</td>
</tr>
<tr>
<td>Total</td>
<td>24.524 Mbps</td>
<td>Total</td>
<td>70 Mbps</td>
</tr>
</tbody>
</table>

The ADSL2+ network G9 proposes to deploy is ill-equipped to support these new consumer services, whereas these services would be at the heart of the Telstra VDSL2 network, for the following reasons:

(a) the Telstra VDSL2 network has a design minimum bit rate of 25 Mbps to all premises in the footprint compared to the 1.5 Mbps of the FANOC network;

(b) The FANOC network will use the “Point-to-Point Protocol” (PPP), which is commonly deployed today to provide residential “best effort” Internet access.

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29 Harrop W and Armitage, G., Quantifying the Broadband Access Bandwidth Demands of Typical Home Users, Australian Telecommunication Networks and Applications Conference (ATNAC), Australia, December 2006
services. PPP is not suited to providing triple play services due to limitations in support of quality of service (QoS) and Multicast capability;

(c) The Telstra VDSL2 network is based on Ethernet and is designed to support the required QoS and multicast capabilities to provide a range of innovative service bundles including, but not limited to triple play. The G9 proposal does not promote innovation in this way. There are then better technical proposals to than those contained in the FANOC network and on this point the SAU should not be accepted.

Hence, the SAU will not deliver any advances in broadband services and will close off options which will deliver, higher speed broadband services of much higher quality more quickly. On this basis, the SAU should be rejected as incapable of being reasonable.

**B.10 G9 has overlooked large implementation costs**

77 G9 has underestimated the tasks and investment required to “make ready” the Telstra copper network to support a FTTN, including removing:

(a) small pair gain systems (SPGS), which needs to be done in advance of the FTTN deployment;

(b) the significant number of “bridged taps” in the access network many of which will cause ADSL2+ service degradation but may not always need to be removed; and

(c) the large pair gain systems (LPGS) which needs to be done as part of the FTTN deployment.

**B.11 G9’s inefficient network design**

78 The FANOC network architecture will be substantially less efficient than an FTTN which Telstra could deploy. It also will be much more expensive and complex for FANOC to migrate to the VDSL2 network which Telstra is planning to offer from the outset.

79 First, the SAU appears to be based on an assumed network architecture where there is one node per pillar.30 This assumption is inefficient, resulting in thousands more nodes

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30 FANOC supporting submission in section 3.1
than an optimal design requires. This network architecture leads to a smaller number of services per node, which results in a higher overhead cost per line served.

If Telstra was upgrading its own network, Telstra would make the investment in the substantial reconfiguration of the copper network, including the deployment of some additional copper cables so that pillars areas are “clustered” to a single node. As we discuss in Part C, Telstra has no incentive to make this investment if all of its sub-loops have to be cut over to FANOC. As FANOC is not the network owner, it does not have the capacity, knowledge or possibly the capital to make that investment.

Second, G9’s network design is based on the assumption that the exchange building is the basic reference point for deployment. In a simplified exchange model, the exchange building is at the centre of the serving area (shown as a red square marked as “Exchange”) and ADSL2+ deployment is by way of the nodes shown as yellow squares in Figure 7. As the assumed operating distance for ADSL2+ is 1.5 kilometres from the exchange, this design assumes a roughly circular serving area radiating from the exchange.

**Figure 7 – Exchange centred model with circular exchange serving area**

Of course, in practice, there are no circular exchange serving areas. Consider three square serving areas which run next to each other (for example, suburbs following a highway constrained by parallel rivers and railway tracks. In this case, the circular model leads to the need for infill nodes, as shown in Figure 8.
This model also starts to show the inefficiency of using the existing exchange building as a fixed reference point for the FTTN network design. Nodes served from adjacent exchanges may be located in closer proximity to each other than 1.5 kilometres. As a result, nodes abutting each end up at exchange area boundaries end up serving fewer customers than a single node which is spaced the full distance from another node.

Finally, upgrading the FANOC network to VDSL2 involves much more than just replacing the current electronics and software. FANOC will, in effect, have to re-engineer the ADSL2+ network and build a new VDSL2 network in its place. As VDSL2 can only be effectively offered within an 800m radius of the node, FANOC will have to go back out into the field and recut the Telstra copper a second time. Many thousands of new nodes will have to be installed, much more fibre will need to be laid and some existing fibre will need to be relocated or re-installed.

The exchange centred model used by FANOC causes even more retro-fitting in a VDSL2 upgrade than its initial deployment of ADSL2+ because there are so many more nodes. Figure 9 depicts (in orange) additional nodes which FANOC would need to install to support VDSL2.
Telstra, as the network owner, is not necessarily tied to the location of existing exchanges and, instead, can rationalise its assets and infrastructure to best accommodate an VDSL2 deployment. As a result, if Telstra retained the option to upgrade, it could achieve a more efficient, consistent cell configuration in which the serving capacity of each node is better utilised, as depicted in Figure 10. In effect, Telstra can best fit the copper network to the FTTN, while FANOC has to do the reverse.

Figure 9 and Figure 10 are to the same scale and illustrate the impact which the different approaches taken by G9 and Telstra have on the level of investment required. The Telstra deployment of VDSL2 requires 52 nodes but the G9 approach requires 72 to
provide equivalent coverage. Further, the VDSL2 layout has also provided coverage into what were adjacent exchange serving areas.

Telstra estimates that the total cost of re-engineering the FANOC ADSL2+ network would be approximately an additional $1 billion. This cost would be more efficiently covered if Telstra’s VDSL2 FTTN were accepted. Thus the current SAU by FANOC has hidden additional costs that impact on the industry and as such the SAU should not be accepted.

Given the inherent inefficiencies in the G9 network design, the SAU should be rejected as incapable of being reasonable.

**B.12 Migration impacts on Telstra and end-users**

End-users face much more severe consequences migrating to VDSL2 through ADSL2+ than would be the case with direct migration to VDSL2 proposed by Telstra.

Migration from ADSL2+ to VDSL2 requires disconnection and reconnecting of each customer line to VDSL2 electronics. This will involve a service outage for telephony and broadband services, which is likely to be complex and time consuming. It may also be that some lines do not operate satisfactorily with the more complex VDSL2 equipment and some form of line maintenance or upgrade of copper lines may be required. By contrast, Telstra would be able to migrate customers from current services to VDSL2 by pre-provisioning at the nodes and pillars, which would allow a seamless cutover.

The G9 proposal also prevents Telstra making reasonable economic business decisions regarding its local network assets in the form of local exchange buildings and main copper pair cables for 15 years. As part of an efficient FTTN deployment, telecommunications operators around the world are planning the rationalisation of selected local exchange buildings and associated real estate, plus the recovery of the obsolete main copper pair cables to free up duct space for fibre deployment. The G9 proposal will force serious economic inefficiencies onto Telstra and current and future Australian customers by locking in the existing local network architecture.

Further, FTTN is a step on the way to Fibre to the Premises (FTTP), which will deliver bitrates in excess of 100 Mbps. Today’s operational decisions impact the movement along that network evolution pathway. The copper pair cable access network has a limited operational life and many lines were installed more than 20 years ago in an environment where there was no requirement to carry frequencies above 4 kHz. In order to maintain the expected performance for broadband services, the copper cable
network requires ongoing maintenance and upgrading. As they require replacement, Telstra must be able to make a balanced economic decision as to how to replace copper cables (with new copper pair cables or optical fibre cables).

94 Under the G9 proposal, there is an assumption that copper cable would be replaced with another copper cable. However, even now Telstra and other operators are deploying fibre to greenfield sites, such as new housing estates. Within a few years, the economic decision will be to replace the degraded copper cable with new fibre cable using the same FTTP technology as is used for greenfield sites. By assuming Telstra retains the copper cable network, the SAU potentially locks in the current copper cable costs to Telstra for 15 years.

95 An artificial regulatory constraint to retain copper distribution plant could set back the future very high speed and efficient FTTP by 10 years or more. When the “copper freeze” is lifted on the expiry of the SAU in 15 years, Australia’s access network would be in a much worse position than currently and potentially two generations behind advanced Telcos elsewhere in the world. By contrast, Telstra’s own FTTN plans involve an assumption that there will need to be additional fibre to the premises deployment as part of the FTTN rollout and the ongoing upkeep of the network.

96 As the G9 model will cut off the continuing evolution towards an FTTP deployment and the much higher broadband speeds that would deliver, the SAU should be rejected as incapable of being reasonable.
C The economics of the G9 proposal: pricing, efficiency and competition

C.1 Introduction

G9 and NERA make three key claims with respect to efficiency:

(a) the G9 approach will give rise to efficient costs, including in terms of the evolution of costs, investment and service quality over time;

(b) those efficient costs will translate into efficient upstream (access) prices; and

(c) the G9 approach will provide for fully efficient downstream competition, allowing for the benefits of efficient prices and upstream service provisions to be passed on to consumers.

The efficiency claims made by G9 and NERA are incorrect, both individually and in their collective effect and do not stack up against the counterfactual. Rather, the likely outcome of accepting the G9 SAU would be that:

(a) network costs would be higher than efficient costs, as a result of inefficiencies of vertical separation;

(b) under the G9’s proposed pricing approach, those additional costs would be translated into higher wholesale prices; and

(c) not only would these be passed through to end-users, but the risks of collusion inherent in the G9 structure means that the price rise to end-users would likely be even greater than the underlying unnecessary and inefficient increase in network costs.

C.2 Costs are not efficient

The G9 proposal will result in added costs because of high initial implementation costs, continuing inefficiencies associated with vertical separation and the G9’s uniquely convoluted governance model. These will result in higher operating costs than are necessary and undermine timely and efficient network investment.
C.2.1 High once-off costs

G9’s proposed structure, dividing the currently integrated local network between Telstra, FANOC and access seekers\(^{31}\), will involve very significant once-off costs, including:

(a) the costs of altering the physical structure of the network so as to provide for the connections, systems and processes essential for the G9 model to work. The US experience with structural separation is the only parallel in terms of transforming the underlying physical structure of a telecommunications network to effect what amounts to vertical disintegration. While estimates of the once-off costs associated with that separation vary, there is no doubt that those costs were extremely large (as were the ongoing inefficiencies that separation caused);

(b) the costs imposed because G9 would eliminate the network’s ability to provide a range of important services (see Part B). The costs of developing replacements for those services, and the disruption costs experienced by users and suppliers during the period in which these replacements were being developed and implemented, need to be brought to account; and

(c) the costs access seekers, including Telstra, face in establishing an additional layer for interconnection with FANOC’s FTTN and those which access seekers face in connecting with Telstra if they use software-based switching (see Part B).

The mere fact that many of these costs would fall on Telstra, and are not accounted for G9’s impressionistic estimate of costs, does not mean that they can be disregarded in considering the LTIE, which requires a social cost-benefit framework. G9 needs to provide the Commission with complete and credible cost information, which can be tested by interveners, before it can be satisfied that the G9 proposal is reasonable.

C.2.2 High ongoing costs

As well as these high, and otherwise avoided, once-off costs, there is no reason to believe ongoing costs under the G9 proposal would be efficient. While the

\(^{31}\) Sub-loops with Telstra; node to LAP/TAP backhaul and some OSS with FANOC; and switching/routing and OSS, back office systems and customer support functions with one, two or more individual access seekers.
arguments advanced by G9 and by NERA are somewhat imprecise, they appear to centre on three contentions:

(a) that the G9 proposal will require a lower cost of capital than that proposed by Telstra;

(b) that vertical separation will in and of itself provide stronger incentives for cost efficiency; and

(c) that vertical separation will sustain efficient investment decisions.

We deal with each of these contentions below.

C.2.3 Cost of capital

Irrelevance of claimed comparison to Telstra

For present purposes, the counterfactual comprises:

(a) the status quo, in which the rate of return for declared services is effectively determined by the Commission. The services the G9 commits to provide are already available in this counterfactual, and the cost of capital for the network inputs they require is subject to arbitration by the Commission; and

(b) A potential Telstra FTTN upgrade, which absent the G9 SAU, would remain possible (and hence is a central feature of the counterfactual). Were such an upgrade to proceed through an SAU, the Commission would have the powers to scrutinise the proposed cost of capital such an SAU contained. Absent such an SAU, the Commission would be able to exercise its declaration powers, and the regulatory requirements flowing from declaration, to review the cost of capital associated with that upgrade.

It is, therefore, misconceived to assume a particular cost of capital for a future Telstra FTTN, as G9 does. In the relevant counterfactual, the cost of capital would be subject to the Commission’s regulatory powers, which would require that the cost of capital to be consistent with terms and conditions that were reasonable.

Even putting that aside, the comparison the G9 and NERA seek to make is incorrect. Telstra’s FTTN proposal has always involved a price cap; the G9’s involves a revenue cap (though NERA inexplicably claim otherwise). It is well-
recognised that the systematic risk of a price cap exceeds that of a revenue cap\textsuperscript{32}, so that the WACC associated with a price cap should be higher than that under a revenue caps. On these grounds alone, the attempted comparison fails.

Further consideration of the proposed WACC is provided in Annex 4 which concludes that FANOC’s proposal is inadequate on detail and fails to demonstrate that the network will be funded in an efficient manner (or at all).

**What if the auction fails?**

G9’s approach to capital raising should be deeply troubling to the Commission. The G9 state that they will rely on a capital raising (“book build”) auction to fund the investments required; importantly, the rate of return that would emerge from that auction would be capped at an amount that appears to be benchmarked off the PSTN WACC.

However, neither G9 nor NERA say what would happen if no outside investor is prepared to bid at this capped WACC level. G9 does not commit to funding any shortfall. As a result, there is absolutely no assurance that the investment would proceed – yet G9 asks that the Commission commit to the SAU before it knows whether FANOC can execute it.

In considering the G9 SAU, the Commission would need to be satisfied that:

(a) the proposed WACC is indeed sufficient to fully fund the proposed deployment; and

(b) in the event of the capital raising auction failing, the G9 are committed to making good, and are capable of making good, any deficiency.

Telstra submits that the lack of any such commitments in the SAU renders it unacceptable.

C.2.3.1 **Ongoing costs of vertical separation**

111 Turning to G9’s contentions that vertical integration would itself create ongoing cost efficiencies, Telstra is unaware of any evidence that supports those contentions. Economic theory and practical experience with vertical separation strongly suggest that in circumstances relevant to this application the opposite is true.

**Theory tells us ....**

112 From a theoretical perspective, the degree of vertical integration is determined primarily by the relative transaction costs of managing vertically related processes through contracts (as occurs under vertical separation) as compared to the transaction costs of managing those related processes within an integrated firm. G9’s proposal imposes four new types of transaction costs because:

   (a) it separates the financial interest of the upstream asset owners (both FANOC and to a degree Telstra) from the downstream market. Related to this, the upstream asset owner would be rewarded on the basis of its costs, and only of its costs, rather than deriving a direct interest from profits in the downstream market;

   (b) it separates ownership of the sub-loops from ownership of the FTTN;

   (c) it separates the switching and routing infrastructure, to be supplied by access seekers, from the connectivity provided by FANOC; and

   (d) it separates the switching and routing infrastructure from the ancillary call support services provided by Telstra, such as emergency calls.

**Modelling tells us ....**

113 The economic modelling in the Attachment to Annex 2 shows that, all else being equal, separation of financial interests must weaken the incentives for cost efficiency, as well as for innovation. This is because, in a vertically integrated structure, the returns on cost reductions (or equivalently, quality improvements) in the upstream layer are magnified as they also yield benefits downstream. Under quite general conditions, this results in stronger incentives for cost reductions and quality improvement than would prevail in a vertically separated structure (i.e. FANOC’s wholesale only model).
Practice tells us ....

114 As the survey in Annex 2 shows, vertical separation in telecommunications, where it has been tried internationally, has:

(a) induced higher costs and slower product and service innovation than would otherwise have prevailed; and

(b) been replaced by vertical reintegration whenever such reintegration has been permitted. The fact that such reintegration has occurred in highly competitive markets (and with the approval of competition and industry regulators) makes it all the clearer that it reflects underlying efficiency considerations.

115 This experience confirms the view many regulators have come to - that structural separation in telecommunications imposes high and ongoing net costs because:

(a) the technologically dynamic nature of telecommunications means that it is difficult to draw clear and stable boundaries between functional layers, and in any event, efficient operation, maintenance and upgrading require the ability to make decisions and trade-offs on an integrated basis across layers. For example, the discussion in Part B shows the complexity inherent in the provisioning, fault and maintenance processes required by the G9 model; and

(b) rather than simplifying the regulatory task, vertical disintegration renders it more complex, costly and contentious, as it forces the regulator to take on the added function of policing whatever essentially arbitrary boundary lines have been drawn and multiplies the number of pricing and service quality issues the regulator must deal with. Thus, G9’s SAU requires the Commission to assume unprecedented powers substantially beyond its statutory brief to determine the level of capital investment the FANOC shareholders should make and to resolve budget, network upgrade and other issues in the likely event that G9’s proposed structure produces deadlock.

116 NERA draws on analogies from other industries in support of vertical disintegration. However, as Annex 2 also shows, the experience in other industries, such as rail, airports and electricity, of mandated vertical separation is consistently that it does not result in sustainable gains in operating efficiency
and especially, creates formidable obstacles to significant and otherwise efficient new investments. These outcomes are particularly striking as the operating and investment environments in the industries surveyed are significantly simpler and more stable than those in telecommunications. These characteristics should make vertical separation less costly than it would be in telecommunications, but even in these industries vertical separation has been a costly and difficult exercise.

G9 also seeks to draw support for its model from the NGBN project in Singapore. However, while the new entrant will be required to be vertically disaggregated, SingTel Optus’ parent will continue to be vertically integrated, will not be required to handover its copper network to the new entrant and will be able to deploy its own vertically integrated FTTN.

C.2.3.2 The high costs of G9’s governance model

The difficulties that G9’s proposal would give rise to are compounded by the uniquely complex nature of its proposed governance arrangements as shown in Figure 11. Telstra is not aware of any governance model internationally that involves as many layers, with as many overlapping and potentially conflicting decision-making roles.

