

Standard form regulation impact statement

Informed decisions for backup
power supply arrangements

JULY 2014

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Introduction

In November 2013, the Australian Communications and Media Authority (ACMA) published an options-stage Regulation Impact Statement (RIS) in relation to the proposal to regulate information provision and record-keeping associated with optional backup power supply arrangements for specified infrastructure solutions to be rolled out as part of the National Broadband Network (NBN).

After consideration of the options-stage RIS, the ACMA made a decision to proceed to a public consultation process to obtain feedback on the options under consideration to achieve the government's policy objective for implementation of optional backup power supply. Thirteen submissions were received in response to this consultation.

In line with advice from the Office of Best Practice Regulation (OBPR),¹ a more detailed RIS—known as a standard form RIS—has now been prepared to assist the ACMA in assessing the implications of the options under consideration and the likely impact of a decision to regulate.

The background to this RIS provides the policy and technical context for the policy problem. Section 1 describes the policy problem that is the subject of the RIS. In summary, the policy problem arises from the rollout of the NBN and migration of consumers from a network that has historically continued to operate during a power outage, to a fibre-based network that will only operate during a power outage if the consumer has backup power facilities (for example, battery backup supplied by NBN Co).

The scope of this policy problem is expected to now be reduced as a consequence of a change in government policy in April 2014 to an optimised multi-technology mix (MTM) approach for the NBN design, so that the number of households in the FTTP infrastructure category, previously expected to be as high as 93 per cent, will now be significantly lower, estimated at approximately 26 per cent. Although fewer households are likely to be affected, the policy problem remains and continues to present a risk for affected households.

This RIS presents a comprehensive analysis of the options canvassed in the options-stage RIS. Option 4 (a prescriptive service provider determination) in this RIS was effectively Option 3 in the Options-Stage RIS. A new Option 3 (a principles based service provider determination) is considered in this document.

Option 3 analyses the impact of a revised service provider determination. The revised draft service provider determination has taken into consideration feedback from the public and targeted consultation processes and stakeholder views.

As required under OBPR best practice regulation requirements, the RIS also contains the following additional elements:

- > details of the ACMA's consultation process and feedback from submitters
- > quantification of the regulatory costs to relevant groups in the community likely to be affected by the options considered and any identified regulatory cost offset.²
- > details regarding the implementation and review of the proposed option.

¹ The OBPR administers the government's regulatory impact analysis requirements. On 19 March 2014 the OBPR provided confirmation to the ACMA that a Standard Form RIS is required to meet best practice regulation standards in respect of this regulatory proposal.

² Consistent with requirements for a standard form RIS, a formal cost benefit analysis is not required.

This RIS is provided to the OBPR for assessment against the government's RIS requirements and will be published on the OBPR website following announcement of a decision by the ACMA.

Background

The need to examine the informed consent and record-keeping of consumers' decisions by carriage service providers (CSPs) in relation to the battery backup capability of telecommunications services has arisen from a number of factors, including:

- > the **reform of the telecommunications sector**, including the structural separation of Telstra's retail and wholesale fixed line services and the formation of NBN Co as a wholesale network provider, wholly owned by the government, and the impact on competition in the telecommunications industry
- > the **decommissioning of the copper network**, and replacement with networks (including fibre to the premises (FTTP)) that do not have any ability to carry their own power, and subsequent impacts such as the use and capability of battery back units
- > the **frequency and impact of emergencies** (including natural disasters) and the **duration and frequency of mains power outages** experienced by Australian households
- > **consumer protection laws** are viewed as inadequate to address the risks to consumers in this instance.

This section also sets out the steps that have occurred, to date, to move to an optional deployment model for battery backup for NBN FTTP connections, and why this necessitates consideration by government of informed consent and record-keeping provisions for battery backup.

Reform of the telecommunications sector

The National Broadband Network

The NBN is a high-speed wholesale network, comprised of various broadband technologies (including FTTP). NBN Co was established in April 2009 as a wholly-owned Commonwealth Government business enterprise to design, build and operate the NBN.

Moving from a largely vertically integrated market structure with one dominant participant to an industry structure with one primary wholesaler significantly changes the responsibilities of, and relationships between, broadband infrastructure wholesalers (such as NBN Co) and CSPs. A particularly significant change is that the Australian Government now owns infrastructure (through NBN Co) over which CSPs offer retail services to consumers.

Greater competition in the sector, and the ability of CSPs to offer more differentiated services (such as higher speeds and bundled packages) over the NBN, will drive a shift away from standardisation in products, services and CSP operating practices. This is evidenced by:

- > Firstly, a number of smaller retail service providers have signed up to provide services over the NBN. More CSPs experience lower barriers to entry and can potentially enter parts of the telecommunications market with a reduced requirement to invest in their own infrastructure to interconnect with the NBN than ever before.
- > Secondly, because the FTTP network has been designed and deployed to allow NBN Co to offer an open access layer 2 wholesale service, CSPs can determine the performance characteristics of their retail products within the wide range of

capabilities offered by NBN Co. CSPs also have the ability to differentiate their products and service offerings from others: for example, a voice service from one CSP may not be the same as the voice service offered by another CSP, even where prices are identical.

- > Thirdly, because the performance, quality and pricing of the wholesale infrastructure will be common across carriers, competition is expected to intensify at the layer of products and services.³

This also applies to consumer information in the sector. A more competitive and diverse sector will mean greater variety in how CSPs choose to communicate with their customers, and will influence the broad level of understanding that consumers will have regarding the technical capability of their telecommunications service(s).

Supply of services over FTTP networks requires installation of various items of physical equipment located in or on the individual premises. This equipment comprises a network termination device owned and installed by NBN Co and customer equipment (for example, a modem or telephone) owned by the customer or leased by the customer from the CSP.

NBN Co, as a wholesale-only provider, does not have a direct contractual relationship with retail customers. While NBN Co is responsible for installing the network termination device in the customer's premises, its position is that the customer's decision in relation to battery backup is a matter to be resolved between the CSP and the customer (along with other service matters such as the service plan and cost). The CSP is required to inform NBN Co of the consumer decision as the rollout phase of the FTTP network requires that NBN Co supply and install the network termination device and associated battery backup.

Wholesale Broadband Agreement

NBN Co will offer wholesale access services over the NBN to CSPs through its wholesale broadband agreement⁴, which is the basis of contractual responsibilities and obligations agreed between NBN Co and its customers (CSPs) in relation to a range of matters including backup power supply orders. In turn, CSPs will offer retail services to customers and/or wholesale services to other service providers.⁵ This will result in significant reform of the telecommunications market and is anticipated to increase competition at the retail level of the telecommunications sector.⁶

³ For example, in its submission to the Hilmer Competition Review, Singtel Optus states that: "In a post NBN world, market power may be derived from broader sources [than infrastructure access and control], including the ability to bundle services; to provide applications and content on an exclusive basis; or the ability to leverage scale of presence across multiple markets."

⁴ Under the *Competition and Consumer Act 2010*, NBN Co must publish all its service offers, to ensure there is full transparency of its terms and conditions of supply. NBN Co has chosen to meet this requirement through both:

- its Special Access Undertaking, which specifies basic terms and conditions under which NBN Co will provide its wholesale services, and accepted by the ACCC in December 2013; and
- publishing a standard form of access agreement, which NBN Co refers to as its Wholesale Broadband Agreement, on its website.

Available at <http://www.nbnco.com.au/sell-nbn-services/supply-agreements/wba2.html#U7s7QX5-cs>

⁵ Part 2 of the *National Broadband Network Companies Act 2011* limits an NBN Corporation to operating as a wholesale-only telecommunications company in terms of the goods and services it supplies, and the investments that it makes. For example, NBN Co cannot supply a content service or other non-communications service and is unable to supply retail services directly to end-users.

⁶ Mr Rod Sims, ACCC, *A regulator's perspective: the NBN Rebooted workshop*, available [here](#), 18 November 2013

The wholesale broadband agreement is an agreement that sets out the basic conditions of access by CSPs to the NBN Co network. The wholesale broadband agreement:

- > provides a benchmark for commercial negotiations between NBN Co and CSPs
- > sets out detailed terms and conditions relating to product supply and prices as well as such matters as service levels, dispute management and operational arrangements⁷
- > does not (and is not intended to) provide a relevant consumer protection mechanism or compliance regime, as NBN Co does not deal directly with consumers (discussed more in Section 2).

Telstra's Structural Separation Undertaking

In late 2010, the Australian Government passed legislation to give effect to the structural separation of Telstra. Structural separation will be achieved by progressively migrating Telstra's fixed line access services to the NBN, as it is progressively rolled out. This arrangement was given effect through the Structural Separation Undertaking, approved by the ACCC in February 2012.

The primary action of the Structural Separation Undertaking is the progressive decommissioning of the copper network (in geographical areas where FTTP is to roll-out), after migration of consumers onto the NBN fibre network. An additional expected outcome is an anticipated increase in competition at the retail level of the telecommunications sector.

Decommissioning of the copper network

Copper disconnection

In geographic areas where NBN Co rolls out its FTTP network, the optical fibre network replaces the copper telecommunications infrastructure from the local exchange all the way through to the customer premises. Copper disconnection occurs around eighteen months after an area first receives NBN fibre and is declared 'ready for service'. Disconnections commenced from 23 May 2014 in the first 15 fibre areas.

Australia is the only jurisdiction internationally undertaking a rollout of a broadband network at the same time as decommissioning the legacy copper network.⁸ Rollout strategies for superfast broadband infrastructure in other jurisdictions are being undertaken as complementary infrastructure to copper networks, often with voice services remaining on copper and data services provided over fibre, facilitating a very slow transition of voice to fibre networks.⁹ Without complementary network infrastructure in place, Australian consumers do not have the option to retain services on the copper network.

This comprehensive shift also requires change by the wider telecommunications industry. The sector is required to undertake broader readjustments, product transition and readiness for a new strategic and operating environment, including in relation to battery backup capability.

⁷ After NBN Co has published a wholesale broadband agreement on its website and an access seeker requests access on the terms in the wholesale broadband agreement then NBN Co must enter into an agreement on these terms. Access seekers can negotiate different terms with a wholesale customer but the differences must be provided to the ACCC and published on the ACCC's website.

⁸ <<COMMERCIAL IN CONFIDENCE INFORMATION REMOVED>>

⁹ PWC (2012), Clearing the way: 2012 Outlook for telecom network decommissioning

Differences in power backup capability between copper and fibre networks

The copper lines used in many legacy telecommunications networks are typically powered from the local telephone exchange facility. This allows for the continued operation of the telephone line and the telephone itself, in the event of a mains power failure at the customer premises, unless the network or exchange itself is damaged.¹⁰

In contrast, a fibre network (such as FTTP) is unable to carry electrical power to the customer's premises. The network termination device installed at the customer premises—which allows the customer to connect their customer equipment and in-house wiring to the fibre network—is powered by the electrical mains network.

Because the network termination device requires mains power to operate, if there is a power failure affecting the customer premises, services carried over the fibre network will stop working unless there is a backup power source on which the network termination device can operate. As a consequence, services—including life dependent services, such as calls to emergency services or the operation of monitored medical alarms—may not continue operating at the premises.

Government has determined that NBN Co should address this concern by installing a battery backup device to power the network termination device—the point at which the network connects to the premises. This approach does, however, face limitations: although the network termination device is serviced by backup power, other equipment in the consumer's premises that is essential for the use of a telecommunications service (for example, a cordless telephone) cannot be powered by this backup power source.

It is possible for a number of consumer-related concerns to arise in relation to the power capability of fibre, compared to copper networks:

- > **Safety.** As large scale backup power can be accommodated for an indefinite period (for example, via diesel generation) at telecommunications exchanges, copper based networks are sometimes viewed by consumers as a safer medium to carry voice calls in an emergency situation.
- > **Aesthetics.** Typically, a telephone connected to the copper network will not be in a position immediately adjacent to a power socket, whereas the network termination device requires a mains power supply. In dealing with these factors, many aesthetic considerations about the network termination device placement arise.
- > **Choice.** Consumers have indicated they strongly desire choice in relation to battery capability, including: the choice to not have a battery backup at all; and a choice to install a battery with greater possible runtime than NBN Co's battery backup unit.

The power capability of fibre networks is especially critical when considered in the context of the electricity sector and mains power outages in Australia.

Emergencies and mains power outages in Australia

Australia is well known as a country with natural disasters and many Australian communities have been significantly adversely affected by these disasters.¹¹ The incidence of natural disasters can be linked to the number of power outages experienced nationally. The most common cause of power outages are storms¹², but

¹⁰ Copper telecommunications networks typically incorporate backup generators and batteries at local exchanges that are activated in the event of a mains power failure.

¹¹ Australian Emergency Management Institute (2009), *National Strategy for Disaster Resilience*

¹² Energy Safe Victoria, available [here](#)

natural disasters such as cyclones, bushfires, floods or landslides can also have a significant impact on the electricity network.

Reliability of power distribution networks

Reliability is a key service measure for a distribution network. Both planned and unplanned factors can impede network reliability. Planned power outages, including for maintenance and construction works, can be timed for minimal impact and with sufficient warning provided to consumers. Unplanned power outages are more common and may occur as a result of operational error, asset overload or deterioration, or routine causes such as extreme weather, animals, vehicle impacts or vandalism.¹³

The key indicators of distribution reliability in Australia's National Electricity Market (NEM) are the system average interruption duration index (SAIDI) and the system average interruption frequency index (SAIFI). Data sourced from the Australian Energy Regulator (AER) indicates that from 2011 to 2013 the average customer experienced a power outage of approximately 230 minutes around one and a half times per year.¹⁴

In the 2012-13 reporting period, unplanned outages comprised just over 74 per cent of total outages across the NEM. Queensland experienced the highest incidence of unplanned outages at 92 per cent, while the Australian Capital Territory had the lowest incidence at 53 per cent.¹⁵

There are significant variations in SAIFI and SAIDI indicators between each of the jurisdictions within the NEM.¹⁶ For example, Queensland residents are likely to experience outages for longer and more frequently than those served by other networks. This is due to the large and widely dispersed rural electricity networks in Queensland, which are more vulnerable to failures, and also the higher likelihood of extreme weather activity in the state, such as flooding and cyclones.¹⁷

Telecommunications networks in an emergency

The continued operation of telecommunications network in an emergency situation can be a critical factor in the safety of lives. In 2012–13, 2.71 million calls were made to the emergency call service from a fixed line.¹⁸ Despite the high penetration of mobile services in Australia (24.9 million handsets as at 30 June 2013), fixed line services have particular advantages in the premises when needing to contact emergency services. These include not being reliant on the rate of congestion on the network, mobile network coverage, the handset being charged or having to provide the location details of the caller (as location details are provided by the network).