Figure 11: G9 Governance arrangements
Experience internationally and in Australia suggests that complex governance arrangements perform extremely poorly in managing large-scale network assets, both in terms of operational efficiency and of timely and efficient new investment. Vertical separation, combined with complex governance arrangements:\footnote{See Annex 2 for modelling and review of industry experience.}

(a) creates misalignments between costs and returns;

(b) aggravates information asymmetries, weakening the effectiveness of disciplines over costs and more generally, over management decision-making;

(c) creates the scope for cost-shifting, encouraging forms of gaming that increase costs and impede timely decision-making; and

(d) vests rights of veto in parties that have incentives to use these veto rights strategically, that is to advantage themselves rather than to minimise costs (or maximise the net value of output) overall.

Management by customer committee

Australia’s own experience with the Telecommunications Access Forum (TAF) confirms the ineffectiveness of downstream customer groups as vehicles for making decisions regarding wholesale investments. The TAF was formed under the 1997 telecommunications regime, and tasked with recommending wholesale services for declaration. Over several years, the TAF failed to agree or recommend a single service for declaration, a fact that the Productivity Commission\footnote{Productivity Commission, “Telecommunications Competition Regulation, Final Report’ (December 2001).} attributed to the difficulty of achieving the required unanimity among participants, noting their lack of common interest. The TAF was abolished in 2002.

According to the Telecommunications Industry Ombudsman (TIO) website there are currently 1709 TIO members\footnote{This number does not include members under administration, receivership or liquidation, therefore the number differs from official registered members.}. Even if the Commission were to consider the number of Licensed Carriers, which is 236\footnote{Telecommunications Act 1997 Register of Licensed Carriers as at 1 July 2007}, or the number of ISPs with over 10,000 subscribers, which is 32\footnote{Australian Bureau of Statistics, Internet Activity, Australia, March 2007}, this is still a significant number of potential
members. Telstra cannot envisage how a BAS Manager with this many members could ever hope to function as an efficient and effective decision making body.

NERA seems to assume that the BAS Manager would take economically efficient decisions. However, it provides no reasons for why this would be so. From an analytical perspective, there are two possibilities (neither of which are explored by G9 or NERA) as to how the BAS Manager could work:

(a) participants could be allowed to do “side deals”, in which parties “bribe” or are “bribed” through income transfers into agreeing to outcomes. In this case, the BAS Manager will operate as a cartel, with all the inefficiencies that entails – inefficiencies discussed below in the context of the effect of the SAU on competition; or alternatively,

(b) if “side deals” are prohibited, there is no reason whatsoever for expecting the committee structure to lead to efficient decisions. Either decisions would not be reached at all; or they would be taken in the interest of the pivotal voter, who is unlikely to have interests that are aligned with the LTIE.

The fact that the SAU would over-weight the representation on the BAS Manager of smaller players makes the likelihood of blockaded and inefficient decision-making all the greater, as it weakens the participants with the greatest and most direct interest in seeing timely and efficient decisions taken.

C.2.3.3 Inefficient investment model

These concerns are accentuated by the risks the G9 model, with its extraordinary complexity and misaligned incentives, poses to timely and efficient new investment. These risks, discussed below, mean that the Commission cannot be satisfied that the SAU would promote efficient investment; rather, in Telstra’s submission, it is more likely to do the opposite.

Upgrade to VDSL2 required

As the FANOC network promises less than currently available on Telstra’s existing network and would be available on Telstra’s VDSL2 network, genuine gains in service availability and quality could only occur if there was to be substantial further investment to upgrade the FANOC network to VDSL2.

Such an upgrade would require significant coordinated outlays by Telstra, the owners of FANOC and by access seekers. The ability of each of these parties to
recoup its costs would depend not only on its own performance, but also on that of each of the others – indeed, the essence of the vertical separation G9 proposes is to separate responsibility for outlays from control over the returns from those outlays. In economic terms, there are pervasive externalities associated with investment decisions in the G9 model – externalities that are internalised to a considerable extent in the status quo. As shown in Annex 2, these externalities are likely to distort the timing and extent of upgrading investment. At the same time, the G9 model, with its complex and overlapping layers of management, aggravates the impact of these interdependencies on efficient decision-making by creating scope for gaming and for the strategic use of voting and veto rights.

127 There is no reason to believe the outcomes will be any better than those observed in other instances where access seekers have a role in infrastructure investment decisions. There is a striking contrast between the inefficiency of investment decisions and the resulting gridlock in the structurally separated systems at Port Waratah and Dalrymple Bay and the efficiency with which capacity expansion has occurred in the vertically integrated systems in the Pilbara. Indeed, given the technological and market uncertainties in telecommunications, the difficulties are likely to be even greater than those persistently observed in the vertically separated ports, airports, rail and electricity transmission sectors (see Annex 2).

128 This Australian experience with the type of structure proposed by G9 cannot be disregarded in considering the impact accepting the SAU would have on the long-term interest of end-users.

Commission required to work on business plans

129 G9 and NERA suggest that any difficulties that arise from the structures and processes set up by the G9 model could be dealt with by an independent expert decision-maker or by the Commission.

130 It is not part of the capabilities or responsibilities of the Commission to take complex operating and investment decisions on behalf of the industry; moreover, the Commission would not be financially accountable for those decisions, were it to take them. 38 It is relevant in considering the burden that

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38 The only case with which we are familiar that involves a regulator in effectively taking major investment decisions is the “regulatory test” under the electricity transmission arrangement. This is a significantly more “hands off” role, in an
would be placed on the Commission that the definition of “Budget” in the SAU is so broad that when the Commission is called in to resolve deadlocks, it will be required to rule on matters that include the commercial prudence of FANOC’s business plan.

131 It is difficult to see how the Commission could be satisfied it would be able to take these decisions on an efficient basis; but if it is not so satisfied, then it cannot be satisfied the SAU is reasonable.

C.2.4 Why SAU is unreasonable on costs

132 In summary, the G9 SAU is unreasonable and should be rejected because it leads to inefficient investment and use of facilities for the following reasons:

(a) it vests in FANOC what amounts to an exclusive right to upgrade the copper network to high speed services, in a context where the ability of FANOC to fund even the initial investment (required to provide services that are in any event already being provided) is uncertain and where further investment would encounter formidable obstacles;

(b) it imposes significant additional initial and ongoing costs as a result of vertical disaggregation;

(c) it imposes further costs through the complex, deadlock prone governance structure proposed by G9; and

(d) is likely to result in delayed or inefficient investment decisions, throwing back onto the Commission responsibility for making decisions about efficient investment which it, as any regulator, is ill-equipped to make.

133 These outcomes need to be contrasted to the status quo, in which:

(a) Telstra has the option to upgrade the network to FTTN and, regulatory distortions aside, it faces substantially the correct incentives to do so (as it would materially bear the costs and revenues that decision entails); and
access seekers are able to use declared services, some of which would not be supported by the FANOC network, at access prices determined by the Commission, including in terms of cost of capital.

C.3 The pricing methodology

134 The G9 and NERA claim that the pricing model set out in the SAU will promote efficient pricing by:

(a) providing FANOC with a strong incentive to price in a manner that ensures the HFTP is efficiently used;

(b) promoting efficient Ramsey pricing through the use of a global price cap; and

(c) ensuring non-discrimination on the basis of infrastructure ownership.

135 These claims are incorrect. Rather, the pricing methodology provided for in the SAU would allow the inefficiencies discussed above to flow through into access prices. As a result, the level of prices will be inefficient. Additionally, that methodology provides no assurances that the structure of prices will be efficient and non-discriminatory. Moreover, the proposed pricing methodology vests inappropriately broad discretion in FANOC and deprives users of reasonable certainty over the level of prices. Given the uncertainty that methodology involves, the Commission cannot be satisfied that the proposed price terms and conditions are reasonable.

C.3.1 Pricing does not ensure efficient use of the network

Arbitrary and inefficient

136 The SAU sets access prices for the First Period that are arbitrary and hence inconsistent with the LTIE:

(a) the G9 claims that prices in the First Period are set on the basis of estimated costs, demand and a remaining capital asset value (CAV) of $1 billion at the end of the Undertaking period. However, the G9 do not commit to any of these parameters in the pricing model set out in the SAU;

(b) any deviations from forecasts in terms of costs or demand in the First Period would simply be passed onto access seekers in the Second and
Further Periods and there is nothing in the SAU that would require FANOC to retain a CAV of $1 billion at the end of the 15 year period; and

(c) therefore, the access charges set out in the SAU for the First Period are nothing more than arbitrary prices, which bear no relationship to the costs of providing services in that period.

Consequently, it is incorrect for the G9 or NERA to claim that the prices proposed in the First Period of the SAU could be efficient in any sense.

137 If the access price in the First Period is arbitrary, the access price in the Second and Further Periods is highly uncertain because there are so many moving parts controlled by FANOC. FANOC can set the Target Revenue at any level it wishes by altering the level of depreciation recovered in each period. The only constraint imposed is that the level of depreciation in the Second and Third Periods must be such that the Opening CAV at the beginning of the third and fourth Access Periods is not less than 2/3 and 1/3 of the Opening CAV at the beginning of the Second Access Period.

138 If the FANOC meets G9’s very optimistic cost and demand forecasts then this requirement will limit the level of prices in the Second and Third Access Periods. However, if the level of demand that eventuates in the First Period requires FANOC to alter its demand forecasts in the Second and Further Periods to more realistic levels (as the SAU permits it to do), then regardless of the depreciation constraint noted above, the access prices under the G9 pricing model could increase substantially in the Second and Further Periods. This exposes the many users who would be captive to the G9 network to substantial, unjustified and unacceptable risk.

A 369% price increase?

139 For example, if the level of demand for the Basic Telephone Access Service was set at 50% rather than 100% as assumed in the G9 model and demand for broadband was to plateau at 65% (rather than the assumed 81%), then the FANOC component charge could be extremely high after the First Period. Setting the level of depreciation well within the constraints set out in the SAU, the FANOC component charge for the bundle of Basic Telephone Access Service and

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39 For example, as a result of not cutting over all of Telstra’s services and of Telstra shifting some services to alternative networks.
broadband could increase by 263% by the end of the Second Period and by 369% by the end of the Third Period compared with the First Period charges set out in the SAU. As illustrated in Figure 12, the 1.5Mbps charge would increase from $14.23 per month at the beginning of Period 1 to $51.72 by the end of Second Period, and $66.72 by the end of the Third Period.

**Figure 12: FANOC Component Charge (Standard Broadband - 1.5Mbps)**

C.3.2 **Revenue cap rather than a price cap**

NERA claims that the proposed pricing mechanism would incent an efficient structure of prices. They base their claim on the assertion that their mechanism amounts to a global price cap, and cite Laffont and Tirole to the effect that such a global price cap has valuable efficiency properties.¹⁰

The proposed pricing mechanism is not a price cap but rather a revenue cap. As NERA itself has acknowledged in other contexts, the efficiency properties of price caps simply do not extend to revenue caps. For example, in a recent report for the Ministerial Council on Energy, NERA stated that:

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Under a revenue cap form of price control, firms have little or no incentive to ensure that their prices are calibrated so as to reflect marginal cost or to avoid distorting customers' usage decisions.\textsuperscript{41}

Revenue caps also can lead to inefficient allocations of risk. For example, if volume variances are correlated with overall income movements, revenue caps will result in price increases at times when consumers' marginal valuations of income are relatively high.

In short, the G9's proposed revenue cap:

(a) is effectively open-ended, meaning the Commission cannot determine whether the proposed level of prices is reasonable;

(b) on NERA's own admission, involves a control mechanism that does not create incentives for an efficient structure of prices; and

(c) shifts the bulk of the risk associated with the venture onto end-users.

\textbf{C.3.3 Does not ensure non-discrimination}

While NERA claims that the SAU requires equal treatment of access seekers, there does not appear to be any commitment to non-discriminatory price terms and conditions in the SAU. On the contrary, the SAU states that FANOC may set different charges for different access seekers:

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"FANOC may set the charges for BAS products for each Access Seeker at lower charges than those set out in the Reference Price List and at different charges for different Access Seekers."\textsuperscript{42}
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The SAU imposes no constraints on how this scope can be exercised, and hence opens the door to inefficient and anti-competitive discrimination. As noted below, the Australian Competition Tribunal has found that the mere fact of vertical separation does not prevent inefficient discrimination from occurring.


C.3.4 Inconsistent with the Commission’s own approach to access pricing

The pricing model proposed by the G9 appears inconsistent with many of the principles and views expressed by the Commission in past decisions on access pricing.

The Commission has placed substantial weight on the importance of optimal network design when assessing cost-based access prices. For the reasons set out in Part B, an ADSL 2+ network, particularly with the architecture in the copper network proposed by the G9, cannot be considered optimal.

The SAU envisages passing through to access seekers the costs associated with optimising its network over time, while still requiring access seekers to fund the initial network investment. The Commission’s approach in the context of Telstra’s services has been to continually optimise Telstra’s network, with the cost-savings passed onto access seekers but the actual costs associated with any such augmentation, including the write-off of Telstra’s existing assets, borne exclusively by Telstra.

As discussed in Part B, there are substantial costs in optimising the copper sub-loops to support high speed broadband services and it is unclear whether, contrary to FANOC’s right to recoup optimisation costs at its layer, Telstra would be able to recoup its optimisation costs at the physical layer. This difference alone would distort efficient investment, as investment decisions taken in functionally interdependent networks would be taken according to different rules.

The SAU includes a mechanism for rolling-forward losses incurred in each period. The methodology advocated and implemented by the Commission and NERA to allocate Telstra’s costs to specific periods has been to front-load cost recovery where assets are at risk of technological obsolescence. In complete contrast, the G9 SAU involves back-loading cost recovery.

The SAU would appear to breach the Commission’s cost allocation rules by seeking to recover from the Basic Telephone Access Service costs in excess of stand-alone costs. For example, in the First Period the FANOC charge for the Basic Telephone Access Service is $10 per month, while the charge for the

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43 See for example, Australian Competition and Consumer Commission, “Assessment of Telstra’s ULLS Monthly Charge Undertaking, Final Decision” (August, 2006) section B.4.6, 56-63.
bundled Basic Telephone Access Service and 1.5 Mbps broadband service is $14.23, just $4.23 more. This implies that the Basic Telephone Access Service accounts for two-thirds of total costs recovered in the First Period. However, there is no evidence that FANOC bears any incremental costs in providing that Service, much less incremental costs proportionate to the proposed share of allowed revenues.

The G9 SAU claims to propose a Ramsey allocation of common costs despite the Commission rejecting this methodology in the context of setting charges for other access services. In fact, the SAU envisages a complete role reversal between the access provider and the regulator. Rather than assessing the allocation of common costs, as the Commission would normally do in the context of any other undertaking, the G9 proposes that the allocation of common costs should be left to FANOC’s discretion and the Commission should instead perform the role of determining whether investment in the network over time is prudent, a role that it is presumably not as well placed to perform as the network owner. This is all the more perverse given that NERA itself has emphasised that a provider regulated by a revenue cap (as the G9 would be) has no incentive to set an efficient structure of prices.

Contrary to the G9’s assertions, the formula it proposes is vastly different to that which the Commission accepted in the case of Foxtel’s Special Access Undertaking in relation to the Digital Set Top Unit Service. In that case, Foxtel submitted a pricing model which set out a formula defining how audited cost categories are converted to firm access prices, which limits the discretion available to Foxtel and the level of uncertainty faced by access seekers.

**C.3.5 Why SAU is unreasonable on pricing**

In summary, the pricing model set out in the SAU is unreasonable because it:

(a) proposes to set prices in the First Period on an arbitrary basis rather than in line with any principles of economic efficiency or the legislative criteria;

(b) proposes a formula for setting prices in the Second and Further Periods which has the scope to substantially increase access prices over time, thereby imposing an unacceptable level of risk on access seekers and ultimately end-users;
(c) appears dependent on cutting over all of Telstra’s retail and wholesale traffic, without which access prices would need to increase to unsustainably high levels in order to recover costs;

(d) involves the application of a revenue cap that would not deliver the claimed efficiency benefits but would rather blunt incentives for efficient pricing and shift the bulk of the risk associated with the proposal to end-users; and

(e) is inconsistent with many of the principles and views expressed by the Commission in its previous decisions on efficient telecommunications cost-based access prices, without any discussion of why these deviations would be consistent with the legislative criteria.

C.4 Impacts on competition

G9 and NERA claim that the G9 model will promote competition. In Telstra’s view, this claim is completely incorrect: not only will the higher costs discussed above be passed through to end-users under the G9 pricing methodology, but the proposed SAU will cause additional harm to end-users by increasing the risk of collusion in downstream markets.

C.4.1 Claimed efficiencies

There appear to be two basic elements to G9’s and NERA’s claim that the SAU would promote competition.

First, NERA argues that under the G9 model all downstream firms, including Telstra, face the same wholesale access price, while in the status quo, Telstra only faces the marginal cost of access. This argument is confused, as when Telstra “sells” access to itself, it foregoes the revenue it obtains from supplying access to third parties. As a result, the opportunity cost that Telstra faces is not marginal cost, but rather the sum of marginal cost and the foregone contribution from sales of access services. However, even were it the case that Telstra faced marginal cost, while access seekers faced the wholesale price:

(a) if, in the G9 structure, downstream users retain a financial interest in FANOC, then those users with such an interest will themselves face

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44 Although FANOC disagrees, reserving itself the ability to charge differentially (see Part C.3.3)
wholesale usage costs that differ from “headline” wholesale changes (as the payments they make to FANOC in part accrue to them); and

(b) in contrast, if – as the G9 suggest – downstream users do not have a financial interest in the upstream assets, there will be more extensive “double marginalisation” than occurs in the status quo: that is, as explained in Annex 2, wholesale prices will be further marked up in the downstream stage, in a way that reduces consumer welfare and competition.

Second, G9 and NERA also argue that the G9 model avoids the risks of price and quality discrimination as between access providers and access seekers. However, the Australian Competition Tribunal has found that the mere fact of vertical separation does not preclude conduct that is so discriminatory as to materially harm downstream competition.\textsuperscript{45}

Moreover, in the counterfactual, there are far-reaching regulatory safeguards against price and quality discrimination, including the operational separation requirements. Annex 5 sets out the criticisms made by NERA and G9 of the Telstra structure and the regulatory safeguards that are in place to address these criticisms.