Although mobile networks can mitigate the continuity of telecommunications, concerns have been raised about the robustness of mobile networks in an emergency (for

¹³ AER (2013), *State of the Energy Market 2013*, p80

¹⁴ This data applies to the NEM only. WA and NT operate their own individual energy markets and do not form part of the NEM.

¹⁵ AER, Network Performance Regulatory Information Notices, available [here](#)

¹⁶ Issues with reliability data limit the validity of comparisons across jurisdictions – particularly, the data relies on the accuracy of individual company's business information systems which may vary considerably. Geographic conditions and historical investment also differs across the networks.

¹⁷ Ibid pages 77-83

¹⁸ 2012–13 data Emergency Call Service Provider (Telstra)

example, refer Optus' submission to the Queensland Floods Commission¹⁹ or ACMA's advice regarding calling the [Emergency Call Service from a mobile phone](#)).²⁰

Battery backup policy to date

There are five primary policy approaches available to deal with service continuity on FTTP networks in the event of a power outage:

- > **Not to have a specific backup power capability policy approach at all**, and leave it to the market to determine if there is a demand for a backup power capability.
- > Require **mandatory installation** of a battery backup for all premises that are connected to a FTTP network.
- > Adopt an **'opt-out' model**, under which consumers have the opportunity to decline the installation of a battery backup.
- > Adopt an **'opt-in model'**, under which consumers have the opportunity to request a battery backup based on the availability of adequate information to make an informed choice.
- > Adopt a **'must-opt model'**, under which CSPs can choose whether they offer, make mandatory or do not offer a battery backup service to their customers. The customer is then required to make an informed decision (after being informed by the CSP) whether they purchase the relevant service from the CSP.

Prior government consultation on an optional deployment model

In response to the government's Statement of Expectations in 2010, NBN Co provided a backup power supply unit as a mandatory adjunct to the NBN network termination device, as an initial policy response while further investigation of the issues was undertaken. This battery backup unit was provided and installed at no cost to all premises in the rollout. In the event of a mains power failure, this backup power supply provides continuous telephone capability for around five hours (depending on the intensity of use and environmental conditions).

Between January and February 2011, the Department of Broadband, Communications and the Digital Economy (now the Department of Communications) undertook consultation with CSPs, emergency service organisations, consumer advocacy groups and other industry stakeholders on the preferred, long term approach for battery backup deployment. Community and industry feedback identified that moving to optional deployment of battery backup units would generate potentially significant benefits and savings by reducing the number of unwanted installations and allowing greater choice for consumers.

Based on the responses to consultation, government considered available options and agreed that NBN Co would provide battery backup on an optional basis to FTTP end users, with the exception of priority assistance customers who would continue to be provided battery backup on a mandatory basis. This decision was made public via the release of NBN Co's Corporate Plan 2013–15 on 8 August 2012.

The operational aspects of the policy decision were effected through NBN Co's revised wholesale broadband agreement which commenced on 19 December 2013. It allows a CSP to seek an informed decision from customers served by FTTP technology as to

¹⁹ "The most significant issue for the Optus network [for the flood season] was ensuring a reliable mains power supply was maintained. Optus is currently reviewing the need to provide extended battery back-up and permanent back-up generators in critical mobile sites across its network." Please find this [here](#)

whether a backup power supply is to be provided at the premises. From 19 December 2013, a transition period commenced which enables a CSP to place an order with NBN Co for activation of service for a customer without a backup power supply in accordance with the customer's preference. The transition period runs to 1 October 2014, which allows CSPs time to adjust their systems and processes.

Government position on consumer awareness of battery backup

In February 2013, the then-Secretary of the Department of Broadband, Communications and the Digital Economy wrote to NBN Co to provide information about the government's policy on implementing the optional deployment model. He indicated that a critical factor in the implementation of the policy would be the establishment of effective mechanisms for CSPs to obtain an informed decision from customers, together with a means of enforcement of the requirements to encourage a high degree of compliance.²¹

In June 2013, the former Minister advised the ACMA²² that he considered arrangements should be in place to ensure that the informed consent of customers was acquired and retained in a consistent manner. This action was taken following consideration of feedback by stakeholders on the options for implementing battery backup.

The Minister's letter noted that the following key elements would need to be addressed:

- > a requirement for CSPs to implement an informed consent process based upon NBN Co's 'Informed Consent Guidelines,' to give customers sufficient information during the sales process about whether to accept or decline the installation of a backup power supply unit, based on their individual circumstances
- > a requirement for CSPs to retain sufficient documentary evidence of communications with customers about the choice made by the customer, including available options, and the final decision about whether a backup power supply has been accepted or declined.

The letter indicated that these requirements were not able to be "appropriately incorporated into the RSP [Retail Service Provider – CSP] installation and connection processes" through NBN Co's wholesale broadband agreement. This view was based on the fact that the wholesale broadband agreement does not (and is not intended to) provide an effective consumer protection mechanism or compliance regime (discussed more in Section 2).

In October 2013, the Minister for Communications, the Hon Malcolm Turnbull MP, confirmed this request and asked the ACMA to continue consultation and development of possible arrangements to protect consumers. Despite the changes in the government's NBN policy since the original request to the ACMA in June 2013, the policy imperative to ensure that a customer served by FTTP technology is informed about the implications of their decision about backup power supply remains significant and is considered urgent, given this technology is being rolled out now, that NBN Co has commenced the transition period for offering optional battery backup services and that disconnections of the copper network have commenced.

²¹ Letter from Mr. Peter Harris, Secretary, Department of Broadband, Communications and the Digital Economy to Mr. Mike Quigley, Chief Executive Officer, NBN Co Ltd, 13 February 2013

²² Letter from Senator, the Hon Stephen Conroy, the Minister for Broadband, Communications and the Digital Economy to Mr Chris Chapman, ACMA Chair and CEO, received on 18 June 2013, regarding the *Regulatory enforcement of 'must opt' battery backup model for NBN installations.*

Changes in government NBN rollout and technology mix

Since the decision to implement an optional deployment model in 2012, the subsequent change of government has resulted in a change of policy in relation to the NBN more broadly. The current government's overarching policy objectives for the NBN are set out in its Statement of Expectations issued to NBN Co on 8 April 2014.

The Statement of Expectations confirms the government's decision that the NBN rollout should transition from a predominantly FTTP model to an optimised MTM approach, as recommended in the NBN Co Strategic Review.²³ This involves deploying the NBN using a wider range of technologies than previously envisaged. Previously 93 per cent of Australian premises were to be connected by FTTP and the remaining 7 per cent of premises to be served by satellite or fixed-wireless technology. The optimised MTM approach suggests that, within the fixed line footprint for 93 per cent of premises, the optimal mix of technologies used could be in the range of:

- > FTTP to 26 per cent of those premises
- > Fibre to the node (FTTN) (including fibre to the basement and/or distribution point) to 44 per cent
- > Hybrid fibre coaxial to 30 per cent.

The eventual mix of technologies will be determined by decisions taken over time for each distribution area, taking into account relevant factors including demand, performance outcomes and the build cost for each technology by geography.

The Statement of Expectations indicates that the NBN Co 2014–2017 Corporate Plan²⁴ will provide further detail about the approach NBN Co intends to take to implement an optimised MTM approach and specifically mentions backup power supply as one of several policy issues which need to be addressed. While the design arrangements for the MTM rollout are being settled, the transition (ending 1 October 2014) to an optional deployment model for battery backup units will continue to affect consumers in FTTP areas.

²³ NBN Co released its Strategic Review Report on 12 December 2013, you can access it [here](#)

²⁴ Scheduled for release in July 2014

1. What is the policy problem?

Policy context

As outlined in the Background, transformational change to the structure of the telecommunications industry has resulted in a new policy problem not previously faced in Australia. Namely, the copper network is being decommissioned in particular geographic areas and large portions of the replacement national telecommunications network (the NBN fibre network) will be unable to supply its own power. Loss of power may disrupt the continuity of services that rely on the NBN fibre network, including voice, data and over-the-top (OTT) services, such as medical alarms, unless there is access to alternative power.

As also outlined in the Background section, there is potential for wide-scale consumer confusion as to who is responsible for providing information to consumers about battery backup. This is because of the different roles and responsibilities of NBN Co and CSPs in bringing a FTTP network to a consumer's home. While NBN Co owns the fibre network (including the network termination device), the CSP has the ongoing relationship with the consumer and responsibility for provision of home equipment generally rests with the consumer.

The potential disruption of services raises concerns for many sections of the community, including:

- > **vulnerable people.** This cohort includes customers without an alternative means of communication in the event of a power failure and those who are elderly, disabled or have difficulty understanding English. They are assessed as being at highest risk and therefore likely to be in most need of battery backup capability. However, being in the vulnerable category may reduce their capacity to make an informed decision about the need for battery backup.
- > **those who experience frequent power outages.** As discussed in Background, people living in Australia are subject to both planned and unplanned power outages. According to the AER, from 2011 to 2013, the average customer across the NEM²⁵ experienced a power outage of approximately 230 minutes, around one and a half times per year.²⁶ There are regional variations in both frequency and duration of power failures across Australia, with Queensland tending to have longer and more frequent failures than other jurisdictions. This is due to the large and widely dispersed rural electricity networks in Queensland which are more vulnerable to failures and also the higher likelihood of extreme weather activity in the state, such as flooding and cyclones.²⁷

Further discussion to scope the indicative size of these two cohorts is below in the risk and likelihood section and in Section 4.

Recognising the risk presented to these groups, the government required NBN Co to mitigate this policy problem by providing a battery backup and installing it at no cost, on a mandatory basis to all premises, as an initial policy response while further investigation of the issues was undertaken. The battery backup unit partially addresses concerns around the NBN fibre network's inability to supply its own power by providing around five hours of backup power (depending on the intensity of use and

²⁵ The NEM interconnects five regional market jurisdictions (Queensland, New South Wales, Victoria, South Australia and Tasmania). West Australia and Northern Territory are not connected to the NEM. [See here](#)

²⁶ AER, Network Performance Regulatory Information Notices, See [here](#)

²⁷ Ibid pages 77-83

conditions of the surrounding environment). This has significantly reduced risk to an acceptable level for the rollout of the NBN fibre network to date.

Based on further government consideration, from 1 October 2014 NBN Co will provide greater flexibility around the deployment of battery backup units, providing units only where there has been an informed choice for the battery backup unit to be deployed (or on a continued mandatory basis for identified priority assistance customers). Since 2012, NBN Co has worked with CSPs to establish the operational framework for optional battery backup. The transition period is scheduled to conclude on 1 October 2014. To inform CSPs' development of systems, NBN Co has supplied some limited guidance on informed consent.

As identified in community and industry feedback, this move will generate potentially significant benefits and savings by reducing the number of unwanted installations and allowing greater choice for consumers. Providing battery backup units on a "must-opt" basis, however, returns the level of risk for disruption to telecommunications services to an unacceptably high level, and raises a new set of policy problems to be considered.

The problem

Considering the inability for the NBN fibre network to supply its own power and the risk that this poses to service continuity, transitioning from mandatory to "must-opt" arrangements for battery backup units presents a new problem: **that consumers may make a choice in relation to a battery backup unit that is not appropriate for their needs** ("the policy problem").

There are two aspects to the policy problem:

- > that consumers may not be aware that, without battery backup capability, their fixed line telephone service will not work in the event of a failure in mains power
- > that consumers may not have access to adequate information to make an informed decision whether to request a battery backup capability.

There are several reasons why consumers may make a choice in relation to a battery backup unit that is not appropriate for their needs:

- > Firstly, consumers are likely to have **low awareness** of the difference between backup capability of the copper network and the NBN fibre network. This is a new policy problem for Australia. It is likely that many customers moving from copper to the NBN fibre network expect a 'like-for-like' service.
- > Secondly, consumers are likely to have **low understanding** of the issue. This matter is complicated, and is one of a number of complex factors that customers are required to consider when migrating from the copper network to NBN fibre. Customers requiring battery backup may be vulnerable, have low levels of technical knowledge and may have difficulty in understanding the implications of declining a battery backup unit. This results in information asymmetry when the customer is selecting their telecommunications service from a CSP, and customers may resort to heuristic behaviours (where consumers take short cuts, such as by following rules of thumb) when the decision environment is complex.

Even if customers do opt for a battery backup unit, a lack of understanding around the power backup capability of their service may mean consumers may still make mistaken assumptions, such as, an assumption that installation of a battery backup unit will ensure continuity in all cases for all service types for an indefinite period of time.

- > Thirdly, consumers may assign the power backup capability of their services as a **low priority**, when compared to other factors, such as the aesthetics of the backup power supply unit, the environmental effects of battery use or the ongoing maintenance costs of a battery backup unit.²⁸ Some customers may not prioritise battery backup units for other reasons, for example, if they have alternative methods of communication (like a mobile phone) in an emergency.
- > Finally, consumers may be influenced by **other behavioural biases** such as framing bias, where consumer choice is influenced by the context in which the information is presented.

The ACMA believes that the most effective method of tackling the policy problem is by addressing the first two reasons. That is, to increase a consumers awareness and understanding. This may assist in addressing other behavioural biases. Although significant efforts have already been undertaken by NBN Co and CSPs to raise awareness and educate consumers about the transition to the NBN, low awareness and understanding of power backup issues, and in some cases the disconnection of copper, continue to persist. Alleviating the awareness and understanding-related causes of the policy problem would reduce the risk associated with the “must-opt” model for battery backup units to a level that is likely to be acceptable.