These safeguards are clearly working. The Commission has concluded that the information Telstra provides on non-price KPIs does not indicate that Telstra has materially discriminated against wholesale customers. The Commission noted that on some metrics wholesale customers received materially better performance than retail customers.\textsuperscript{46}

\textit{C.4.2 Risks of collusion}

Any risks to competition that might arise from the fact of vertical integration in the counterfactual are overwhelmed by the risks to competition which arise from G9’s governance structure. That structure amounts to a joint venture

\textsuperscript{45} Virgin Blue Airlines Pty Limited [2005] ACompT 5 (12 December).
\textsuperscript{46} Australian Competition and Consumer Commission, “Imputation Testing and Non-price Terms and Conditions relating to the Accounting Separation of Telstra, for the March Quarter 2007” (June 2007) 35.
between competitors, with the BAS Manager being the primary mechanism through which that joint venture operates.

The extensive exchange of information required for this structure to work, and the extensive shared decision-making on which it rests, would necessarily create risks of downstream collusion. Even were that collusion not to eventuate, the fact of the additional risk, and the costs that would need to be incurred so as to police against it, are detriments to end-users and are inconsistent with end-users' long-term interests.

The risks of collusion are compounded by the fact, noted above, that G9 proposes that voting rights on that committee will be constrained, in ways that tend to “over-weight” relatively small players. These players will generally have more to gain by colluding. Moreover, the very broad discretion that appears to be involved in determining precisely how this over-weighting would occur (i.e. at precisely whose expense and by how much), creates scope to punish firms that would compete aggressively.

More generally, the decision-making processes of the BAS would create opportunities both for log-rolling (which facilitates collusive profit maximisation) and for “tit for tat” strategies that punish firms that seek to compete aggressively.

Additionally, the important role assigned the BAS Manager in relation to service innovations poses immense risks to competition as it:

(a) requires competitors to disclose to their rivals their plans for developing new downstream services, so as to explain and justify requirements for innovation in the upstream services;

(b) creates opportunities for less innovative firms to slow or even block the development of new downstream services by more innovative and aggressive rivals; and

(c) will create a socialisation of innovation that is inherently undesirable and contrary to the long term interests of end-users.

The potential harm of collaborative arrangements among competitors is well recognised. For example, the US Antitrust Guidelines for Collaborations Among Competitors issued by the Federal Trade Commission and the DOJ, issued in April 2000, at para 3.31(b) state that “...the sharing of information related to a market in which the collaboration operates or in which the participants are actual or potential competitors may increase the likelihood of collusion on matters such as price, output, or other competitively sensitive variables.”
The Commission, consistent with economic thinking, has expressed deep scepticism about collaboration between competitors:

An agreement to exchange information or one that facilitates such an exchange (even when there is no express agreement to fix prices) may raise competition issues if it provides competitors with sufficient certainty regarding their competitors' behaviour that they will no longer need to compete vigorously. The impact on competition may be seen in a variety of ways including reduction in price competition, reduction in discounting or promotional activities, or reduced innovation and product differentiation.

A parallel is the setting of interchange fees in credit card networks. The Commission found that the fact that the banks, which competed downstream in the provision of card issuing and merchant acquiring services, breached section 45A of the TPA and in any event substantially lessened competition by jointly setting interchange fees in an upstream market. Regardless of the flaws that may have marred the Commission's analysis in that case, the Commission cannot resile from the strong concerns it has previously expressed about joint decision-making by competitors.

As a result, parties who seek to implement any such horizontal arrangements between competitors must face a very high hurdle, which G9 has not addressed, much less cleared.

Further, seeking approval for an SAU under Part XIC does not provide immunity for conduct under other provisions of the TPA, including Part VI or Part XIB. On their face the G9 arrangements appear to involve breaches of section 45A of the TPA because the SAU will fix or control prices of services to be acquired by G9 members who are in competition with each other. If section 45A is breached, the Part XIB competition rule will clearly be breached.

There is no joint venture defence available for breaches of the competition rule. Furthermore, in Telstra's view, the G9 members would be hard pressed to avail themselves of the joint venture defence in connection with breaches of s45A because they could not show that the SAU, to which the price fixing is central, did not have the purpose or likely effect of substantially lessening competition:

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49 This is unlike, for example, the Payment Systems (Regulation) Act 1998 which specifically provides for immunity where an arrangement has been made between banks as to provision or price of services.
50 Section 76D, TPA. The definition of proceedings in s76D(3) makes it clear that the joint venture defence is not available as a defence to a breach of the competition rule under Part XIC.
(a) competition would be substantially lessened with the SAU relative to the world without it, as Telstra would not be able to proceed with its own network upgrade and access seekers would lose key wholesale services which the FANOC network cannot support;

(b) the extensive sharing of information through the BAS Manager will facilitate collusive behaviour;

(c) the scope the BAS Manager structure provides for vote trading and vetoing permits a “tit for tat” approach in which aggressive competitors would find their proposals being vetoed; and

(d) the ability of the committee of users – that is, of downstream competitors – to prevent new services from being provided, allows that committee to harm innovative and aggressive users.

C.4.3 Why the SAU is unreasonable on competition grounds

171 The competition risks arising from the G9’s model are so fundamental that the SAU is not capable of being considered reasonable. These concerns should weigh all the more heavily on the Commission as we are unaware of any precedent for a competition authority approving a proposal between competitors where:

(a) there would be very little scope, if any, for competitors to “opt out” of the agreement, as they require access to the underlying assets;

(b) the proposed structure requires extensive information-sharing and joint decision-making between competitors; and

(c) the structure provides a natural mechanism by which those competitors that nonetheless sought to compete vigorously, aggressively and innovatively could be punished by their less competitive and efficient rivals.

C.5 G9 SAU not supported by economic analysis

172 In summary:

(a) the G9 proposal will not result in costs, service quality or investment that are efficient over time. Rather, the evidence suggests that costs will be higher than they need to be, the quality and range of the services
available will not match even current levels, and investment in network upgrading and modernisation will be compromised;

(b) the G9’s wholesale prices will not reflect costs. Rather, analysis shows that the pricing mechanism the G9 proposes for wholesale services impose unacceptable taxes on users of basic telephony services, while shifting all of the investment risk on to end-users. Additionally, the G9 proposal would give FANOC a wide-ranging discretion over the structure of prices;

(c) the G9 model will not promote competition but is much more likely to result in collusion than in sustainable and efficient competition.
D The G9 SAU assessment against the statutory criteria

D.1 Submission on the consistency with standard access obligations

173 The G9 fundamentally depends on an a sub-loop access service which G9 acknowledges is inconsistent with the SAOs, in particular section 152AR(3)(b). The consistency of the G9 SAU with the SAOs cannot be viewed in isolation from the fundamental illegality on which it is built.51

174 In respect of the FANOC services, G9 acknowledges that the SAOs have limited application because as FANOC is a wholesale only model there are no comparable benchmarks of self supply. Access seekers, in effect, have to take whatever FANOC offers, provided it is offered to all of them. As CRAI discuss in Annex 2, the incentives within the G9 proposed structure will tend towards the lowest common denominator in service quality, technology and investment.

175 The SAOs require, to the extent services are regulated, that Telstra provide a range of upstream inputs on a non-discriminatory basis to allow access seekers to compete in the different downstream customer and product market sectors in which Telstra Retail competes. As CRAI discusses in Annex 2, a vertically integrated operator will have greater incentives to invest because it directly shares in the retail margins. The outcome of the interplay between these incentives of vertical integration and the requirements of the SAOs and operational separation is likely to deliver non-discriminatory access products to access seekers.

176 The different outcomes which the SAOs produce between a wholesale only operator and a vertically integrated operator are illustrated by comparing the G9 proposed products with Telstra’s current wholesale product range52. G9 has a limited product set consisting of a basic telephone connectivity service and four best efforts broadband services. As set out in Figure 2, there are a large number of business grade broadband and data wholesale products which cannot be supported on the G9 network.

51 The G9 Consortium “Statutory Amendments to Facilitate Competitive Proposals for the Construction of an Australian Next Generation Broadband Network” (30 May 2007) para 4.7. The G9 concedes that “the SAU provisions cannot operate effectively...” without the amendments G9 seeks to remove the current limitations on the SAOs in section 152AR(4).

52 See part B of this Submission, in particular Figures 1, 2 and 3.
177 Even were it the case that the Commission thought – in Telstra’s view, incorrectly given Virgin Blue Airlines Pty Limited\(^{53}\) – that the structure proposed under the SAU was less likely to result in undesirable discrimination than the current arrangements, it could not be satisfied that the overall effect would be to promote efficiency or competition, as the range of wholesale services available would so severely diminish.

D.2 Reasonableness of the terms and conditions contained in the Undertaking

(a) Whether the terms and conditions promote the long-term interest of end-users (LTIE)

178 The Australian Competition Tribunal has said the following in relation to the LTIE:

“End-users: end-users include the actual and potential (users of the service)

Interests: the interest of the end-users like in obtaining lower prices (than would otherwise be the case), increased quality of service and increased diversity and scope of product offerings. This would include access to innovations... in a quicker timeframe than would otherwise by the case

Long-term: the long-term will be the period over which the full effects of the...decisions will be felt. This means some years, being sufficient time for all the players (being existing and potential competitors...) to adjust to the outcome, make investment decisions and implement growth – as well as entry and/or exit strategies.”\(^{15}\)

179 The SAU does not promote the LTIE because:

(a) the SAU is very unlikely to contribute to lower prices, even relative to the status quo. The G9 structure involves significant one off costs which the G9 has failed to take into account, including the substantial costs of vertical disaggregation\(^{15}\). The FANOC network architecture will be substantially less efficient than that of Telstra’s FTTN. The pricing mechanism the G9 proposes for wholesale services impose unacceptable taxes on users of basic telephony services, while shifting all of the investment risk on to end-users. Additionally, the G9 proposal would give

54 Seven Network Limited (No 4)[2004] ACompT 11 (23 December 2004) 120.
55 See discussion in Part C.2 of this Submission.
FANOC a wide-ranging discretion over the structure of prices and the significant discretion in the pass-through mechanism\textsuperscript{56};

(b) Broadband end-users will face degraded services because the FANOC broadband wholesale services are of a lower service quality (no business grade services) and lower speeds (only a best efforts 1.5 Mbps) than existing broadband services supplied on Telstra’s current network\textsuperscript{57};

(c) residential and business end-users will face substantial risks to their basic telephony services\textsuperscript{58} in the course of the compulsory migration of the entire PSTN base within FANOC’s footprint, and the ongoing supply of services by means of softswitching without the safety net of the existing TDM switching. This has not been attempted on this scale anywhere in the world;

(d) corporate end-users will lose access to existing high quality, high speed data services supplied on Telstra’s current network, such as Frame Relay, ATM and Centrex\textsuperscript{59}. The SAU contains no commitment to developing alternative services;

(e) G9 has provided no details of how it will deal with the substantial technical challenges involved in supplying over the FANOC network a range of essential services currently available to end-users, such as public payphones and traffic control systems\textsuperscript{60};

(f) existing customer service levels are put at risk by the complex, transaction heavy inter-operator processes required to support provisioning and fault systems\textsuperscript{61}. The SAU contains no service commitments which would allow access seekers providing standard telephone services to meet their own legal obligations such as the CSG\textsuperscript{62};

(g) the migration pathway to more advanced services is uncertain, costly, slow and risky for consumers\textsuperscript{63}; and

\textsuperscript{56} See discussion in Annex 3 of this Submission in relation to Pricing Issues.
\textsuperscript{57} See discussion in Part B.4 of this Submission.
\textsuperscript{58} See discussion in Part B.5 of this Submission in relation to basic telephony.
\textsuperscript{59} See Figure 3 in Part B.4 of this Submission.
\textsuperscript{60} See discussion in Part B.6.
\textsuperscript{61} See Figure 5 in Part B and the discussion in Part B.8 of this Submission.
\textsuperscript{62} See discussion on Part B.7.
\textsuperscript{63} See discussion in Part B.8.
(h) consumers will benefit from less innovation because of the delayed upgrade to VDSL2 and the risks of collusion inherent in the G9 structure.

180 The counterfactual, including the possibility of Telstra upgrading its network to VDSL2, is more likely to promote the LTIE through lower prices, increased quality of service and innovation. Once the regulatory uncertainties are resolved, Telstra will move quickly to deploy its VDSL2 network, which will offer a wider range of higher quality broadband services than offered on the FANOC network. As network owner, Telstra will have the opportunity and the incentive to substantially invest in making the copper network more efficient for an FTTN deployment. The resolution of regulatory uncertainties should not be counted as a delaying factor in relation to the Telstra proposal. G9 is also seeking regulatory measures before it proceeds.

181 The SAU fails to promote competition because:

(a) it seeks to anoint G9 as a “winner” and award it a protected monopoly, while permanently blocking the asset owner, Telstra, from ever building its own FTTN network;

(b) the scope of competitive activity will diminish because access seekers will lose access to a number of broadband, data and voice services currently supplied by Telstra, due to the technical limitations of the FANOC network;

(c) it imposes inefficiently high costs which will be passed on through inefficient access prices, and distort competitive outcomes; and

(d) the incentives inherent in G9’s proposed structure and governance model will mean there is limited or no product innovation, and there is a substantial risk of collusion on price and non-price issues.

182 The counterfactual, including the possibility of Telstra upgrading its network to VDSL2, is more likely to promote competition because:

(a) access seekers will continue to have access to a PSTN services or PSTN-emulation services which allows them to compete in the supply of

64 See discussion in Annex 7 of this Submission.
65 See Part of this Submission, in particular B. 7
66 See discussion in Annex 2 of this Submission.
downstream voice services without investing in their own switch infrastructure\textsuperscript{67};

(b) access seekers will have continued access to the existing range of wholesale data products or to VDSL2 products which are close substitutes\textsuperscript{68};

(c) access seekers will have the capability to determine their own QoS on Telstra’s VDSL2 network – providing greater opportunities for product innovation\textsuperscript{69};

(d) the risks of collusion on price and non-price terms inherent in the G9 structure are avoided while the potential risks of vertical integration are addressed through existing regulatory measures\textsuperscript{70}; and

(e) Telstra as a vertically integrated operator will have more incentive to introduce innovative services and continuously upgrade its network than FANOC as a wholesale-only operator.

The SAU will not result in the \textbf{economically efficient use of infrastructure} because it\textsuperscript{71}:

(a) disables a functioning network that is already capable of delivering what the proposed G9 network could;

(b) delivers services which are more restrictive, of lower quality and of higher risk than the existing services;

(c) involves an inefficient design for an FTTN by using a model which assumes one pillar-one node, existing exchange locations and future replacement of copper for copper – in effect, fitting the FTTN to the current network rather than the other way around;

(d) embeds an expensive, transaction-heavy supply chain; and

\textsuperscript{67} See discussion in Part A.5 and B.5 of this Submission
\textsuperscript{68} See discussion in Part B.4 of this Submission.
\textsuperscript{69} See discussion in Part B.9 of this Submission.
\textsuperscript{70} See discussion in Annex 2 of this Submission in relation to d. and e. of this paragraph.
\textsuperscript{71} In relation to the various points see discussion in Part B, in particular B.4, B.5, B.11, B.7 and B.8.
imposes additional costs on access seekers by requiring them to invest in new systems, transmission equipment and other infrastructure to continue to provide current services.

The counterfactual results in more efficient use of infrastructure because:

(a) access seekers will face the costs of one less layer of interconnection than under the G9 model;

(b) Telstra is able to realise legitimate vertical efficiencies, which are reflected in the access and retail prices, while facing safeguards to address any potential risks to competition of vertical integration; and

(c) the Telstra copper network is used to provide a wider range of services to meet current customer needs than the FANOC network would support.

The SAU will not result in economically efficient investment in infrastructure because:

(a) it allows FANOC, as a monopoly FTTN operator, to embark upon an investment in soon-to-be-outmoded technology, foregoing more efficient investment and upgrade paths;

(b) results in an inefficient, costly migration pathway to higher speed services, such as VDSL2;

(c) reduces Telstra’s incentives to optimise the local loop network; and

(d) cuts off the more efficient option of Telstra undertaking an upgrade of its own network.

The counterfactual, which includes the possibility of Telstra upgrading its network to VDSL2, will result in more economically efficient investment in infrastructure because:

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72 See discussion in Annex 2 and Annex 5 of this Submission.
73 As noted above see discussion in Part B of this Submission.
74 See discussion in Part B.9 of this Submission.
75 See Annex 2 of this Submission in relation to points b, c and d.
(a) Telstra will have the opportunity and incentive to make a substantial investment in the copper network to accommodate a much more efficient network design for an FTTN than FANOC can achieve;

(b) Telstra will prepare the network for the next big step to an FTTP deployment as it incrementally replaces existing copper with fibre rather than repair it\(^\text{76}\); and

(c) a higher speed, higher quality broadband network will be deployed much earlier and with less disruption than under the G9 proposal\(^\text{77}\).

(b) **Legitimate business interests of the carrier or carriage service provider concerned**

187 The G9 proposal does not reflect the legitimate business interests of the carrier or carriage service provider concerned because the SAU cannot be divorced from the G9 sub-loop unbundling proposal\(^\text{78}\). In addition to being constitutionally invalid under section 51(xxxi), taking control of Telstra’s entire copper network in the FANOC deployment areas is beyond what FANOC can legitimately expect as a non-network owner and an access seeker, and derogates from the legitimate expectations of Telstra as the network owner. It is also beyond FANOC’s legitimate expectations, and derogates from Telstra’s, that FANOC can expect to finance its investment by forcing Telstra to buy back services from FANOC. Hence, the restrictions in section 152AF and 152AR(3)(b) form part of the essential fabric of Part XIC and delineate the boundaries of the Commission’s role and powers.

188 The counterfactual, including the possibility of Telstra upgrading its network to VDSL2, recognises Telstra’s legitimate rights as the network owner to utilise its own assets to deploy its own FTTN, subject to fair and reasonable access requirements to bottleneck facilities.

(c) **The interests of the persons who have rights to use the declared service**

189 The G9 proposal does not serve the interests of the persons who have rights to use the declared service because access seekers will:

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\(^{76}\) See discussion in Part B.2 of this Submission.

\(^{77}\) See discussion in Part B, in particular B.3 of this Submission.

\(^{78}\) See discussion in Part A, in particular A.2 of this Submission.
(a) lose access to existing wholesale services;

(b) incur increased capital and operating costs in continuing to access those wholesale services which they can obtain from FANOC – some access seekers, such as switchless resellers, may have to exit the market; and

(c) face reduced opportunities for innovation because the G9 model requires the BAS Manager to know about and consent to changes in wholesale services required to support new offerings.