Risk

The policy problem results in the emergence of interrelated risks which include:

1. That CSPs do not provide adequate information to customers regarding the limitations of service continuity in the event of a power outage.
2. As a consequence of being provided with inadequate information a customer:
 - a. requests a battery backup unit where it is not needed (incurring unnecessary costs) or
 - b. does not request a battery backup unit where it is needed, potentially requesting a unit at a later time (incurring additional unnecessary costs) or
 - c. suffers loss of life or harm, wholly or partly due to:
 - i. the absence of a battery backup unit or
 - ii. a lack of awareness of the functions and limitations of the battery backup unit.

Risk of loss of life or harm

As highlighted earlier, the **consequence** of this risk eventuating is assessed as **very high**. If consumers are not informed about the implications of disruption to their telecommunications services (and hence have not been able to plan alternatives), the consequences of that disruption can involve loss of life or harm (significant consequences).

In the instance that consumers experience loss of life or harm and they were not afforded sufficient information to make an informed choice on battery backup at the time that they selected their telecommunications service, CSPs may suffer consequences, including reputational damage, the loss of consumer confidence or civil penalties (for example, tort law).

²⁸ It is anticipated that operational battery life would be between three and a half and five years (based on a high quality sealed lead battery: Department of Broadband, Communications and the Digital Economy (2010), *National Broadband Network Implementation Study*, page 115). Through their CSP relationship, consumers are responsible for replacing batteries and the replacement cost of a battery is approximately \$40 (refer, for [example](#))

A concurrent aspect of the risk is the lack of record keeping requirements. While NBN Co's guidance on informed consent recommends recording the decision made by a consumer, it does not provide specific information about how the customer arrived at the decision (for example, what information was provided). This means a highly adverse situation could eventuate, and there would be no way of determining whether it was a result of a point of sale process that did not allow the customer to make an informed decision.

The **likelihood** of the risk eventuating is assessed as **moderate**. ACMA modelling shows that, over the course of ten years, this risk will eventuate for an estimated 97 consumers. This number reflects the number of customers in FTTP areas, correlated with the likelihood of power outages and the extent to which consumers rely on their fixed line telecommunications service in an emergency. The methodology of this modelling is outlined further in Section 4: Impact Analysis, *'Reduction in the economic costs associated with the risk to property, health and life'*.

A number of assumptions and indicative evidence have been used to inform the risk assessment, including:

- > **CSP battery backup offerings to date.** Some CSPs have moved to offering services without battery backup during the transition period. As a consequence, some observations can be made regarding the likely behaviour of industry to meet the requirements of the wholesale broadband agreement (that is, without regulatory intervention). Information being provided by select CSPs under the status quo can be found in **Table 1**.

Table 1: Industry examples of consumer information regarding battery backup

CSP	Information provided to customers (under the status quo) to allow an 'informed decision' as to whether they require battery backup	ACMA comment
AusBBS	<p>Batteries - please be aware that your NBN services, including UNI-V phone depend on constant power. The NBN Network Termination Device comes with a battery backup unless you opt out. This battery will keep your phone service operating during a brief power outage. Important! It is your responsibility to maintain the battery backup.</p> <p>Alarms - you may be able to use your UNI-V phone service for third-party alarms like medical and security alarms. Not all the devices connected to, nor all the services currently operating on, the existing copper-based Australian telecommunications network will necessarily be able to operate in their present form on the UNI-V phone service. You should check with your service provider to make sure they have tested their service for NBN UNI-V connections.²⁹</p>	AusBBS offers its customers optional battery backup, therefore are required to comply with the wholesale broadband agreement. The information provided to consumers is brief, and arguably does not provide sufficient information to enable an informed decision as to whether they require the battery backup service.
Optus	<p>Equipment needs</p> <p>Please ensure you inform us if you use equipment such as disability or medical services or back-to-base alarm. Some equipment may require an alternative service or additional equipment.</p> <p>We will tell you if we are not able to support the equipment.³⁰</p> <p>Q3. Do you require a back to base alarm or have a need for a medical alert service?</p> <p>Optus NBN services do not include a battery backup and are incompatible with some alarm/alert services. If you require or use a back to base alarm or a medical alert service, please contact us to discuss your requirements for your NBN service.³¹</p>	Optus' NBN services do not include battery backup. The ACMA has not identified any consumer information regarding access to an emergency service number in a power outage. This is viewed as critical for a consumer to make an informed decision as to whether they require the battery backup service.
Telstra	Your Telephone Service on the NBN and power outages	Telstra's consumer information notes customers will be provided with battery backup if they are eligible for

²⁹ [Source](#)

³⁰ [Source](#)

³¹ [Source](#)

CSP	Information provided to customers (under the status quo) to allow an 'informed decision' as to whether they require battery backup	ACMA comment
	<p>Your Telstra Voice Advanced service will be delivered via the NBN and will need to be connected to your T-Gateway to make and receive calls. Unlike some existing phone services, your voice and broadband services won't operate during a power failure. This means you won't be able to use your Telstra Voice Advanced service on the NBN to make or receive telephone calls, including calls to Emergency '000' services. Please consider the implications of this, especially if you have a back to base alarm or personal response system that you'd like to connect via your telephone service on the NBN. If you are eligible for Priority Assistance you'll be provided with our Telstra Voice Standard service as the primary voice service with your bundle. Telstra Voice Standard is battery backed-up by the NBN Co supplied Power Supply Unit (PSU and battery) so you can use your telephone service during a power outage. Telstra Voice Standard isn't available on Fixed Wireless, however, other options are available.</p> <p>Incompatible Equipment</p> <p>Most existing devices will be supported by a telephone service on the NBN. However, some older landline telephone handsets (such as a dial/rotary phone), back to base alarm systems, personal response systems (medical alert/emergency call systems) and fax machines may not work. Please check with the manufacturer/provider to check if your device is compatible.³²</p>	<p>Priority Assistance. It does not mention, and it is unclear if a battery backup service is available for bundled products from Telstra (or other providers) for non-priority assistance customers. Awareness is critical when making a decision as to whether a consumer requires the battery backup service.</p>

The above three examples demonstrate that under the status quo CSPs are providing inconsistent information to consumers to obtain an informed decision regarding whether they require battery backup. These examples also demonstrate the omission of what the ACMA believes are key facts (such as the inability to access emergency services and that battery backup is an option even though not all CSPs may offer it). This presents an unacceptable level of risk to consumers.

- > **Regulatory experience relating to information provision more broadly in the telecommunications market.** Complaints data in relation to information provision by CSPs more broadly is illustrative of the likelihood of consumers being enabled to make a fully informed choice in relation to their telecommunications service.
- > The ACMA's *Reconnecting the Customer Inquiry* in 2011-12, for example, was initiated in response to ongoing and increasing customer complaints to the Telecommunications Industry Ombudsman (TIO)³³ regarding the quality of CSP customer care practices. The Inquiry in part found that:
 - > CSPs have failed to provide sufficient information to consumers to enable them to make informed choices that would suit their needs, resulting in significant consumer detriment.³⁴
 - > The existing industry code of practice had not provided adequate community safeguards in relation to information provision by CSPs to consumers.³⁵
- > A reduction in consumer complaints occurred following the introduction of a revised industry code, the *Telecommunications Consumer Protections Code C628:2012* (TCP Code), which took effect in September 2012. In the year following

³² [Source](#)

³³ For the period January–March 2011, complaints to the TIO increased by almost 31 per cent over the previous corresponding period. This includes an increase in complaints made about customer service and complaints-handling.

³⁴ ACMA's *Reconnecting the Customer Inquiry* in 2011-12, pp 63–64, 'Why have firms failed to provide an acceptable level of service?'

³⁵ ACMA's *Reconnecting the Customer Inquiry* in 2011-12, p 131.

introduction of the TCP Code, the TIO experienced an 18 per cent decline in telecommunications related complaints.³⁶

- > Some of the key sources of problems experienced by consumers in the telecommunications sector are outlined in Box 1.

Box 1: Consumers' experiences when choosing products and providers (edited extract from the *Reconnecting the Customer* final public inquiry report)

The customer service experience typically starts at the time consumers look for a product. Typically, all of the features and the quality of a telecommunications product will only be discovered after its initial use; accordingly, the information available about products in the market—particularly about how they will perform in practice—is vital for consumers to make an informed choice.

For many consumers, choosing a product—and, accordingly, a service provider—is difficult. Some of the reasons cited by consumers and consumer representatives for these difficulties included:

- > Consumers are faced with an array of choice. There is a vast number of plans and products in the market from which consumers can choose—even a single provider often offers many different plans.
- > Poor advertising and marketing practices that do not accurately represent key features of telecommunications products add to the confusion many consumers face when choosing a product.
- > Critical information about products is not disclosed clearly, which makes it difficult for many consumers to understand what they are purchasing.
- > Relying on representations made at the point of sale can also be problematic. Some consumers were offered one thing at the time of sale by a customer service representative, but received something else.

Source: *Reconnecting the Customer* final public inquiry report pp 45-46.

These assumptions are especially likely to hold true with smaller CSPs who are faced with constraints of scale and resourcing.

The government has been consulting with industry prior to the release of the first NBN Co Statement of Expectations in December 2010.³⁷ In that time, industry has shown little or no interest in establishing mechanisms to improve consumer awareness and understanding of the battery backup capability of the NBN fibre network, preferring a 'wait and see approach'. This means the likelihood of the risk eventuating has not been diminished, leaving the risk with industry and (through the absence of an effective response to address the policy problem) the government.

Section 2 contains a more detailed discussion of the commercial incentives on market participants and likelihood of the identified risks eventuating.

Based on the above information and research, the ACMA has made a speculative estimate that **ten per cent** of customers in FTTP areas will not be adequately informed to make their decision about battery backup and will subsequently make the wrong decision for their needs.

³⁶ [Source](#)

³⁷ [NBN Rollout: Statement of Expectations](#)

Objective

Due to the high risk of the policy problem, there is value in proactively addressing it. To that end, the following objective has been set: **to ensure that consumers are sufficiently informed to make an informed decision in relation to the NBN Co fibre to the premises battery backup unit that is appropriate for their needs and appropriate records are kept** (“the policy objective”).

This policy objective was specifically confirmed by the government in correspondence to the ACMA, indicating that “conditions should be in place to ensure that an informed decision is made and recorded in a consistent manner by requiring that:

- > customers receive sufficient information from CSPs during the sales process about whether to accept or decline the installation of a backup power supply unit, based on their individual circumstances
- > CSPs retain sufficient documentary evidence of communications with customers about the choice made by the customer, including available options, and the final decision about whether a backup power supply has been accepted or declined.”³⁸

Section 3 to this RIS provides additional detail on the scope of the policy problem, including the services and consumer demographic covered by the problem.

The ACMA assesses that meeting this policy objective will reduce the likelihood of risks eventuating, in that consumers will be more likely to be satisfied with their choice in relation to a battery backup unit and, if they require backup capability, they will be more likely to select it and in all cases the consumer decision will have been clearly documented.

It is also essential to recognise that the policy objective is not to increase the take-up rates of battery backup units. It may well be possible, once consumers have sufficient awareness and understanding of how the NBN fibre network operates, that more consumers make a judgement call that the benefits of opting for no battery backup unit may outweigh the benefits of having one. The objective is solely that customers make informed choices in relation to battery backup capability. Setting this objective empowers consumers and ensures their ownership of decisions around battery backup units. It provides consumers with sufficient flexibility to make decisions that are appropriate for their circumstances, as assessed by them.

³⁸ Letter from Senator, the Hon Stephen Conroy, the (then) Minister for Broadband, Communications and the Digital Economy to Mr Chris Chapman, ACMA Chair and CEO, received on 18 June 2013, regarding the *Regulatory enforcement of ‘must opt’ battery backup model for NBN installations*. This position was formally reconfirmed by the Hon Malcolm Turnbull MP, Minister for Communications, in October 2013.

2. Why is government action needed?

The stated policy objective is unlikely to be met by existing consumer protection mechanisms or without government action because of market failure on five fronts:

1. As a result of wider government intervention in the telecommunications industry, **migration to the NBN is compulsory** and not initiated by the consumer.
2. The NBN Co **wholesale broadband agreement does not adequately manage the identified risks**. The wholesale broadband agreement sets out an operating framework for optional battery backup but does not providing an enforceable mechanism for consumer facing activities. NBN Co, as a wholesaler, has no role to review CSP compliance practice regarding informed consent. CSPs are likely to implement variable practices in line with their own governance standards which may not be sufficient to reduce the risk.
3. CSPs have **compelling commercial incentives** to provide information to consumers in a way that does not enhance consumers' awareness or understanding of battery backup issues, including referring responsibility for the issue to NBN Co and ultimately to the government as the infrastructure owner. This behaviour is not adequately countered or managed under either the wholesale broadband agreement or existing consumer protection mechanisms.
4. Even where CSPs did comply with the voluntary guidance provided alongside the wholesale broadband agreement, **the implementation would be inconsistent** and is unlikely to sufficiently improve consumers' understanding of their requirement (or not) of a battery backup unit.
5. Existing **consumer protection mechanisms are unlikely to satisfactorily manage the identified policy problem and associated risks**. In particular, existing consumer protection mechanisms are not specific enough to require CSPs to enable an informed choice about battery backup by the consumer. Existing consumer protection mechanisms also do not diminish the commercial incentives to provide minimal consumer information about battery backup.

Compulsory migration

Consumers will not be able to express a choice as to whether they migrate their fixed line telephone service to the NBN or remain on Telstra's copper network.

As part of the government's reform of the telecommunications market, the NBN will replace Telstra's copper telecommunication network where FTTP technology is to be deployed, and as such the decommissioning of Telstra's copper network requires the migration of fixed line telephone services to the NBN.

Consumers who wish to retain any fixed line telephone or internet service must move to the NBN by contacting a retail service provider. As a result, the consumer is likely to be presented with a wide range of information across a hundred or more of retail plans from approximately 40 retail service providers.