190 The counterfactual, including the possibility of Telstra upgrading its network to VDSL2, is more likely to serve the interests of the persons who have rights to use the declared service because access seekers will:

(a) have access to a greater range of higher quality wholesale services, both on Telstra’s current network and on its VDSL2 network;

(b) face lower investment to acquire wholesale services from Telstra;

(c) work in a simpler, lower risk operational environment; and

(d) will have more autonomy and opportunities to innovate on Telstra’s VDSL2 network because they will be able to set their own QoS levels independently of Telstra as the network operator79.

(d) The direct costs of providing access to the declared service

191 The G9 model fails to account for significant costs which the G9 proposal will impose on the industry, which are as follows:

(a) the FANOC network architecture is in highly inefficient80;

(b) there are likely to be substantial once off costs in altering the physical structure of the Telstra network, so as to provide for the connections, systems and processes essential for the G9 system to work. Those costs are entirely attributable to the proposal, as they would be avoided in the counterfactual, and hence are direct costs;

79 As noted previously these issues are addressed in more detail in Part B of this Submission.

80 See discussion in Parts B.10 and B.11 of this Submission.
costs are likely to be imposed because G9 would eliminate the network’s ability to provide a wide range of important services. The costs of developing replacements for those services, and the disruption costs experienced by users and suppliers during the period in which these replacements were being developed and implemented, need to be brought to account\textsuperscript{81};

there will be ongoing costs of the transaction-heavy inter-operator processes which the G9 model requires between Telstra, FANOC, voice service access seekers and data service access seekers\textsuperscript{82};

access seekers face additional capital to utilise the FANOC wholesale services, including to rebuilt OSS interfaces\textsuperscript{83}; and

access seekers face additional costs of building backhaul to the LAPs or acquiring backhaul from FANOC to the TAPs, which is not covered by the SAU\textsuperscript{84}.

Additionally, the revenue cap proposed in the SAU allows FANOC to recover any revenue shortfalls it incurs from loss of traffic through higher prices to remaining users. This recovery of consequential losses is inconsistent with the direct costs criterion of the reasonableness test.

The counterfactual, including the possibility of Telstra upgrading its network to VDSL2, is likely to involve lower direct costs because:

the entire layer of vertical disaggregation and the resulting additional interconnection and transaction costs created by the G9 model is avoided; and

Telstra, as network owner, will have the opportunity and the incentive, to substantially upgrade its copper network to create a more efficient FTTN design, which will flow through to access prices\textsuperscript{85}.

\textsuperscript{81} See discussion in Parts B.5 and B.6 of this Submission.
\textsuperscript{82} See discussion in Part B.8 of this Submission.
\textsuperscript{83} See discussion in Parts B.7 and B.12 of this Submission.
\textsuperscript{84} See discussion in Annex 3 of this Submission.
\textsuperscript{85} See discussion in Annex 2 of this Submission.
(e) The operational and technical requirements for the safe and reliable operation of a carriage service, a telecommunications network or a facility

194 As the G9 members do not operate a large scale local network, they have a limited understanding of what the operational and technical requirements necessary for the safe and reliable operation of the network are. None of the G9 members has experience with large scale local telephone networks. SingTel Optus’ current direct connect telephone base is small. The difficult launch of the OptusVision telephone services, with the many problems it experienced over a long period of time illustrates the challenges faced by operators with limited local telephony experience, even when they form part of well-established telcos overseas.86

195 The G9 proposal does not ensure the operational and technical requirements for the safe and reliable operation of a carriage service, a telecommunications network or a facility because of:

(a) the substantial risks faced in the unprecedented migration of the entire PSTN customer base and the use of softswitching without a TDM safety net87;

(b) the more complex arrangements which will apply to emergency call handling;

(c) G9’s failure to address special services end-users, such payphones and co-ordinated traffic light services, the loss of which could affect public safety88;

(d) G9’s failure to address the special requirements of persons who crucially depend on highly reliable telephone services, such as those with life-threatening medical conditions; and

(e) the threat of reduced service levels for customers resulting from the complex, transaction heavy processes inherent to the division of the network between Telstra, FANOC and one or more access seekers89.

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87 See discussion at Parts B.8 and B.10 of this Submission.
88 See discussion in Part B.6 of this Submission.
89 See discussion in Part B, in particular Figure 5 of this Submission.
Figure 5 in Part B shows, at a very high level, the interactions required to address faults in the proposed network. The Tribunal commented in the ULLS decision that a service provider will have sufficient incentive to ensure the safe operation of the service if it earns a sufficient return to cover its costs of ensuring safe and reliable operations. However, the inter-operator arrangements are so fragmented that the resources of one operator are unlikely to cure the problems. Moreover, the relevant issue is the comparison in effectiveness to the counterfactual: in other words, the extent to which this criterion is met with the SAU, relative to what would otherwise occur.

The counterfactual is more likely to address the operational and technical requirements for the safe and reliable operation of a carriage service, a telecommunications network or a facility. Telstra has a proven track record in running a highly reliable local network. The migration to an FTTN will not, for the reasons noted above, be a simple task. Telstra is much better equipped to undertake that task with the depth of its expertise, its substantial technical and engineering resources, its knowledge of its own network and the more efficient and co-ordinated structure of a vertically integrated network.

(f) The economically efficient operation of a carriage service, a telecommunications network or facility

The G9 proposal does not promote the economically efficient operation of a carriage service, a telecommunications network or a facility because:

(a) current retail and wholesale services will not be supportable on the G9 network, potentially affecting the level of network utilisation

(b) access seekers face additional capital and operational costs to maintain existing interconnection and wholesale arrangements, including investing in new OSS interfaces, deploying more Pols and deploying network to LAPs or acquiring unregulated backhaul services from FANOC; and

(c) the transaction heavy provisioning and fault processes will raise all operators’ costs and lower service quality;

(d) the FANOC network design is highly inefficient, adding costs to access seekers and end-users; and

See discussion relevant to the following points in Part B, in particular B.4, B.8, and B.11 of this Submission.
(e) the proposed pricing methodology passes on an inefficient cost level, provides no incentives for an efficient price structure and creates uncertainties in access pricing that would discourage the efficient use of the FANOC network – access seekers would be unwilling to commit to demand forecasts in the face of such uncertainty, which itself will give rise to greater scope for price rises.\textsuperscript{91}

The counterfactual is more likely to promote the economically efficient operation of a carriage service, a telecommunications network or a facility\textsuperscript{92} because:

(a) there will be a wider range of wholesale and retail services on the current Telstra network and its VDSL2 network, providing greater opportunity to realise efficiencies and achieve lower costs;

(b) access seekers can acquire switched services or a PSTN emulation service and layer 3 broadband services from Telstra rather than invest in their own switching and routing infrastructure – improving Telstra’s scale efficiencies which are passed on in lower access process;

(c) there are well established, efficient and non-discriminatory inter-operator processes between Telstra and access seekers supported by electronic interfaces, which also would be migrated to the future VDSL2 network;

(d) Telstra is able to realise legitimate vertical efficiencies in the supply of services and the operation of its network, which flow through to lower retail and wholesale prices.

**D.3 Other relevant matters – section 152AH(2)**

The G9 proposal will have an impact on the ability of access seekers to meet the extensive social and consumer regulatory requirements. These obligations apply to the provider of the Standard Telephone Service, which will be the access seeker as the switch provider, or specifically to Telstra. Telstra will continue to bear legal responsibility for these obligations, although it loses

\textsuperscript{91} See also discussion in Annex 3 of this Submission.

\textsuperscript{92} See discussion relevant to the following points in Part B, in particular B.4, and Annex 2 of this Submission.
control of the underlying network which is crucial to its ability to comply with those obligations93.

201 Telstra’s financial resources to meet the USO within and outside the G9 footprint will be reduced. Telstra will be obliged to provide services to USO customers in the G9 footprint but FANOC will have no matching obligation to provide the telephony connectivity which Telstra requires to meet that obligation. The ability of all access seekers to meet the CSG requirements will be compromised by the complex, transaction heavy operations and maintenance processes required under the G9 model94. Telstra also has Priority Assistance obligations under its licence to provide high reliability services to persons with life threatening medical conditions which G9 fails to consider under its proposal.

202 The Commission has failed to consider whether, as the G9 is a joint venture between competitors, other provisions of the TPA apply beyond Part XIC. The G9 pricing methodology involves a price fixing arrangement between competitors which seems to be in breach of both section 45A and the competition rule. Additionally, it creates a heightened risk of collusion, which is inconsistent with the “likely effect” limb of section 45.

93 See discussion in Part B.5 of this Submission.
94 See discussion in Part B.8 of this Submission.
Annex 1: Technical and Service Aspects of the FANOC Proposal

The threat to basic telephony

1. The proposed G9 solution set out in the SAU does not provide voice switching. Instead, FANOC proposes to build a network where a Telstra sub-loop is used for the conveyance of analog voice signals from the customer premises to the node. At the node, there will be line cards for the analog voice service which will generate ringing voltage and relevant tones and which will convert the analog voice signal to and from a VoIP form which runs from the node in a common Gbps Ethernet optical link with the data to a local access point or transit access point at which there is a Point of Interconnection (PoI). This impacts the current efficient telephony interconnect arrangements which have been highly effective.

2. G9 proposes that the point to point service which delivers converted analog voice from the customer premises to the PoI would be handed over to voice service access seekers at a point of interconnection at the PoI. That is, G9 does not propose to switch the voice services or to convert them (for example, by means of a media gateway and media gateway controller) into the form that would be expected by a PSTN operator. This is set out in Figure 13.

Figure 13 – FANOC FTTN proposal for voice service access

3. The implication for voice access seekers is a less efficient interworking arrangement with additional costs and complexity. These access seekers must either implement a media gateway and media gateway controller in order to switch the voice services using existing time division multiplex (TDM) switches or must move to the implementation of softswitches either at a central point on their core IP network or distributed geographically around the core IP network. This increased complexity is unreasonable.
This proposal by G9, if it were to be implemented would require one of two alternatives, each with risks and each requiring expenditure that is not currently required to interconnect to the Australian public switched telephone network:

(a) the access seeker uses a softswitch and only converts to TDM when they need to connect to the PSTN. In order to implement this solution, each access seeker will need to acquire a media gateway which is not required in current interconnection and is inefficient on the basis that it is duplicative; or

(b) the access seeker uses their existing TDM switching equipment (which is a very large investment) and converts the voice service to TDM immediately after interface at the FANOC PoI. Again, each access seeker will need to acquire media gateway equipment that is not required in the current interconnection and which will be obsolete in a relatively short time (in telecommunications network investment terms).

The access seeker would also have to introduce new systems, support and maintenance arrangements in addition to those currently in place and would remain for the areas not covered by the FANOC network. This impacts the current efficient telephony interconnect arrangements which has been highly effective.

In order to minimise capital investment, the access seeker is likely to choose the software switching option and to pass the technology implementation risk to end-users by requiring that those end-users which acquire its service should be part of that access seeker’s learning curve. The impact of a potential additional duplicative investment would reduce industry efficiency.

In any case, the G9 proposal makes a significant assumption about the number and variety of software based switching systems that can share access to a single node. Although these parameters are node dependent, the likely outcome is that the manufacturer and configuration of the software based switching systems will need to be determined by FANOC and applied to each voice access seeker. This results in greater complexity of interworking.

The approach that access seekers will have to take in order to provide services associated with standard telephone services (such as operator services and directory assistance) will be made more complex under the SAU regime compared with current arrangements. If the access seeker chooses the softswitch option, these problems also extend to access to the emergency service person, as well as potentially the provision of untimed local calls and making carrier pre-selection available. This, too, results in greater complexity of interworking.
If a non-Telstra access seeker were to decide to take the technology risks of implementing a softswitch solution in order to provide voice services, it would still need to interface to a switched network provider if it is to acquire directory inquiry services and operator services. That is, a pure software based switching systems solution would only be available to access seekers which are capable of providing such services themselves. This also results in greater complexity of interworking.

The issue is more complex in relation to emergency services. The voice access seeker would need to interface at each of the Telstra CCA within the FANOC network footprint in order to access emergency services. That is, the capital investment required simply to deliver access by consumers to the emergency service number is significantly higher than the capital expenditure required by an access seeker acquiring voice services on the current Telstra network where the 000 call is not routed via the access seeker’s network. Again, this results in greater complexity of interworking.

Technical Differences between the FANOC Network and the Telstra FTTN

In this section, we provide evidence that the technical capability of the FANOC network is doubtful. On the basis of this doubt, the SAU should be rejected.

The most obvious difference between the two networks is speed in both the upstream and the downstream directions. ADSL2+ is slower and therefore not capable of delivering services, or bundles of services, that require higher speeds, as Figure 14 shows.

Telstra’s planning sees customer bandwidth demand increasing over the next 15 years as a reasonable method of planning for the technical requirements of a future network. The SAU does not allow for this and is thus unreasonable in the long term.
The second difference is that Telstra’s FTTN is based on the Ethernet protocol using VLANs. By contrast, the FANOC network will use the Point to Point Protocol (PPP)95. PPP based architectures are commonly deployed today to support best effort broadband Internet access services. Ethernet provides better support for delivering next generation services such as triple play and business grade connectivity in addition to broadband Internet access. If an access seeker wishes to deliver PPP based services, these may also be carried over Ethernet.

PPP based architectures have limitations in supporting multicast services. Support for multicast capability in a PPP based architecture is not standards-based and requires vendor-specific implementation. The SAU supporting submission alludes to these limitations when it refers to a possible point-to-multipoint service for IPTV in the future. However, the SAU does not make a commitment to offer a service which would allow access seekers to provide IPTV services.

Telstra’s network is designed to support the point to multipoint multicast capability required for future IPTV services.

95 PPP may also be carried over an IP network using the Layer 2 Tunnelling Protocol (L2TP)
A further difference between the proposed networks is the quality of service (QoS) capability. Managing packet flows using QoS maximises the efficiency of a customer’s broadband connection, allows new services to be provided and keeps costs down. Telstra’s network will support Ethernet based QoS capability suitable for delivery of IPTV and business data services. The SAU is not specific on the QoS issue. In any event, PPP/L2TP based architecture has limitations in supporting QoS: again, it is not standards based and requires vendor-specific implementation.

Telstra proposal promotes smooth transition for wholesale competitors

Telstra’s VSDL2 proposal also includes “POTS emulation”. Wholesale customers will be able to interface to the Telstra PSTN at the same 66 CCA locations and points of interconnection as they do today. Rather than require a significant investment in new switching equipment, the Telstra proposed solution will ensure that existing voice resale customers will be able to access services which have the same characteristics as the existing declared services of:

(a) PSTN origination;

(b) PSTN termination; and

(c) local call resale.

FANOC SAU could be implemented with no fibre

From a technical perspective, the services that are proposed in the SAU could be implemented with very little additional construction. Optus currently has a plan for deployment of 340 ADSL2+ exchanges. As a result, individual companies that are anticipated to be members of FANOC are able to provide all of the services set out in the FANOC SAU at the minimum service levels in that SAU.

The SAU does not commit to deploying any fibre at all and this is reflected in those minimum service levels. Further, this minimal deployment would not require sub-loop unbundling. The effect of the network build suggested in the G9 submission is not required to deliver the minimum service levels and it is unclear as to why the service descriptions and their associated service levels are set so minimally.

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96 Paul O’Sullivan presentation on 21 June 2007 at SingTel Investor Day 2007-Singapore

[See attached separate report from CRA.]
Annex 3: Pricing issues

1 In this Annex, Telstra explains its understanding of how the G9 pricing model works and sets out its main concerns with the price terms and conditions proposed in the G9 SAU.

The FANOC pricing model

2 Telstra’s understanding of G9’s pricing model is that the maximum charges for the 5 BAS products will be set as the sum of:

(a) the FANOC charge; plus
(b) the Pass Through Component.

3 In the First Period, the FANOC charge for a Basic Telephone Access Service is set at $10. FANOC also provides four bundled services, each of which includes the Basic Telephone Access Service and a broadband service at differing bandwidths. For a combined Basic Telephone Access Service and a 1.5Mbps broadband service, FANOC proposes to charge $14.23 in the First Period, just $4.23 more than the Basic Telephone Access Service alone. Charges for the bundled service in the First Period increase to a maximum of $35.38 for an “unlimited” bandwidth service.

4 The Pass Through Component includes the ULLS charge, including the monthly charge, the connection charge, any associated ULLS charges and any other liability, cost, expense or amount incurred by a FANOC Ownership Entity in connection with a ULLS forming part of the HFTP Network.97

5 G9 claims that the FANOC charges in the First Period are set on the basis of:

(a) estimated capital and operating costs;
(b) forecast penetration for the Basic Access Telephone Service of 100%;
(c) forecast penetration for standard broadband services of 72% in 3 years and 81% over the remainder of the 15 year SAU period; and

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97 See the definition of the Pass Through Component on page 6 of the FANOC Undertaking: FANOC Pty Ltd, “FANOC Special Access Undertaking, Submission to the ACCC” (30 May 2007).
(d) a capital asset value (CAV) of $1 billion at the end of the 15 year undertaking period.98

However, G9 does not commit to any one of these estimates in the SAU. Rather:

(a) any deviations from forecasts in estimated capital and operating costs would be passed onto access seekers in the form of higher prices after the First Period;

(b) any errors in forecasting demand for either the Basic Access Telephone Service or the standard broadband services in the First Period would be passed onto access seekers in the form of higher prices after the First Period; and

(c) there is nothing in the SAU that would require FANOC to retain a CAV of $1 billion at the end of the 15 year period.

Given the lack of commitment to its own estimates, the First Period access charges set out in clause 2.1 of schedule 3 are nothing more than arbitrary prices, with 100 per cent of the risk associated with any errors in the estimation of costs or demand forecasting borne by access seekers and ultimately consumers.

During the First Period, FANOC may also add new BAS Products at any time, with the maximum amount of the FANOC Component Charges for those BAS Products set at FANOC’s discretion.99

In the Second and Further Periods, FANOC can increase the Basic Telephone Access Service charge set out in clause 2.1 of schedule 3 by no more than CPI.100 However, for all other BAS products FANOC is free to set both the level and the structure of charges subject to the constraint that, based on forecast demand, the G9 will not over-recover its Target Revenue. The G9 can set the Target Revenue at any level it wishes by altering the level of depreciation recovered in each period. The only constraint imposed is that the level of depreciation in the Second and Third Periods must set such that the Opening CAV at the beginning

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100 FANOC allows for the introduction of other FANOC Component Charges for the Basic Telephone Access Service. If these charges were introduced then they would also be set at the discretion of FANOC.
of the third and fourth Access Periods is not less than 2/3 and 1/3 of the Opening CAV at the beginning of the Second Access Period.

10 In the Fourth Period, there does not appear to be any constraint on the level of depreciation that can be recovered in access prices. As the G9 SAU makes no commitment to the level of the CAV at the end of the SAU period, there would be nothing preventing the G9 from setting depreciation in the Fourth Period to a level that exceeded full cost recovery.

11 Telstra also notes that FANOC does not contemplate offering an unbundled broadband service. Therefore, when an access seeker takes a standard broadband service from FANOC, Telstra understands that it will also automatically become the voice provider for the end-user. As G9’s proposal involves cutting over 100 per cent of the copper lines in its footprint area, this means that there would be no other wholesale services available within the G9 footprint, such as LSS or wholesale xDSL, which would allow the provision of unbundled broadband services. Given that the Commission has not raised this as an issue in its discussion paper, Telstra assumes that the Commission is comfortable that competition will not be substantially lessened by excluding the provision of wholesale services that allow access seekers to compete in the provision of stand-alone broadband services. In its draft decision, Telstra requests that the Commission confirms its view on the implications for competition of G9’s proposal to only offer wholesale broadband services as part of a bundle with voice telephony services.

12 Telstra also notes that the Commission’s discussion paper states that FANOC will offer the same prices to all parties on a non-discriminatory basis. However, there does not appear to be any commitment to non-discriminatory price terms and conditions in the SAU. On the contrary, the SAU states that FANOC may set different charges for different access seekers:

“FANOC may set the charges for BAS products for each Access Seeker at lower charges than those set out in the Reference Price List and at different charges for different Access Seekers”.

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102 FANOC Pty Ltd, “FANOC Special Access Undertaking, Submission to the ACCC” (30 May 2007) clause 7.6.
In its draft decision, Telstra requests that the Commission clarify its views on whether the price terms and conditions in the SAU will be applied on a non-discriminatory basis in the light of clause 7.6 of the SAU.

**Inconsistency with past Commission decisions**

One of Telstra's main concerns is the inconsistency between the price terms and conditions set out in the SAU and the principles that the Commission has used in the past to assess cost-based access prices, particularly in the context of Telstra's undertakings. While Telstra does not necessarily agree with the approach the Commission has taken in the past, it is important that regulatory decision making is at least applied on a consistent basis across different access providers. Where the Commission believes it is appropriate to deviate from the principles it has previously applied, or the views it has previously expressed, it is important for Telstra to understand the basis on which the deviation is justified. These reasons could impact the way in which Telstra approaches its investment decisions and undertakings in the future.

In prior decisions, and particularly in the context of assessing Telstra's undertakings, the Commission has applied the “forward-looking” principle to its assessment of cost-based access prices. This principle requires that costs are estimated on the basis of providing the service in the future using the most efficient means possible and commercially available. To date, the Commission has placed substantial weight on the importance of optimal network design and efficient costs when assessing cost-based access prices (as has the Australian Competition Tribunal).

The rationale underlying the Commission's approach has been that the long-term interests of end-users are usually best promoted if access prices are set at the level that would prevail if the access provider faced effective competition. In a competitive market, an access provider would not be able to charge more for the use of its services than the efficient cost of providing the same services today. If an access provider attempted to charge in excess of efficient costs then

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an alternative provider could enter and undercut those prices based on the most efficient network design and operating practices.

17 It is unclear from the Commission’s discussion paper whether it intends to apply the same forward-looking benchmark to the assessment of G9’s cost-based access charges for the BAS services. If the Commission does not intend to apply this benchmark then Telstra requests that it explains why the principle of forward-looking network design is not necessary in this circumstance for access prices to be consistent with the legislative criteria.

18 If the forward-looking benchmark is to be used in the assessment of G9’s proposed pricing then it is Telstra’s view that G9’s proposed PPP/L2TP architecture cannot be considered best-in-use. The technical limitations of G9’s proposed network are set out in detail in Part B of this submission, however, in short:

(a) While the PPP/L2TP architecture is suitable for providing a best-efforts Internet-grade service, it is not suitable for multi-service triple-play. In fact, the industry trend is a move away from PPP/L2TP based architecture to support triple-play services where QoS and multicast are key requirements.

(b) This network architecture supports speeds up to a theoretical maximum of 24Mbps. This is nothing more than can be provided today using exchange based ADSL2+, which is already being provided by Telstra and a range of other industry players using their own DSLAM equipment.

(c) The costs associated with upgrading G9’s proposed network to a VDSL2 architecture are substantial. Such an upgrade would require the deployment of thousands of additional nodes to shorten copper loop lengths, and retrofitting of all equipment in existing nodes. Telstra estimates that it would cost approximately $1 billion to augment the outdated network architecture proposed by G9.

19 In Telstra’s view, there should be a mark-down applied to the proposed G9 network costs to reflect the lower service potential of that network relative to

106 These service providers include Optus, iiinet, Nextep, Soul, Primus and Agile.
VDSL2. For example, if the cost associated with the G9 network were 80% of VDSL2 network costs, but it only provided 40% of the service potential then it should be marked down by half.

Treatment of cost optimisation over time

Even if G9’s network were considered the most efficient network available today, this will not be the case in the future. Over time, as technology advances, the gap between the costs associated with G9’s network and the most efficient means of supply will continue to grow. The Commission’s approach to this issue in the context of Telstra’s services has been to continually re-optimise Telstra’s network, with the cost-savings passed onto access seekers but the actual costs associated with any such augmentation, including the write-off of Telstra’s existing assets, borne exclusively by Telstra.107

For example, the Commission has continually reduced its estimate of Telstra’s ULLS network costs over time. In March 2002, following a substantial analysis of ULLS network costs, which the Commission took more than two years to complete, it estimated ULLS network costs at $33 per service per month in Band 2 areas.108 At the end of 2003, the Commission issued a second report titled Final Determination for Model Price Terms and Conditions for ULLS. In this report, the Commission estimated ULLS network costs for Band 2 at just $12 per service per month.109 In its latest arbitration decisions on ULLS, the Commission has estimated the network costs for ULLS using an adjusted version of Telstra’s cost model. The Commission’s estimate is [c-i-c]. However, the Commission has also signalled that it is developing its own cost model for estimating the efficient cost of declared service and expects the results to be below those estimated using Telstra’s model.110

The SAU proposes a very different methodology. Under the G9 pricing model, G9 would be allowed to recover the costs associated with its actual network over

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107 For example, the Commission has been suggesting for some time that the costs of providing local access in rural areas of Australia should not be estimated using Telstra’s actual copper network technology. Rather, it has suggested that WiMAX technology is much more efficient and on this basis the costs to Telstra should be estimated on the basis of WiMAX, with no regard to the costs associated with augmenting Telstra’s network from a copper-based access network to a WiMAX network or the costs associated with writing-off Telstra’s existing copper network.
109 Australian Competition and Consumer Commission, “Final Determination for Model Price Terms and Conditions of the PSTN, ULLS and LCS Services” (October 2003), 73.
110 See for example, Australian Competition and Consumer Commission, “Local Services Review, Draft Decision on whether or not the ACCC should extend, vary or revoke its existing declaration of the local carriage service” (March 2006) Section 9.3, 90.
the full 15 years of the SAU, regardless of the efficiency of that network over
time. Further, contrary to the Commission’s approach towards Telstra, any costs
that G9 incurs in optimising the network over time would be passed straight
through to access seekers.

23 Telstra believes it would be inappropriate for the costs associated with both the
technically obsolete G9 network and the cost of upgrading that network over
time to be borne by access seekers while Telstra bears the full cost associated
with the continual re-optimisation applied to its PSTN. This is all the more the
case as the cost base on which G9 proposes to obtain services from Telstra is
determined on such a continually re-optimised basis.

Cost recovery over time and roll-forward of losses

24 The G9 pricing model includes a mechanism for rolling-forward losses incurred in
each period. That is, any costs that G9 fails to recover in the First Period,
regardless of the cause, can be rolled-forward and capitalised in the form of the
CAV to the Second Period. The pricing model continues to allow for the CAV in
the Second and Further Periods, although in these periods the CAV is also
calculated as the difference between costs and forecast revenues (not actual
revenues).

25 This is inconsistent with the position that the Commission has previously taken
on cost recovery over time. The Commission’s approach has been to allocate
costs to specific periods and if they are not recovered in that period then the
shortfall is borne by the access provider. Even where the failure to recover costs
has been a direct result of the Commission’s own forecasting errors, it has
refused to allow Telstra to carry forward losses to future periods. For example, in
the case of ULLS specific costs Telstra argued that:

“It would be inconsistent with the statutory criteria to allow access seekers to
escape contributing to the recovery of costs incurred on their behalf merely
because those costs were arbitrarily allocated to periods when demand was
low, even though those costs yielded benefits which continued into period
when demand was high”111

The Commission rejected Telstra’s argument in both its 2005 and 2006 Final ULLS Decisions on the basis that:

“considering historic profits or losses when determining the price for the ULLS was inconsistent with the ex ante approach adopted by both the ACCC and Telstra. Further, including historic profits or losses would shift all the risk of demand forecast errors onto access seekers...”

In terms of how the Commission has previously allocated costs to specific time periods for recovery, Telstra notes that at least since 2000, the Commission has adopted a tilted annuity to reflect the profile of cost recovery in a competitive market. For assets at risk of technological obsolescence, a tilted annuity front-loads the profile of cost recovery over time, recovering more in early years and less in later years of the asset’s life. This mirrors what would occur in a competitive market where service providers would charge higher prices in the early years of operation to take into account the fact they will need to reduce prices over time to remain competitive and still fully recover their costs.

For example, in assessing Telstra’s PSTN SAU for 1999/00 and 2000/01 the Commission used a tilted annuity stating that:

“..the annuity used by the Commission is a tilted annuity which reflects the price trends in the replacement costs of assets and which therefore seeks to reflect cost recovery in a potentially contestable market...”

and

“The Commission recognises the problem of technical obsolescence by “titling” the annuity”

The importance of front-loading cost recovery over time was also recognised by NERA, when it was commissioned by the Commission to estimate the long-run incremental cost of Telstra’s PSTN. In particular, NERA noted that the proper measurement of depreciation takes on particular importance where there is...
substantial technological progress, as is the case with the telecommunications industry. NERA stated that:

“If the depreciation profile that is actually used fails to mirror the economic depreciation profile, this will lead to a failure to recover the cost of investment over an asset’s life. This can be seen from the fact that, as price and output falls and costs increase over the lifetime of an asset, it will become progressively more difficult to finance depreciation.”

NERA suggested that:

“In practice, where there is significant technological progress (as is expected to be the case for things like switching and multiplexing equipment) and hence reducing capital equipment prices over time, sum of the years’ digit depreciation often gives the best approximation to economic depreciation.”

In contrast to the methodologies recommended and applied by both the Commission and NERA for estimating efficient, cost-based access prices, the approach embedded in the G9 pricing model involves back-loading cost recovery. G9 sets low prices for broadband services in the First Period and introduces the concept of a CAV to capture all un-recovered costs. Regardless of the reason for under-recovery in the First Period – whether this be as a result of failing to reach demand forecasts, capital costs exceeding expectations or inefficient operating practices – the un-recovered costs are captured in the CAV, capitalised and pushed into the Second Period. If those costs are not recovered in the Second Period or there are further costs in the Second Period left un-recovered (compared with forecast revenues) then these are again captured in the CAV and pushed to Further Periods for recovery.

Therefore, unlike the methodology recommended by the Commission and NERA for Telstra’s network, which involves recovering a higher share of costs earlier, the G9 methodology pushes out cost recovery to later periods. If the Commission’s assessment of G9’s allocation of costs over time and recovery of past losses differs from the Commission’s previous position on these issues, Telstra requests that the justification for this change in position be provided in the draft decision.

33 In its previous decisions, the Commission has focused considerable attention on the allocation of common costs between network components and services. This is understandable given that common costs account for the majority of total costs in a telecommunications network and hence the allocation of these costs is one of the key factors determining the level of access prices.

34 In terms of which costs can be allocated to a service, the Commission’s views are set out in its Access Pricing Principles – costs that are not causally related to the provision of access services should not be recovered in access prices and when allocating common costs, access prices should not exceed stand-alone costs\textsuperscript{116}. It is not clear to Telstra that the pricing proposed by FANOC is consistent with the views expressed by the Commission.

35 The SAU includes a specific allocation of costs between the BAS products for the First Period. The FANOC charge for the Basic Telephone Access Service is $10 per month, while the charge for the bundled Basic Telephone Access Service and 1.5Mbps broadband services is $14.23, only $4.23 more. This means that the FANOC charge for Basic Telephone Access Service accounts for two-thirds of the total FANOC costs (excluding the Pass-Through) recovered in the First Period. In Telstra’s view, this share of costs appears extremely higher given that the proposed FANOC charge for the Basic Telephone Access Service does not include the cost of ULLS or a contribution to the funding of services in high cost areas. However, there is no evidence that FANOC bears any incremental costs in providing that Service, much less incremental costs proportionate to the proposed share of allowed revenues. Telstra urges the Commission to test whether the $10 per month allocated to the Basic Telephone Access Service breaches the Commission’s Access Pricing Principles by exceeding the stand-alone efficient cost of providing the service and is therefore being used to cross-subsidise the cost of providing broadband services.

36 In terms of how to allocate costs to a service, the Commission has generally relied on usage-based measures for allocating common costs. For example, in the only cost modelling exercise the Commission undertook of Telstra’s PSTN it allocated switching and transmission costs equally to every minute of traffic

that utilised that equipment, regardless of the end-use of that traffic. Similarly, the Commission has allocated CAN costs to services either on the basis of capacity or number lines. Telstra is also not aware of any decision where the Commission has allowed the use of an alternative methodology of allocating common costs such as Ramsey pricing. In fact, the Commission has expressly rejected the application of Ramsey pricing in the context of setting access charges for mobile terminating access, where it cited the uncertainty associated with demand elasticities as one of the main problems with applying this approach.\footnote{Australian Competition and Consumer Commission, “Optus’s Undertaking with respect to the supply of its Domestic GSM Terminating Access Service, Final Decision” (2006) 77.}

In contrast to past Commission decisions, the SAU proposes that the Commission have no input into the allocation of common costs. Rather, in the Second and Further Periods, the allocation of costs between broadband services would be left completely to G9’s discretion. While NERA claims that such an approach would promote efficient pricing by allowing a Ramsey allocation of common costs, it also notes that it is not aware of any jurisdiction in the world where such an approach has actually been implemented.\footnote{The only other instance Telstra is aware of in which the Commission has had to play a significant and direct role in assessing investment is the Regulatory Test for investment in inter-State electricity transmission assets. The difficulties associated with this test have elicited considerable comment, particularly in relation to market benefits, which are strongly affected by the commercial impact of any approved augmentation on participants operating either side of the inter-state transmission asset. The Regulatory Test has recently been amended by the AEMC, but has come in for further criticism by the Electricity Reform Implementation Group, who has proposed that the Test be split into two stages. The first would be the development of a National Transmission Development Plan (NTDP), which would develop a long term integrated plan for the grid. The second stage (which in effect would replace the Regulatory Test) would involve subjecting any project proposed under the NTDP to a project assessment and consultation process to ensure it represents the most efficient alternative to meeting reliability standards and providing market benefits within the confines of the NTDP. See Electricity Reform Implementation Group, “Energy Reform, The way forward for Australia, A report to the Council of Australian Governments”, January 2007 in effect this would narrow the regulators role to more of a compliance role. This experience highlights the risks involved in making the Commission the arbiter of what are fundamentally commercial decisions.}

In fact, the SAU envisages a complete role reversal between the access provider and the regulator. Rather, than assessing the allocation of common costs, as the Commission would normally do in the context of any other undertaking, G9 proposes that the allocation of common costs should be left to its discretion and the Commission should instead perform the role of determining whether investment in the network over time is prudent, a role that it is presumably not as well placed to perform as the network owner.\footnote{In effect this would narrow the regulators role to more of a compliance role. This experience highlights the risks involved in making the Commission the arbiter of what are fundamentally commercial decisions.}

If the Commission believes it is appropriate to deviate from its past position on the allocation of costs, including the use of Ramsey pricing via a global price-
cap, Telstra requests that the Commission sets out its reasons as to why the deviation would be appropriate in the case of the SAU.

Claimed efficiency properties

40 NERA, in its submission on behalf of the G9, claims that the proposed pricing mechanism amounts to a global price cap, and cites Laffont and Tirole to the effect that such a global price cap has valuable efficiency properties. This claim is incorrect.

41 In effect, the proposed pricing mechanism is not a price cap but rather a revenue cap. As a general matter, the efficiency properties of price caps simply do not extend to revenue caps. Indeed, NERA itself has emphasised this point in other contexts (including in reports by the author of the NERA submission in behalf of the G9 application), though it does not cite those reports in its G9 submission. For example, in a recent report for the Ministerial Council on Energy, NERA stated that:

"Under a revenue cap form of price control, firms have little or no incentive to ensure that their prices are calibrated so as to reflect marginal cost or to avoid distorting customers' usage decisions."

42 This directly contradicts the statements NERA makes in its G9 submission.

43 As well as lacking conventional efficiency properties associated with some forms of price cap regulation (in the sense of incenting a movement to an efficient structure of prices), revenue caps can lead to inefficient allocations of risk. For example, if volume variances are correlated with overall income movements, revenue caps will result in price increases at times when consumers' marginal valuations of income are relatively high. This also has implications for the comparisons NERA draws between what is said to be the ceiling rate of return

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121 See NERA Economic Consulting, “Economic Properties of the FANOC SAU (2007) Section 4.3, 17, where it claims that the global price-cap is a major potential advantage of the SAU in terms of its ability to promote the objectives of Part XIC of the TPA.
122 NERA’s discussion of this point is also itself incorrect, as it fails to distinguish, even for conventional price caps, between linear and non-linear prices. NERA states that price caps are efficient because they induce a movement to a Ramsey-like price structure. However, where non-linear prices are superior to linear prices, a conventional price cap, or even a global price cap, may prevent those non-linear prices from being imposed.
under the G9 proposal and the WACC it attributes to Telstra. In effect, there is no reason to expect that the network revenues that will flow to the G9 under a revenue cap will have anywhere near the systematic risk that bears on the Telstra network, which is regulated under price caps (as well as through access price regulation). The difference in systematic risk between price cap regulated networks, and networks that are regulated through revenue caps, is widely recognised in the academic literature\textsuperscript{123} (though it is not mentioned by NERA in its G9 submission) and is one of the many factors that invalidate NERA’s claims in respect of the WACC.