NBN Co wholesale broadband agreement

Contractual obligations agreed between NBN Co and its customers (CSPs) in relation to a range of matters, including backup power supply, are set out in NBN Co's wholesale broadband agreement. NBN Co's wholesale broadband agreement partially addresses the policy problem relating to optional backup power supply by allowing CSPs to offer choice, and clarifying the relationship between wholesaler and CSPs. The wholesale broadband agreement supplies the operational framework for optional

battery backup (that is, CSPs submit online customer orders with the battery backup field set on optional).

As outlined in the background section, in October 2013, NBN Co issued a companion document to the wholesale broadband agreement, which provides guidance to CSPs around the implementation of optional battery backup, and recommends processes to ensure consumers make informed choices (entitled the Optional Battery Backup Informed Consent Guidelines and Checklists).

The wholesale broadband agreement and associated Guidelines are not expected to adequately address the identified policy problems because:

- > The wholesale broadband agreement clearly states that **CSPs are responsible for interfacing with consumers**, and resolving issues, even if they relate to the network or NBN Co infrastructure.

Because of its role as a wholesale provider, NBN Co is not able to manage the relationship between the consumer and CSP and will only be aware of, or able to respond to, consumer complaints once an issue arises. As the Guidelines do not provide any requirement for compliance, CSPs may not retain sufficient documentation of consumers' choices, leaving consumers with limited recourse to escalate their complaints. This results in an operational framework with limited ability to monitor or enforce non-compliance.

- > The Guidelines do not form part of the wholesale broadband agreement and are **not contractually binding** on CSPs. They state that CSPs must make their own decisions on the type and extent of information that should be provided to their customers in relation to backup power. While this is a reasonable expectation of large CSPs, it is not anticipated that smaller CSPs have sufficient incentive to invest the resources and seek advice on implementing the Guidelines' recommendations and be willing to extend the sales process with prospective customers.
- > As outlined in the background section, the transition in industry structure changes the role and incentives of CSPs. There is now **no end-to-end accountability** for consumers' telecommunications services (or safety resulting from those services).³⁹ Where CSPs and NBN Co both have a role in relation to an aspect of a customer's service (such as provision of a battery backup unit), there are greater opportunities for CSPs to avoid accountability for aspects of the end-user's experience.
- > There are **limited incentives for CSPs to minimise the number of incorrect installations that require rectification**, as the main cost involved in retrofitting backup power supply units will fall to NBN Co.
- > Although there are some market-based incentives for CSPs to voluntarily comply (such as reputational damage, the loss of consumer confidence or the possibility of civil penalties), it is **unlikely that market-based incentives are sufficient** for some CSPs, in particular smaller CSPs, to fully adopt the guidelines and more broadly to sufficiently inform consumers about battery backup.
- > There is no inherent incentive on NBN Co to enforce the terms of the wholesale broadband agreement. This lack of incentive is compounded by the likely absence of available remedies to address any damage suffered by customers.

³⁹ Roche, M and Wignall, K (2011), 'Gaps in Telecommunications Public Policy: End to End Service Delivery in the NBN World', *Telecommunications Journal of Australia*, vol 61, no 2.

- > CSPs may rely on implied consent and provide information to consumers in a way that is unclear or inaccessible. This would mean **CSPs could technically comply with the wholesale broadband agreement but would not necessarily reduce the risk to consumers**, or the likelihood that they would not make an informed decision in relation to battery backup.

Disincentives on CSPs to provide adequate information to consumers

CSPs have some commercial incentives to minimise the amount of information provided to consumers for a number of reasons:

- > Firstly, providing consumers with additional information and choice will **increase the time taken in sales processes**. CSPs have an incentive to minimise the amount of information provided to customers in sales processes to encourage a completed sale and reduce the length of time spent with the customer and lower any costs associated with this process. This is especially the case for sales processes that occur over the telephone or in stores, where there is pressure to reduce the amount of 'sales talk time' with the customer, increasing the amount of time available to secure other customers.

Because of the low awareness and understanding of most consumers in relation to how the transition to the NBN interacts with power supply issues, it is expected that this time impact is not negligible (based on the expected approach to compliance with the ACMA's draft service provider determination, speculatively estimated at around 60 seconds per average sales interaction).

- > Secondly, communicating their services' power capability limitations may **reduce the attractiveness** of their service to potential customers. It is natural for CSPs to highlight the positive aspects of their products and services, and minimise information about the negative aspects of their products to secure a sale. It is reasonable to assume that CSPs who offer services with a battery backup unit, without a battery backup unit or offer a choice may minimise the information about services they do not offer or the limitations of a service they are offering.
- > Thirdly, there are **ongoing resource imposts in interacting with consumers who have batteries**. Any problems experienced by the consumer with their battery backup unit need to be raised through their CSP. Maintenance and replacement notifications are also communicated through the CSP. Significant savings in the area of customer support can be made by CSPs where consumers do not have a battery backup unit. For this reason, CSPs have an incentive to encourage consumers not to opt for a battery backup unit, even where the consumer may need it.
- > Fourthly, **CSPs pursuing a cost leadership strategy can offer more competitively-priced services** where no battery backup unit is available. The transition to the NBN is expected to lead to more intense retail competition. The introduction of common wholesale pricing across all CSPs means there are fewer opportunities to pursue a competitive advantage based on cost leadership. Not offering a battery backup unit is one opportunity and CSPs are already refraining from offering their customers battery backup units presumably for this reason.
- > Fifthly, because of the potential to increase time costs relating to sales and service, or reduce the attractiveness of their product, **CSPs may rely on the consent implied by the consumer purchasing the service**. For example, CSPs may provide information about their own non-battery backed up services, but not make the customer aware that battery backup is an option. CSPs may also provide information that is 'available on their website', but not easily accessible at

the time the customer is considering the (often two year contract) purchase. This may be argued by CSPs as gaining informed consent under the wholesale broadband agreement and meeting current consumer protection legislation. This approach would not address the policy problem and is unlikely to improve outcomes for consumers.

- > Finally, as outlined earlier, **the normal incentives of customer dissatisfaction and potential liability are diminished** as incentives for CSPs to offer battery backup units because the lack of end-to-end accountability in an NBN environment means CSPs can shift customer dissatisfaction to the wholesaler or directly to the government.

It is however recognised that some CSPs will view these commercial incentives to minimise information provided to consumers as less compelling and will address the policy problem appropriately under the existing non regulatory framework.

It is natural for market operators to aggressively seek efficiencies in sales processes and pursue customer bases or product options that are highly profitable. But, in this instance there is a policy objective to reduce inefficient use of government resources and the risk of loss of life or harm to consumers. It would not be reasonable to leave this public policy objective to the market and genuinely expect CSPs to sacrifice the compelling market-driven incentives of efficiency and profitability without the impetus of regulatory compliance.

Inconsistent information

Should CSPs implement the principles of the wholesale broadband agreement and comply with the spirit of the **Australian Consumer Law**⁴⁰ (ACL) and **TCP Code**, the lack of specific information in the wholesale broadband agreement is likely to result in inconsistent consumer information across industry (therefore, not meeting the stated policy objective).