In short, the G9’s proposed pricing mechanism:

(a) Does not create incentives for an efficient structure of prices; and

(b) Shifts the bulk of the risk associated with the venture on to end-users.

**Pricing uncertainty**

Related to the allocation of risk, the G9 SAU provides no certainty regarding prices over time. Beyond the First Period, G9 has unlimited discretion over the level and structure of access charges. Given that the G9 are proposing very low charges for broadband services in the First Period, they would have an extremely large cost pool to recover in the later periods of the SAU. Even if G9 spend no more than the initial capital outlay of $3.6 billion, then substantial price increases after the First Period will be required if the extremely optimistic demand forecasts are not achieved. Telstra has run a range of alternative scenarios to demonstrate the scope available to G9 in the pricing formula.

**Error in demand forecasting**

The pricing model proposed by G9 is extremely sensitive to forecast demand. Telstra’s understanding of the pricing model is that G9 does not need to set demand forecasts (and hence prices) until the beginning of each Access Period. Therefore, if the level of demand in the First Period turned out to be much lower than expected, the G9 pricing model would allow for all losses to be rolled-forward in the CAV to the beginning of the Second Period. Further, the access

prices for the Second Period would be calculated based on lower demand forecasts than suggested in G9's SAU documentation.

47 Therefore, if Telstra did not cut over all of its services to the G9 network then this would have a substantial impact on the level of access prices that could be set using the G9 pricing model. For example, if the level of demand for the Basic Telephone Access Service was set at 50% rather than 100% as assumed in the G9 model and demand for broadband were to plateau at 65% rather than the 81% then the FANOC component charge could be extremely high after the First Period.

48 Setting the level of depreciation well within the constraints set out in the SAU, the FANOC component charge for the bundle of Basic Telephone Access Service and broadband could increase by 263% by the end of the Second Period and by 369% by the end of the Third Period compared with the First Period charges set out in the SAU (i.e. the 1.5Mbps charge would increase from $14.23 per month at the beginning of Period 1 to $51.72 by the end of Second Period, and $66.72 by the end of the Third Period). The increases in charges for the 1.5Mbps service possible under this scenario using the G9 pricing model are illustrated in the figure below.

49 Given that the FANOC component charge together with the Pass-Through Charge could easily exceed today's current wholesale prices for the same service, this would call into question the viability, much less efficiency, of the G9 network. Therefore, it would appear that the G9 proposal is dependent on cutting over all of Telstra's wholesale and retail traffic in order for the resulting access prices to be sustainable.
Similarly, if the costs that G9 incurs in the First Period exceed its initial estimates then prices in the Second and Further Periods could be increased substantially compared with the First Period pricing. For example, if costs exceeded forecasts in the First Period by one-third (and assuming no further capital expenditure was required after the First Period) the FANOC charge for the bundled Basic Telephone Access and broadband service could increase by 34% by the end of the Second Period and by 39% by the end of the Third Period compared with the initial prices set out in the SAU. The figure below sets out the increase in FANOC charges for the Standard Broadband - 1.5Mbps service.
In addition to the issues above, the Pass Through Component of G9’s pricing model raises significant issues. It is another example of why G9’s SAU needs to be considered in light of the various statutory amendments proposed by G9, and not in a vacuum.

With an eye to Telstra’s current High Court proceedings relating to the ULLS and LSS, the G9 has proposed an amendment to section 152EB of the TPA which would have the effect that access seekers, rather than the Commonwealth, would be required to pay “just terms” compensation for acquisitions of property arising under Part XIC of the TPA. This amendment, if passed, would result in FANOC being obliged to pay any “just terms” compensation for any acquisitions of property as a result of the supply of ULLS (as varied to allow for sub-loop unbundling). Telstra’s view is that this would be an extremely significant liability.

The definition of Pass Through Component in the G9 SAU is drafted widely so as to catch any liability of FANOC arising under the amended section 152EB in respect of sub-loop unbundling.
The net result of these two measures is that any “just terms” liability arising from the supply of ULLS would be passed on to access seekers (including Telstra whose property was acquired in the first place).

Telstra believes these proposals would be held to be constitutionally invalid as being directly inconsistent with and/or an attempt to avoid the guarantee of “just terms” for acquisitions of property under section 51(xxxi) of the Constitution. This alone has implications for the ACCC’s power to accept the G9 undertaking on the current terms.

In addition, even if the measures were valid, the amount of potential “just terms” liability under the amended section 152EB (and therefore the size of the Pass Through Component that flows into access prices) is uncertain – and failing agreement between Telstra and FANOC (which is unlikely), the amount would be determined by a Court. Telstra’s view is that it would be an extremely significant amount. In any event, this uncertainty casts an enormous shadow over the entire pricing regime in the G9 SAU. It cannot be in the LTIE for the ACCC to accept the SAU in circumstances where such a significant component of the G9 pricing model is effectively at large.

In summary, the pricing model set out in the G9 SAU:

(a) proposes to set prices in the First Period on an arbitrary basis rather than in line with any principles of economic efficiency or the legislative criteria;

(b) proposes a formula for setting prices in the Second and Further Periods, which has the scope to substantially increase access prices over time, thereby imposing an unacceptable level of risk on access seekers and ultimately end-users;

(c) appears dependent on cutting over Telstra’s retail and wholesale traffic, without which access prices would need to increase to unsustainably high levels in order to recover costs;

(d) involves the application of a revenue cap that would not deliver the claimed efficiency benefits but would rather shift the bulk of the risk associated with the proposal to end-users;

(e) is inconsistent with many of the principles and views expressed by the Commission in its previous decisions on efficient cost-based access prices,
without any discussion of why these deviations would be consistent with the legislative criteria; and

(f) makes no commitment to non-discriminatory price terms and conditions.
Annex 4: WACC under the FANOC Undertaking

[See attached separate report from CRA.]
Annex 5: Current Vertical Integration Regulatory Safeguards

1 G9 and NERA argue, in effect, that the G9 model is a “cure” for the competitive ills which access seekers face as a result of Telstra’s vertical integration. G9 and NERA refer in general terms to the alleged problems of vertical integration, and fail to refer to the operational safeguards which have already been addressed in Australia to address such concerns.

2 Schedule 1 Part 8 of the *Telecommunications Act 1997* (as recently amended) requires Telstra to have an operational separation plan to achieve transparency and equivalence of wholesale eligible services.

3 The plan approved by the Minister includes:

(a) Operational Separation Plan;

(b) Customer Responsiveness Strategy;

(c) Service Quality Strategy;

(d) Information Equivalence Strategy;

(e) Information Security Strategy;

(f) Price Equivalence Framework; and

(g) Internal contracts.

<table>
<thead>
<tr>
<th>NERA / G9 Submission</th>
<th>Current regulatory safeguards applying to Telstra</th>
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<tbody>
<tr>
<td>Criticisms of Telstra or vertically integrated incumbent</td>
<td>Operational separation includes a price equivalence framework which targets key services that wholesale competitors rely on to compete effectively.</td>
</tr>
<tr>
<td>No access to the same prices</td>
<td>The Price Equivalence Framework sets out the arrangements and approach under which Telstra will conduct the relevant imputation</td>
</tr>
<tr>
<td>When considering its downstream competitive strategy, a vertically integrated firm will rationally ignore published access prices and focus solely on the economic cost of providing access. The published access price is merely an internal mechanism.</td>
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<tr>
<td>NERA / G9 Submission</td>
<td>Current regulatory safeguards applying to Telstra</td>
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<tr>
<td>Criticisms of Telstra or vertically integrated incumbent</td>
<td>tests. The effect is that in setting retail prices Telstra Retail personnel have to factor in the equivalent input costs to competitors.</td>
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<tr>
<td>(accounting) transfer payment (para 2.3.1 NERA report)</td>
<td>Clause 4 of the Operational Separation Plan requires that the Service Quality Strategy includes provisions requiring:</td>
</tr>
<tr>
<td>No access to the same quality of service</td>
<td>(a) the frequency, completeness and accuracy of the provision of call or data traffic record information for Eligible Services offered to wholesale customers is at least equivalent to that provided to the Retail Business Unit in respect of the comparable Eligible Service by implementing billing systems with the capability to provide electronic transfer of call usage records and other billing data with the provision of a summarised monthly invoice in electronic format;</td>
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<tr>
<td>Access seekers [should] have access to the same quality of service and information from the access provider. If some access seekers are provided with better QoS and information from the access provider this can distort downstream retail. Also described as “sabotage” (Paragraph 2.3.2 NERA report).</td>
<td>(b) the billing information provided to the Wholesale Business Unit in relation to the supply of an Eligible Service is at least equivalent to that provided to the Retail Business Unit in respect of the comparable Eligible Service by ensuring that the Wholesale Business Unit will have equivalent access to the billing feed from the Network Data Mediation Layer;</td>
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<tr>
<td>Telstra is to describe target timeframes for</td>
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<tr>
<th>NERA / G9 Submission</th>
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<tr>
<td>Criticisms of Telstra or vertically integrated incumbent</td>
<td>the provision of timely and effective access to Telstra’s exchange buildings to relevant wholesale customers and commit to measure performance against those timeframes; Telstra is to implement processes to promote the principle of equivalence of supply by the Key Network Services Business Unit of Fault Detection, Handling and Rectification, and Service Activation and Provisioning; and Telstra is meets certain service standards described in clause 5.18 of the Operational Separation Plan, which will be measured quarterly. Clause 4.5 notes that by complying with the Service Quality Strategy, Telstra will ensure the standard of delivery of Eligible Services made available to wholesale customers is equivalent to the standard of delivery of comparable Eligible Services supplied to the Retail Business Unit.</td>
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<tr>
<th>No transparency of the regime</th>
<th>The following strategies are designed to allow for transparency as to Telstra network:</th>
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<tbody>
<tr>
<td>Criticisms of the incumbent in relation to transparency of the regulatory regime (para. 4.2.2 of NERA report)</td>
<td>• service quality strategy; • information equivalence strategy; and • customer responsiveness strategy. The operational support business unit is required to contract on equivalent terms with Telstra Wholesale and Telstra Retail. Telstra</td>
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<td>NERA / G9 Submission</td>
<td>Current regulatory safeguards applying to Telstra</td>
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<tr>
<td>Criticisms of Telstra or vertically integrated incumbent</td>
<td>is required to appoint a compliance officer with oversight of operational separation. Telstra is required to present an annual compliance report, including an external auditors report. Telstra is also required to provide information on request to the Commission as well as compile and create documents that the Commission deems necessary for it to advise on compliance.</td>
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<tr>
<td>No efficient pricing</td>
<td>The Commission has full oversight of access pricing for declared services. As discussed in Part C, the G9 pricing formula fails to meet the stringent tests which the Commission has applied to Telstra pricing, including the treatment of depreciation, the non-recovery of network optimisation costs and the strict allocation of common costs.</td>
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</table>

Standard regulatory regimes for vertically integrated monopolies, such as TSLRIC pricing do not encourage efficient pricing. However because FANOC is not vertically integrated a wholesale price cap applied to FANOC would have the desirable theoretical properties of a global price cap without the undesirable administrative aspects (para 4.3 of the G9 submission).
<table>
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<tr>
<th>NERA / G9 Submission</th>
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<tbody>
<tr>
<td><strong>Criticisms of Telstra or vertically integrated incumbent</strong></td>
<td><strong>Clause 4.6 of the Operational Separation Plan requires an Information Equivalence Strategy. This strategy requires Telstra to provide a Network Notification Process consisting of two reporting frameworks:</strong></td>
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<tr>
<td><strong>No access to the same information</strong></td>
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<tr>
<td>The timely provision of information is important to access seekers (para. 4.4 of the G9 submission).</td>
<td>(a) the Long Term Notification Report (to be more fully described in the Information Equivalence Strategy) will be prepared and provided to affected wholesale customers every 12 months and will contain general details of any relevant change in network functionality, network architecture, network capacity and operational support systems where:</td>
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<td>(i) the relevant change will adversely affect the availability or functionality of Eligible Services that are supplied by Telstra to that wholesale customer;</td>
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<td>(ii) Telstra has entered into a binding contract with a vendor for the supply of products or services necessary for the implementation of the relevant change;</td>
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<td>(iii) Telstra has received all internal approvals necessary in order to implement the relevant change; and</td>
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<td>(iv) the relevant change is intended to be implemented within a two year period from the date of the Long Term Notification Report;</td>
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<td>NERA / G9 Submission</td>
<td>Current regulatory safeguards applying to Telstra</td>
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<tr>
<td>Criticisms of Telstra or vertically integrated incumbent</td>
<td>(b) a series of short term or operational notifications that will be made to relevant Telstra wholesale customers on a more frequent basis. It is expected that these will generally include notifications in relation to:</td>
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<td>(i) planned events;</td>
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<td>(ii) certain access network upgrades;</td>
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<td>(iii) availability of ADSL capability;</td>
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<td>(iv) exchange service area information;</td>
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<td>(v) major service impacting network incidents;</td>
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<td>(vi) other general service or provisioning impacting matters relating to operational support systems; and</td>
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<td></td>
<td>(vii) disaster recovery plan information.</td>
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<tr>
<td>Clause 4.7 provides that the Information Equivalence Strategy includes provisions that allow and support customer forecasting of network demand.</td>
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</tbody>
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<tr>
<th>Discrimination on Technical Issues</th>
<th>Telstra is required to provide equivalent treatment. The network support unit is required to operate at arm’s length from Telstra Wholesale and Telstra Retail.</th>
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</thead>
<tbody>
<tr>
<td>Technical decisions may be made that do not consider the interest of access seekers or that specifically disadvantage access seekers in comparison to the incumbent’s own interests (para. 4.4 of the G9</td>
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<tr>
<td><strong>NERA / G9 Submission</strong></td>
<td><strong>Current regulatory safeguards applying to Telstra</strong></td>
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<tr>
<td><strong>Criticisms of Telstra or vertically integrated incumbent</strong></td>
<td></td>
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<tr>
<td>No input to incumbent priorities, for example in network planning</td>
<td>No incentive to maximise the utilisation of the network</td>
</tr>
<tr>
<td>In contrast to the current situation with Telstra, the design of the network, including technological specification of upgrades to the network, will be decided in a manner that takes into account all assets currently deployed – by both Telstra and other telecommunications providers ( paras 4.4 and 5.5 of the G9 submission).</td>
<td>Lack of vertical integration means that FANOC will maximise utilisation of the network (para.4.1 of the G9 submission). Where a network is owned by an incumbent who can provide services in the retail market, then the provision of services to an access seeker can be viewed as providing a service to a competitor in the retail market. Therefore it follows that an incumbent would not have as strong an incentive to maximise the utilisation of the network, but instead would have an incentive to minimise the utilisation of the network (para 4.4 of the G9 submission).</td>
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<tr>
<td>The operational separation regime sets up different set of incentives between Telstra Wholesale and Telstra Retail. Telstra Wholesale personnel cannot participate in Telstra Retail activities. Telstra Wholesale personnel are rewarded on the performance of the wholesale business. Each of Telstra Wholesale and Telstra Retail have separate incentives to maximise their own businesses. The SAOs and equivalence requirements of the operational separation regime also ensure that Telstra Wholesale has equivalent access and opportunity to utilise the regulated network services to maximise its wholesale business.</td>
<td>As noted above Clause 4.7 provides that the Information Equivalence Strategy includes provisions that allow and support customer forecasting of network demand. Clause 4.11 also provides that as part of the Customer Responsiveness Strategy Telstra will conduct regular reviews with wholesale customers about the quality of eligible services supplied and to provide for any views or advice in how the operational or technical attributes of services could be improved.</td>
</tr>
</tbody>
</table>
Annex 6: G9 Statements not backed by commitments in the SAU

Telstra is also concerned that the Submission to the Commission, the NERA report and the Submission to Government would tend to give the impression that the SAU delivers more that actually does. Important advantages, benefits or procedures put forward by the G9 are either addressed in very limited detail in the SAU or missing altogether. Set out below are the claims made about the proposed services and the relevant references, or lack of, in the SAU.

<table>
<thead>
<tr>
<th>Submission to Commission</th>
<th>SAU</th>
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<tbody>
<tr>
<td>FANOC will construct and own the HFTP Network</td>
<td>Nowhere in the SAU does G9 commit to FANOC constructing a FTTN. Given the low speeds and best efforts service quality, FANOC could string together a network sufficient to offer those services with a limited number of nodes, the existing DSLAMs of G9 members based in Telstra exchanges and, of course, the Telstra copper network. Additionally, had the members of the G9 seriously determined to make the financial commitments likely required to bring the project to completion, or to cover its costs should the proposed capital-raising auction fail in whole or in part, those that are listed entities would likely have obligations to disclose that fact. None have done so. As a result, the Commission is entitled to draw the conclusion that the members of the G9 do not expect to be providers of the service for which the application has been lodged.</td>
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<tr>
<td>The initial network would cover approximately 4 million homes in five capital cities</td>
<td>There is no commitment to the coverage of any FTTN – there is no Deployment Schedule set out in the document.</td>
</tr>
<tr>
<td>The network will be able to be transitioned to a VDSL network when</td>
<td>There is no transition path for VDSL in the SAU –</td>
</tr>
<tr>
<td>Submission to Commission</td>
<td>SAU</td>
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<tr>
<td>there is sufficient consumer demand.</td>
<td>VDSL is not mentioned.</td>
</tr>
<tr>
<td>The interest of users of standard telephone services would be met in the conversion to the Network.</td>
<td>FANOC is not providing the standard telephone service, but the access seekers will. Successful transition will depend as much on them as FANOC. There is no mention in the SAU of how FANOC will manage transition, what will be expected of FANOC and access seekers in the transition and what it will do in the event that there are major failures in the transition. There is no accompanying statement from G9 members, who presumably will be major users of the FANOC Basic Telephone Access Service, about whether they intend to install the infrastructure to support their own switched telephony services, whether they will be using software based switches or TDM, how they intend to manage the migration and what they will do if something goes wrong and consumers lose their telephone service..</td>
</tr>
<tr>
<td>The shareholding and board of FANOC will be reconstituted at the financing phase.</td>
<td>There is no commitment to do this, or recognition of this, in the SAU.</td>
</tr>
<tr>
<td>Wholesale customers will own a separate entity that is identified in the SAU as the BAS Manager.</td>
<td>Clause 4.1(d) provides that each access seeker will be entitled to be a BAS Manager Member and will be entitled to voting rights. It is not clear what is to occur if an access seeker does not wish to be an BAS member or exercise its voting rights. Many access seekers will be relatively small and as the TAF experience shows, reluctant to be involved in industry bodies due to cost and time involved</td>
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<tr>
<td>Submission to Commission</td>
<td>SAU</td>
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<tr>
<td>No two access seekers will have more than 40% in the BAS Manager.</td>
<td>It is not clear how the voting shares capped at 40% will be allocated between the two largest network users. If Telstra has 70% of the traffic and SingTel Optus has 20% of the traffic, is the 40% rateably allocated between them or does SingTel Optus get half (i.e. 20%)?</td>
</tr>
<tr>
<td>FANOC will only serve wholesale customers – FANOC will not provide any retail telecommunication services.</td>
<td>Clause 4.1(a) provides that no FANOC Ownership Entity, or a subsidiary of any FANOC Ownership Entity, will provide any Carriage service to an person that is not an access seeker. Access seeker is defined as a carrier or carriage service provider to which a FANOC Ownership Entity supplies a BAS product, or that has requested the supply of a BAS Product. The definition of access seeker therefore does not exclude a FANOC Ownership Entity or a subsidiary of a FANOC Ownership Entity from becoming an access seeker and legitimately seeking to be supplied with a BAS product.</td>
</tr>
<tr>
<td>FANOC and Speedreach will enter into a management agreement - the legal relationship between the BAS Manager and FANOC will principally be governed by a management agreement.</td>
<td>There is no provision for what is to occur if the BAS Manager and FANOC fail to enter into a management agreement on day one. It is also not clear what the Management Agreement will look like. Importantly the SAU does not specify if obligations given to the BAS Manager (such as reviewing and participating in Budgets) are functions of the BAS Manager Board, its executives or a matter on which the members will vote. The Submission refers to voting on “key” issues</td>
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<tr>
<td>Submission to Commission</td>
<td>SAU</td>
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<td>but does not define what these are.</td>
<td>FANOC seems to have power to introduce and vary technical specifications and non-price terms over the objection of the BAS Manager, despite the BAS Manager's sole being touted as one of the main advantages of this entity. Clause 6.6, while dressed up in language of acting reasonably, allows FANOC to reject the BAS Manager's position if FANOC considers it not to be Commercially Prudent, which is a very broad, ill defined concept. While clause 6.4(a) provides that the Basic Telephone Access Service cannot be withdrawn or varied without the Commission's consent, the service description itself allows FANOC to impose any other limitations or requirements which it thinks fit (which, as it is part of the service description is presumably not a variation). Clause 6.4(b) allows the other Initial BAS Products to be withdrawn after the first 3 years.</td>
</tr>
<tr>
<td>FANOC and Speedreach will develop technical specifications for a range of different services</td>
<td>The minimum service is only at a bit rate of 1.5 Mbps and even then it is only a “target”.</td>
</tr>
<tr>
<td>Initial services contemplated by the Undertaking are Standard Broadband services of different bandwidths of 1.5 Mbps, 6 Mbps, 12 Mbps and 24 Mbps.</td>
<td>The minimum service is only at a bit rate of 1.5 Mbps and even then it is only a “target”.</td>
</tr>
<tr>
<td>A three year rollout of the network is planned which is estimated to be around 500 nodes per month.</td>
<td>As noted above there is no commitment to a three year rollout in the SAU.</td>
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<tr>
<td>G9 estimates that further regional installations could be undertaken at the rate of 250 per month.</td>
<td>There is no commitment to rollout the network to regional areas.</td>
</tr>
<tr>
<td>Submission to Commission</td>
<td>SAU</td>
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<tr>
<td>The BAS Manager will comprise directors nominated by members of the BAS Manager. It is anticipated that the chairperson and a number of other directors will be required to be independent of any particular member/access seeker. G9 asserts that operational decisions regarding the HFTP Network will be taken by the BAS Manager which will engage an independent executive team supervised by a board comprised of independent directors and directors appointed by BAS Manager members.</td>
<td>The SAU does not specify how these arrangements are to operate. It is left to the Management Agreement which is not yet negotiated and may never be agreed.</td>
</tr>
<tr>
<td>G9 asserts that FANOC will have very focused network and service objectives related to the wholesale BAS products provided to access seekers using the HFTP network (para 4.4 G9 Submission).</td>
<td>The SAU does not specify what these are or does it specify a process or methodology for the measurement of or reporting on service levels nor the consequences of not meeting service levels</td>
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</table>
The Commission seeks views of interested parties on the reasonableness of all the terms contained in the body of the Undertaking with reference to the matters outlined in Appendix 1 to this Discussion Paper.

**Telstra Answer**

The G9 SAU *does not meet the long term interests of end-users* because:

- broadband end-users will face degraded services because the broadband wholesale services promised by G9 are of a lower service quality (no business grade services) and lower speeds (only a best efforts 1.5 Mbps) than existing broadband services supplied on Telstra’s current network;

- despite quality reductions, prices may rise as FANOC’s pricing methodology provides no comfort on price levels and grants wide discretions to FANOC (as detailed in Annex 3) without the assurances that the Commission has sought from Telstra;

- residential and business end-users will face substantial risks to their basic telephony services in the course of the compulsory migration of the entire PSTN base in the FANOC service areas and the ongoing supply of services by means of softswitching without the transitional safety net of the existing TDM switching, This has not been attempted on this scale anywhere in the world. G9 proposes to attempt it without giving any enforceable undertakings in relation to transitioning or continuity of service;

- corporate end-users will lose access to existing high quality, high speed data services supplied on Telstra’s current network, such as Frame Relay, ATM and Centrex. The SAU contains no undertaking as to development of alternative services;

- G9 has provided no details of how it will deal with the substantial technical and service challenges in supplying over the FANOC network a range of essential services currently available to end-users, such as public payphones, traffic control systems and services to persons with life-threatening illnesses;

- existing customer service levels and critical emergency services are put at risk by the complex, transaction heavy inter-operator processes required to support provisioning and fault systems. The SAU contains no commitments to QoS which would enable access seekers to meet their obligations to customers, including the CSG;
• the migration pathway to more advanced services is made more uncertain, costly and slow;

• there will be limited or no innovation under the SAU. The role of the BAS Manager ensures that all access seekers will be aware of new products before they are available to end-users. Inevitably this will lead to standardisation over time as every access seeker knows what every other access seeker can provide (and may lead to collusion);

• increased quality of service and innovation are likely to be delivered more quickly under the counterfactual of the possibility of Telstra upgrading its network to VDSL2. Once the regulatory uncertainties are resolved, Telstra will move quickly to deploy its VDSL2 network. The resolution of regulatory uncertainties should not be counted as a delaying factor in relation to the Telstra proposal because G9 is also seeking regulatory measures before it proceeds; and

• the considerable costs imposed by the above issues are not brought to account by G9, yet will be borne by end users.

The G9 SAU fails to promote competition because:

• it seeks to anoint G9 as a “winner” and award it a protected monopoly, while permanently blocking the asset owner, Telstra, from ever building its own FTTN network;

• the scope of competitive activity will diminish because access seekers will lose access to a number of broadband, data and voice services currently supplied by Telstra due to the technical limitations of the FANOC network;

• it imposes inefficiently high costs which will be passed on through inefficient access prices, and distort competitive outcomes; and

• the incentives inherent to G9’s proposed structure and governance model will mean there is limited or no product innovation and a significantly enhanced risk of collusion on price and non-price issues.

The G9 SAU will not result in the economically efficient use of infrastructure because:

• it disables a functioning network that is already capable of delivering what the proposed G9 network could;
• it delivers services which are more restrictive, of lower quality and of higher risk than the existing services, while demanding an immunity from competitive overbuild;

• the vertical separation model it proposes will increase costs and compromise efficiency; and

• those additional costs will be passed on to access seekers who will face increased capex and opex costs to maintain current interconnection and service arrangements.

The G9 SAU will not result in economically efficient investment in infrastructure because it:

• it allows G9 to embark upon an investment in soon-to-be-outmoded technology, foregoing more efficient investment and upgrade paths;

• results in an inefficient, costly migration pathway to higher speed services, such as VDSL2;

• involves a vertically separate structure that undermines incentives for efficient investment, and has failed spectacularly to deliver efficient investment in cases such as Dalrymple Bay and Port Waratah: all of the inefficiencies that have characterised those cases would be imported into telecommunications;

• there is no certainty the G9 can finance even the proposed network, much less an upgraded network. However, should the G9 proceed with their current proposal, they would effectively have a monopoly over the next phase of upgrading, and could either postpone it or provide it at prices that were inefficiently high;

• reduces Telstra’s incentives to optimise the local loop network; and

• cuts off the more efficient option of Telstra undertaking an upgrade of its own network.

The G9 proposal does not address the legitimate business interests of the carrier or carriage service provider concerned because the SAU cannot be divorced from the G9 sub-loop unbundling proposal. Taking control of Telstra’s entire copper network in the G9 deployment areas is beyond what FANOC can legitimately expect as a non-network owner and an access seeker and derogates from the legitimate expectations of Telstra, as the network owner. It is also beyond FANOC’s legitimate expectations and derogates from Telstra’s that FANOC can expect to finance its investment by forcing Telstra to buy back services from FANOC. Hence, the reason that the restrictions in section 152AF and 152AR(3)(b) form part of the essential fabric of Part XIC and delineate the boundaries of the Commission’s role and powers.
The G9 proposal **does not serve the interests of the persons who have rights to use the declared service** because:

- access seekers will lose access to existing wholesale services;
- access seekers will face increased capital and operating costs in continuing to access those wholesale services which they can obtain from FANOC;
- access seekers will have less opportunity to innovate on the FANOC FTTN given its limited QoS offering than currently or on Telstra’s VDSL2 network; and
- the SAU does not include the detailed network modernisation notification requirements which the Commission has considered necessary when reviewing Telstra submissions[^124] and which have been advocated by G9 members themselves[^125].

The G9 proposal **increases the direct costs of providing access to the declared service** because:

- the G9 model fails to account for significant costs which the G9 proposal will impose on the industry;
- there are likely to be substantial once off costs in altering the physical structure of the Telstra network, so as to provide for the connections, systems and processes essential for the G9 model to work;
- the costs imposed because G9 would eliminate the network’s ability to provide a wide range of important services. The costs of developing replacements for those services, and the disruption costs experienced by users and suppliers during the period in which these replacements were being developed and implemented, need to be brought to account;
- the ongoing costs of the transaction-heavy inter-operator processes which the G9 model requires between Telstra, FANOC, voice service access seekers and data service access seekers;

[^124]: ACCC, Draft decision on ULLS, at p 129 http://www.accc.gov.au/content/item.phtml?itemid=742357&nodeid=b8ed7c144efd0da12f0ad34b9cc1fb7&fn=ACCC%20draft%20decision%20on%20Telstra%20ULLS%20undertakings%20(Jun%2006)%20(revised).pdf.
[^125]: see SingTel Optus’ further submission on network modernisation as part of the LLU undertakings process http://www.accc.gov.au/content/item.phtml?itemid=755108&nodeid=a0968cd1d2c176cfd0005fe2466fe91f&fn=Optus%20Network%20modernisation%20(Jul%2006).pdf.
• the additional capex which access seekers to utilise the FANOC wholesale services, including to rebuilt OSS interfaces; and

• the costs of building backhaul to the LAPs or acquiring backhaul from FANOC, which is not covered by the SAU or probably by existing service declarations.

The G9 proposal does not ensure the operational and technical requirements for the safe and reliable operation of a carriage service, a telecommunications network or a facility because of:

• the substantial risks faced in the unprecedented migration of the entire PSTN customer base and the use of softswitching without a TDM safety net;

• the more complex arrangements which will apply to emergency call handling;

• G9’s failure to address special services on which some end-users crucially depend, such services for end-users with life-threatening illnesses;

• the threat of reduced service levels for customers resulting from the complex, transaction heavy processes inherent to the division of the network between Telstra, FANOC and one or more access seekers.

The G9 proposal does not promote the economically efficient operation of a carriage service, a telecommunications network or a facility because:

• current retail and wholesale services will not be supportable on the G9 network, potentially affecting the level of network utilisation and inefficiently reducing the benefits end-users derive from the telecommunications network;

• access seekers will face additional capex and opex costs to maintain existing interconnection and wholesale arrangements;

• G9’s proposed structure will impose substantial inefficiencies via vertical disintegration;

• as those inefficient costs will inevitably be passed on to end-users, the efficiency with which the network is used will be diminished; and

• starting with ADSL 2+ deployment rather than moving straight to VDSL2 adds to the costs of the migration to VDSL2 or other more advanced services.
The Commission seeks views of interested parties as to whether the Undertaking reasonably provides for parties to interconnect and use the service, in a manner consistent with the Standard Access Obligations.

The Commission seeks views on whether the Undertaking reasonably and in accordance with the Standard Access Obligations deals with:

1. Standards;
2. Points of interconnection;
3. Congestion;
4. Managing network interconnection and network integrity;
5. Co-ordinating multiple parties with network management access;
6. Ensuring access is sufficient to meet access seekers’ quality of service requirements, including those under the customer service guarantee; and
7. Transition of other voiceband services or their migration to IP.

**Telstra Answer:**

The G9 concedes that the SAOs have limited operation in the context of a wholesale only model because there is no self supply against which external supply can be benchmarked, as applies to Telstra through the transparent reporting requirements of accounting separation and more recently operational separation. The incentives inherent in the G9’s proposed structure and governance rules provide a less effective guarantee of service quality, technology upgrade and ongoing investment in wholesale services than the current vertical integration model with the existing regulatory safeguards.

On the specific matters listed by the Commission:

<table>
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<tr>
<th>Factor</th>
<th>Telstra response</th>
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<tr>
<td>Standards</td>
<td>The SAU does not refer to appropriate standards in respect of VoIP services. The</td>
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<td>standards referred to in SAU (DSL Forum TR-58 and TR-59) pertain to ATM DSLAMs.</td>
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<td>The SAU fails to point out the proprietary nature of quality of service parameters</td>
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<td>Factor</td>
<td>Telstra response</td>
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<td>which could complicate interconnection by multiple parties with the FANOC network.</td>
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<td>Points of interconnection</td>
<td>While the SAU refers to the access seeker being able to choose between a PoI at a Local Access Point (LAP) or Transit Access Point (TAP), the supply of backhaul by FANOC from the LAP to the TAP if the access seeker chooses to connect at the TAP is not covered by the SAU. If the LAPs are expected to be in Telstra local exchange buildings, each access seeker would need to have a backhaul capacity from each local exchange building in the FANOC proposed footprint. The cost of such backhaul (which would be required for each of data and voice services) has not been factored into the costs set out in the SAU. Backhaul to an aggregation point higher in the Telstra network than the local exchange is included within the wholesale price for Telstra bitstream services and other access products.</td>
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<td>Congestion</td>
<td>The SAU requires that all access seekers share the same “pipe” on a point to point basis between the PoI and the customer premises (there will be two “pipes”, one for the aggregated telephony traffic of access seekers and one for the aggregated broadband traffic of all access seekers). Congestion will need to be managed (if at all) using a propriety system over the PPP service. There is a risk that an access seeker’s quality of service will be adversely affected by the traffic of one or more access seekers, such as an unanticipated or unmanaged spike in their traffic as a result of their downstream marketing activities. In contrast, Telstra’s proposed FTTN would provide each access seeker with a virtual local area network of its own within which it can manage traffic congestion</td>
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<td>independently of each others access seeker and construct its own differentiated quality of service offerings. Access seekers will be able to order and dimension the amount of capacity which suits their customer profile (e.g. for business customers who require higher reliability or for residential customers who will tolerate slower or less consistent service).</td>
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<tr>
<td>Managing network interconnection and network integrity</td>
<td>There is insufficient information in the SAU to allow either a voice or data access seeker to determine the cost and technical parameters of interconnection. In particular, the absence of information on the proposed node means that any softswitch interface could not be appropriately specified. The SAU threatens network integrity of voice services: mass migration to softswitching and to network managed between two, three or more operators is unprecedented.</td>
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<tr>
<td>Co-ordinating multiple parties with network management access</td>
<td>The complex interrelationship between data and voice service access seekers, FANOC and Telstra means that any form of network management will be complex and prone to difficulties. The G9 submission provides no detail which would allow any assessment of the complex and varied issues which arise from multiple access seekers all requiring operational support system access on a real time basis.</td>
</tr>
<tr>
<td>Ensuring access is sufficient to meet access seekers’ quality of service requirements, including those under the customer service guarantee</td>
<td>The SAU describes a residential centric network which has internet grade connectivity. Retail and wholesale business grade “traditional” data or DSL services would no longer be available on the FANOC network, resulting in a drop in network service levels. The complex interrelationship between both data and voice service access seekers, FANOC and Telstra means that any form of customer service guarantee (particularly in</td>
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<td>respect of time to rectify faults) would be difficult, if not impossible, to deliver.</td>
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<td>There are no service level commitments in the G9 SAU. While the BAS Manager may formulate service levels as part of the Non-Price Terms, FANOC can reject and this is not a matter which can be escalated to the Commission or the independent reviewer.</td>
</tr>
<tr>
<td>Transition of other voiceband services or their migration to IP</td>
<td>The SAU does not provide enough information to allow a potential voice access seeker to design a voice switching service. There appears to be an assumption by FANOC that all access seekers will deploy softswitches. However, there are significant risks in deployment of such switches in the absence of a fall back to traditional TDM switching.</td>
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The Commission seeks views of interested parties as to whether the proposed means of adding, varying or withdrawing BAS products is reasonable and consistent with the Standard Access Obligations; and whether the proposed FANOC structure affects this view.

Telstra Answer:

The proposed process of adding, varying and withdrawing BAS Products has the following serious deficiencies:

- The vertical separation between Telstra as the owner of the copper pairs, FANOC and the BAS Manager will further complicate the development and implementation of an efficient suite of products and will import into Australian telecommunications the many delays in innovation and excess costs that have occurred in structurally separated industries (see Annex 2);

- While FANOC must consult with the BAS Manager over the introduction, variation or withdraw of BAS Products, FANOC has the final decision and there is no express right of escalation to the Commission or the independent reviewer. FANOC also has an open-ended discretion embedded in the service descriptions to add any “limitation or requirement” FANOC wants. Strictly on the drafting, such additions would not be a
variation to a service description and would not seem to need to go through the consultation process with the BAS Manager at all. In any event, FANOC as a wholesale-only operator will have less incentive to invest and innovate in new upstream inputs than a vertically integrated operator as FANOC does not earn downstream retail margins from innovations;

- The G9's proposed structure will discourage innovation. Where an individual access seeker requesting new or modified wholesale services to support an innovative downstream service, FANOC is required to inform and seek the advice of the BAS Manager, that is all of the other access seekers on the FANOC network;

- The criteria in 6.7 of the SAU does not address what happens if more than one access seekers requests new services and only some of the services can be accommodated. How will FANOC decide between the services? How will the BAS Manager whose members will have different businesses and risk profiles decide what is best for the whole industry when two or more valid, but conflicting proposals are made; and

- It is difficult to believe the structure proposed by G9 would produce any positive outcomes, consistent with the best interests of competition. Such a proposal is without international precedent and is unreasonable.

The Commission seeks views of interested parties as to the reasonableness of FANOC’s proposed service description.

Telstra Answer:

The G9 service description is so skeletal and ambiguous that it is difficult to meaningfully evaluate the proposed services. The service description provides an inadequate basis for access seekers to plan use of and interconnection with the FANOC network and does not provide a proper basis on which the Commission can approve the SAU. On this basis, it is not capable of being reasonable. Among other things, the G9 service description fails to address the following matters:

<table>
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<tr>
<th>Element of service description</th>
<th>Expected detail</th>
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<tr>
<td>Technical standard to be used for the VoIP service</td>
<td>There are a number of alternative standards for VoIP services. Some of these are suitable and standardised for PSTN replacement and others which are currently used for private networks and which have not yet been</td>
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</table>
Element of service description | Expected detail
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standardised for PSTN equivalent applications. It would be reasonable for the SAU to indicate the standards for VoIP services that have been assumed in the development of the network architecture.

Node vendor’s requirements for switch interfacing | Fibre to the node networks are complex and have some elements which are specific to the vendor of the node. In particular, the mechanism by which information required by a softswitch is delivered from the node to the core IP network of an access seeker will vary from vendor to vendor. It would be reasonable for the SAU to define the requirements of the node vendor that has been assumed in the development of the network architecture.

Mechanism by which voice traffic is presented separately from DSL traffic at the point of interconnection | Given the architecture of the SAU network, there may be both voice and data access seekers. It is not clear from the SAU how traffic for each type of access seeker will be delivered at the proposed PoI set out in the SAU.

From the details we can glean from the SAU, it delivers an inferior service to the services currently available and which would be offered on a Telstra VDSL2 network.

The Commission seeks the views of interested parties as to the proposed price terms and conditions with reference to the matters outlined in Appendix 1 to this Discussion paper. In particular, the Commission seeks views in relation to the following issues:

1. Do sufficient incentives, and safeguards, exist within the pricing model for the accurate forecasting of demand and costs? In particular, do such incentives and safeguards exist in the second, and subsequent, access periods?
2. Do sufficient mechanisms exist in the Undertaking to ensure the quality of the BAS products, and the incentives for innovation, are maintained?

3. Is the proposed approach to account for differences between actual and estimated expenditures and actual and estimated revenues in the pricing method reasonable?

4. The Undertaking proposes that for the purposes of the estimation of the WACC the value of the equity beta be set at the lower of either 1.0, or a value as set by a capital raising auction. This raises a number of specific issues:

   i. Is an either/or approach to the estimation of the equity beta appropriate in these circumstances?

   ii. Is a capital raising auction as proposed considered an appropriate approach for estimating the cost of equity?

   iii. Does a predetermined maximum equity beta of 1.0 appear reasonable for such an Undertaking?

   iv. How should the proposed capital raising auction be structured? Are there any specific elements that are considered necessary to be incorporated into the auction design? (auction floor, limit on number of bidders, allowance for multiple bids, defined size of increments etc.); and

   v. Are there relevant examples of such an auction process being used to determine the return on equity?

5. What should the terms of reference be for the independent reviewer or the Commission in arbitrating disputes between FANOC and the BAS Manager? What factors should be considered by the independent reviewer or the Commission in making a determination? How should the process involving such a determination be conducted?

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**Telstra Answer (using the Commission numbering):**

1. There are no adequate safeguards or incentives built into the pricing model to ensure accurate forecasting of costs or demand. As discussed in Annex 3, the pricing model allows any costs incurred in the First Period, regardless of whether or not those costs are efficient, to be included in the cost pool and, if unrecovered in the First Period, rolled-forward to the Second and Further Periods in the CAV. Following the First Period FANOC can reset the demand forecasts at the beginning of each Access Period. Given
that FANOC get to keep any difference between actual and forecast demand and can set differential access prices, this provides them with a strong incentive to underestimate demand following the First Period. The only safeguard that appears to exist on the cost side in the Second and Further Periods is that, in the certain event that the BAS Manager will not reach agreement, the Commission will determine whether investment is prudent and can be included in the cost pool. Given the Commission is neither a user or owner of the network, has no information regarding demand and little understanding of the technical aspects of the network, Telstra does not believe that this proposal could be viewed as an adequate safeguard. As discussed in Annex 3, the level of discretion built into the proposed G9 pricing model imposes an unacceptable level of risk on access seekers and ultimately consumers and is therefore incapable of promoting the long-term interests of end-users.

2. As discussed in Annex 3, G9’s proposed access prices appear inconsistent with the principles and views expressed by the Commission in previous decisions. Importantly, the G9 pricing model does not include any mechanism to ensure that access prices are consistent with efficient, forward-looking costs over time. Rather, access seekers are expected to fund an increasingly outdated network over time while also incurring the costs associated with any optimisation that is undertaken. As this model ensures that FANOC is compensated for any costs it incurs, there would seem to be little, if any, incentive for FANOC to innovate in order to reduce its costs. Further, as any costs associated with innovation or quality improvements would need to be approved by the BAS Manager, it will again be left to the Commission, rather than the market, to determine whether innovations should be undertaken and whether quality improvements should be made to the services supplied over time. In Telstra’s view, the effect of the G9 pricing model will be to stifle incentives for innovation and quality improvements.

3. In the First Period there is no mechanism to account for differences between actual and estimated costs, demand and revenues. In the Second and Further Periods Telstra understands that the BAS Manager must approve expenditures and, if this fails, the Commission will determine the level of expenditure that can be included in the cost pool. For the same reasons as noted above and in Annex 3 Telstra does not believe this is reasonable. In terms of the difference between actual and estimated revenues, it is Telstra’s understanding that FANOC keeps any difference. As discussed above, given that FANOC can reset demand forecasts at the beginning of each Access Period, this provides substantial scope for gaming. In terms of the difference between
expenditures and forecast revenues, Telstra notes that the G9 proposal to roll forward any shortfall is inconsistent with previous Commission decisions.

4. The G9 provide too few details as to the basis on which they have derived their estimates of the cost of capital, or about the design and implementation of the proposed capital raising auction, for serious review to be undertaken. As a result, the Commission should require the relevant details to be disclosed. Nonetheless, the following points can be made:

- Contrary to what is claimed by NERA, the proposed pricing mechanism is a revenue cap, rather than a price cap. It is well known that revenue caps have lower systematic risk than price caps (though they are otherwise inefficient). Consequently, the claimed comparisons between the G9 proposed WACC and that required by Telstra (operating under price caps) are incorrect.

- As regards the specific WACC proposed by the G9, the G9 do not commit to ensuring that sufficient funds are available to fully deploy the proposed network at the ceiling rate of return. In other words, should the proposed capital raising auction fail, the G9 are not standing behind the mechanism to ensure that the full funding needed is made available, nor does appear to be any condition precedent which only makes the SAU operational once full and guaranteed funding is in place. As a result, there is no basis on which the Commission can be satisfied that the proposed WACC has any substance or more generally, that the required investment would be made in full.

- There is consequently a risk that the G9 would commence work, effectively depriving Telstra of its network, without any ability to complete even the little they propose to do in the SAU.

- At the same time, the G9 offer no assurances that debt levels in the entity would be kept to prudent levels. There is consequently a risk that an inherently highly risky investment would be leveraged to levels that involved a substantial exposure to bankruptcy, with investors reasoning that should the threat of bankruptcy arise, the regulator would – as has been the case elsewhere – allow the ceiling WACC to be increased.

- Moreover, the SAU commits to a very low level of service, in terms of the bandwidth and other service attributes that would be made available. However, once the SAU was in place, it would obviously not be possible for any other
entity to upgrade the network, say to VDSL. As a result, the G9 would be wellplaced to “hold up” the community and demand a higher WACC than that it had originally claimed.

- It follows that the Commission:
  - Cannot be satisfied the proposed WACC would indeed lead to the network being funded;
  - Even if it were funded, was funded on a prudent and sustainable basis; and
  - Would persist into a potential VDSL upgrade, until which end-users will derive no benefits from the SAU above and beyond those available in any event.

5. Telstra does not believe that the Commission or an independent arbitrator should be taking decisions regarding the FANOC budget. As discussed above, the Commission is not well placed to be making such decisions. It does not face the correct incentives and does not have the appropriate information or skill base to be taking decisions regarding infrastructure investment and other expenditure.

The Commission seeks views of interested parties on the reasonableness, and consistency with the SAOs, of the non-price related terms and conditions contained within the Undertaking with reference to the matters outlined in Appendix 1 to this Discussion Paper.

Telstra Answer:

There are, in effect, no non-price related price terms and conditions as these are left to future agreement between the BAS Manager and FANOC, with no escalation to the Commission. As a result, FANOC, in effect, has ultimate say over the terms and conditions.

By leaving so much to future decision making after approval of the SAU, G9 seeks to sidestep the procedural requirements which would apply to the variation of an SAU or to the withdrawal of an old one and submission of a new one.

As G9 concedes, the SAOs, in particular section 152AR(3)(b), has no real application to FANOC because it does not supply services in the downstream markets.

Access seekers are, therefore, dependent on:
a. the non-discrimination provision in clause 3.1(c)(i) of the SAU. This provision is qualified ("provides to other Access Seekers generally in respect of that BAS Product") and much less complete than section 152AR, including non-discriminatory fault and provisioning processes (section 152AR(3)(c)) and non-discriminatory interconnection of facilities (section 152AR(5)); and

b. the incentives for FANOC as a wholesale only provider to upgrade its network and continue to develop and introduce new wholesale products. As discussed in the CRAI report in Annex 2, FANOC will have significantly less incentive to invest in new technology and network upgrades to support innovative downstream products because its return does not involve sharing in those downstream margins but is a cost-based return.

The Commission also must take account, under the counterfactual, of the obligations which Telstra has under the operational separation regime to provide “equivalence” to access seekers. The operational separation regimes sets out a more extensive, closely defined and transparent set of obligations than the limited terms of the SAU.

The Commission seeks views of interested parties on the impact of the management principles on whether the Undertaking is reasonable with reference to the matters outlined in Appendix 1 to this Discussion Paper.

Telstra Answer:

G9’s assertion about the benefits of the wholesale-only structure of FANOC are inconsistent with the international evidence on structural separation in telecommunications and other industries which shows that vertical disaggregation:

a. has induced higher costs through the loss of vertical efficiencies;

b. has resulted in slower product and service innovation than would otherwise have prevailed with a vertically integrated operator sharing in downstream revenue; and

c. has been replaced by vertical reintegration whenever such reintegration has been permitted. The fact that such reintegration has occurred in highly competitive markets (and with the approval of competition and industry regulators) makes it all the clearer that it reflects underlying efficiency considerations.

The shortcomings of vertical disaggregation are substantially worsened by the uniquely complex model proposed by G9 in which responsibilities are divided between FANOC and the
BAS Manager and all or most of the downstream competitors participate in the management of the network through the BAS Manager. This structure:

a. creates misalignments between costs, returns and decision making;

b. carries a high risk of deadlock, dispute and delay given the misalignment of incentives, such as between big and small downstream providers, between outside investors with a lower risk appetite and telcos, residential focus and business focused providers;

c. provides each downstream competitor with the incentive and the ability to block or retard the initiatives of others, especially those most competitively threatening to their own business, while gaming to ensure that their preferred improvements are agreed;

d. provides downstream competitors with greater opportunity than otherwise to gather information, or even consider collusion, with their retail rivals.

The Commission's role in the governance structure is troubling and inconsistent with its powers as a creature of statute. If the BAS Manager and FANOC cannot agree on capital investment, operational and other key issues, the Commission is to stand in their shoes and make those commercial decisions. The Commission, as a regulator, is ill equipped to make fundamentally commercial decisions. Vesting the Commission with such broad powers under the SAU also fly in the face of the plain statutory intent of Part XIC that the Commission be empowered merely to accept or reject an undertaking and not to create an entirely new regulatory regime: eg s.152CBC(2).

The further problem with the creating of these non-statutory powers is that they exist outside the framework of principles, procedures, and review mechanisms of Part XIC within which the Commission must exercise its powers.

In any case Telstra considers that the SAU does not prevent FANOC from offering retail services as claimed in the Submission that accompanied the SAU. The definition of access seeker does not exclude FANOC or a FANOC Ownership Entity or a subsidiary of a FANOC Ownership Entity from seeking access to a BAS Product.

Telstra is also concerned that the roles of the BAS Manager and FANOC leave gaping issues unresolved. Specifically Telstra considers that G9 needs, at a minimum, to answer the following questions in relation to FANOC and the BAS Manager:
• What occurs to the management/ownership structure if there are consolidations within the industry? At what level would cross shareholdings between 2 or more FANOC or BAS Manager members be a problem?

• What is the process/consequences for parties dropping out of the BAS Manager?

• What is the process for appointing independent Board members? How are the Directors to be reimbursed? Will the BAS Manager have the staff and how will this be managed?

• Is it intended that the BAS Manager will have assets and liabilities? What if the BAS Manager was sued?

• What if Members of the BAS Manager do not participate in its functions, for example electing Board members or voting? Telstra notes that, of the eligible members of the TAF, only a small percentage were active participants.

• Is there a quorum requirement for the BAS Manager?

• As the voting allocation of the BAS Manager shifts year to year, is a constituted BAS Manager allowed to revisit and reverse previous decisions of a differently constituted BAS Manager?

The Commission seeks views of interested parties on whether the proposed mechanisms for enforcing compliance with the corporate governance and management principles are effective.

Telstra Answer:

The G9’s proposed enforcement and dispute resolution mechanisms have the following shortcomings:

a. the BAS Manager’s right to review the Budget, and thereby to escalate disputed issues to the Commission or the independent reviewer, is limited to the Expenditure and Deployments and does not include the FANOC Component Charge for each individual BAS Product. FANOC has discretion to set individual prices within the total revenue envelope;

b. G9 emphasises the role which the BAS Manager has in respect of Non-Price Terms as one of the major advantages of its model over the current arrangements. However:
c. FANOC has final say over the non-price terms. While the BAS Manager may prepare the proposed Non-Price Terms, FANOC can reject them and there is no escalation to the Commission or the independent reviewer;

d. FANOC also has power to vary the Non-Price Terms with no express requirement to seek the view of the BAS Manager;

e. FANOC has the final say over the introduction or variation of new BAS Products with no escalation to the Commission or the independent reviewer;

f. The SAU requires the Commission to assume a role which is inappropriate from a legal and policy perspective. The Commission becomes the ultimate arbiter of network design, deployment and upgrades and the capital expenditure required to be made by FANOC. This reaches substantially beyond the Commission's legal powers to approve or reject SAU’s and its role as an arbitrator of the terms of access under Part XIC; and

g. The mechanisms for dispute resolution in the SAU are skeletal. The Commission and the independent reviewer are used interchangeably without any clear guidance which disputes each would have responsibility for resolving. The Commission and independent reviewer have total discretion as to the manner in which the determination will proceed. There is no guidance in the principles which the Commission or the independent reviewer would apply, other than the value standard of Commercially Prudent. There is no review or oversight process in relation to decisions made by the Commission or the independent arbitrator.

The Commission seeks views of interested parties on whether the term of the Undertaking is reasonable.

Telstra Answer:

The term of the SAU is not reasonable because the effect of its 15 year term is to:

(a) lock in a FTTN monopoly based on ADSL 2+ technology which is already being overtaken by market and technology developments, without any commitment to upgrade to more advanced technologies and an inherent incentive structure which is likely to result in deadlock over whether to make the investment in upgrades; and

(b) lock out the Commission from review of key elements of the decisions made by FANOC which determine the price paid by access seekers and end-users.
Clause 4.3 purports to create some kind of “bail out” mechanism if the operation of the SAU becomes unreasonable at some future point. First, this clause does not attempt to address all of the future uncertainties with the operation of the SAU which might render its operation “unreasonable”. It relates only to difficulties arising by reason of issues concerning “ownership, corporate governance or management of FANOC Ownership Entities or the BAS Manager etc”. It does not purport to deal with all the other uncertainties in the SAU including the operation of the very vague price formula. A provision of this sort is unlawful because:

(a) it purports to confer powers and functions on the Commission which have no statutory foundation: e.g. clauses 4.3(b)(ii), 4.4, 4.5, 4.6;

(b) it purports to set up some kind of “statutory estoppel” against the Commission (clause 4.4); and

(c) it is ultimately unenforceable in any event because, as clauses 4.5 and 4.6 tacitly acknowledge, the Commission has no power to withdraw approval of the undertaking and all that clauses 4.5 - 4.6 provide for is for FANOC itself to decide voluntarily to withdraw the SAU in certain circumstances.

Accordingly, while clause 4.3 and following comprise an acknowledgment that, as the SAU is framed, its operation may cease to be “reasonable”, the SAU provides no effective mechanism to address that eventuality. Thus, it follows, as a matter of logic and law that the Commission simply cannot be satisfied under section 152CBD(2) that the undertaking will be reasonable in its operation.

The Commission seeks views of interested parties on any of the arguments presented in the Submission and related schedules in support of FANOC’s claim that the price and non-price terms and conditions in the Undertaking are reasonable and consistent with the SAOs.

Telstra Answer:

For all of the technical, service, legal, economic and other reasons set out above, FANOC’s SAU is not consistent with the SAOs and is not capable of being reasonable.