Leaving information provision to the market is sensible where competitors offer differentiated products that should be communicated differently. This policy problem, however, involves a number of aspects that are common across all CSPs:

- > The battery backup unit provided to NBN FTTP consumers is common across all CSPs.
- > The lack of consumer awareness and understanding in relation to the backup capability of the NBN fibre network is an industry-wide challenge, faced by all CSPs.
- > When the policy objective is to improve general awareness and understanding of a policy issue, it is preferable to communicate information around that issue in a common way.

The number of common aspects of the policy problem indicates that a standardised, consistent approach is most likely to improve consumers' understanding and meet the stated policy objective.

To date, there is no evidence that CSPs are willing to develop their own industry-driven standards for communicating battery backup related information. This suggests that regulatory intervention is justified to establish a framework that is sufficient to improve consumers' awareness and understanding of the policy problem.

⁴⁰ The ACL is set out in Schedule 2 to the *Competition and Consumer Act 2010*. It is a single, national law concerning consumer protection and fair trading which applies in all States and Territories, and to all Australian businesses.

Summary

It is important to note that many of these market failures exist because of uncertainty around the transition to the NBN and disconnection of copper. Self-evidently, since Australia is the only jurisdiction undertaking a rollout of a broadband network at the same time as decommissioning the legacy copper network, many of the issues arising out of the transition are unprecedented internationally. It is natural that the telecommunications market will take some time to adjust to the market disruption and normalise its behaviour.

Existing consumer protection mechanisms

Existing consumer protection mechanisms do not dull these commercial incentives, and are not specific enough to require CSPs to enable an informed choice by the consumer. Relevant existing mechanisms include:

- > The ACL which includes consumer guarantees in respect of the supply of goods and services to consumers. These guarantees apply to the supply of a telecommunications service.⁴¹ It does not, however, specifically require a CSP to inform a customer about the limitations of a service that is supplied with or without a backup power supply. The limitations of the infrastructure layer and equipment itself may not be viewed by the CSP as being offered by the CSP, but by NBN Co, a government-owned company. In the absence of a specific requirement, CSPs are unlikely to disregard the market incentives of efficiency and profitability.

The ACL prohibits misleading and deceptive conduct in relation to the goods and services in the transaction. As such, it would not require CSPs who do not offer a battery backup unit to inform consumers about the functionality of battery backup, even though this piece of information could be critical in informing a consumer's decision on whether to proceed with the selection of a service. The ACL also operates as an 'ex-poste' regulatory tool; that is, it allows consumers to take action after the consumer has suffered damage or harm.

- > The TCP Code which is designed to ensure good service and fair outcomes for all consumers of telecommunications products in Australia. While the TCP Code provides a number of important consumer safeguards (including that CSPs must communicate their offers in a way which is clear, accurate and not misleading⁴²), it allows CSPs to determine at their discretion what constitutes sufficient information in relation to their product

As indicated earlier, regulatory experience of the telecommunications market indicates that, when no action is taken in relation to information provision by CSPs to

⁴¹ Section 54 relates to the supply of "goods" which includes the supply of goods together with other property or services and provides that there is a guarantee that goods supplied to a consumer are of acceptable quality. In this context it may apply to the supply of a backup power supply unit. Similarly, section 61, relates to the supply of "services" which includes the supply of services together with property or other services and provides that there is a guarantee that services will be reasonably fit for any purpose, or might reasonably be expected to achieve a desired result, made known to the supplier by the consumer. It may be applicable to the supply of a carriage services by a CSP.

⁴² Clause 4.1.1 of the TCP Code provides that a supplier must communicate its offers in a way which is clear, accurate and not misleading, to allow consumers to make informed choices. To achieve this, a supplier must use language to communicate its offers (whether orally or in writing, including in the supplier's advertising) which is suited to the intended audience; and provide information about its offers in a comprehensible, clear and accurate manner, without exaggeration or omission of key information. Clause 4.1.2 of the TCP Code provides that a supplier must provide a summary of each of its current offers to allow consumers to compare offers provided by each supplier which best suit their needs through a Critical Information Summary (CIS). It is not necessary for the CIS to be provided at the point of sale in all instances (for example, online or telephone sales may provide the CIS up to five days after the sale).

consumers, a large number of complaints were made by consumers. Following the institution of the TCP Code, the number of complaints significantly decreased and consumer satisfaction improved.⁴³ This is a relevant example of market incentives being insufficient to ensure consumers receive satisfactory information regarding their telecommunications services.

Additionally, non-regulatory mechanisms to broadly raise awareness and improve understanding (such as a large-scale marketing campaign) are not expected to be an effective possible response. It is difficult for customers to determine if they are impacted, because the geographical dispersion of impacted customers means they can't be specifically targeted easily. The long duration of the NBN rollout also adds complexity and significant costs to a large-scale marketing campaign. Coupled with existing low levels of awareness and understanding, it is unlikely that a large-scale marketing campaign approach would be effective. <<COMMERCIAL IN CONFIDENCE INFORMATION REMOVED>>

⁴³ Follow-up research conducted for the ACMA in 2013⁴³ confirms increased consumer satisfaction with—and the usefulness for consumers of—the new measures contained in the revised TCP Code. This is notably the case for those measures which assist consumers in understanding service products and comparing offers, and tracking usage. Three in ten consumers (29 per cent) thought that it was easier—compared to 12 months previous—to evaluate or compare telecommunications products or offers and 32 per cent had seen or received a critical information summary (with 82 per cent of them finding it useful). According to the TIO's Annual Report, statistics also show that consumer complaints to the TIO marked a five-year low in 2012-13. In this period, the TIO received 158,652 complaints about mobile, fixed line and internet services, which was an 18 per cent decrease from the previous year.

3. What policy options have been considered?

Four possible options have been developed to address the policy objective stated at the end of Section 1 to this RIS:

- > **Option 1:** Leave it to the market
- > **Option 2:** Industry makes a guideline and/or code
- > **Option 3:** The ACMA makes a principles-based service provider determination
- > **Option 4:** The ACMA makes a prescriptive service provider determination.

Scope

These options are defined by the following scope:

- > **NBN FTTP network only.** While there is potential for future competition in the provision of superfast broadband network infrastructure, the nature and extent of the networks which might be rolled out by competitors to NBN is currently unknown. Therefore the scope of the current policy options is limited to the network that is known to require a battery backup unit to allow backup capability (that is, the NBN FTTP network).
- > **Services with or without a backup power supply.** Increasing awareness and understanding among consumers is required regardless of whether a particular service offered by a CSP has a battery backup unit available. This ensures all customers have the option of making an informed choice about their service.
- > **Residential end-users.** The government's optional backup power supply policy identified residential customers of NBN services as the intended beneficiaries of any arrangements implemented to ensure sufficient information is available to make informed decisions about backup power supply. This approach is consistent with stakeholder feedback to not include non-residential customers. Business customers are more likely to have alternative arrangements in place in the event of a power failure and are well placed to negotiate appropriate solutions for their businesses
- > **Standard telephone services.** The policy applies to the supply of standard telephone services, including voice-over-IP services with the characteristic of 'any-to-any connectivity'.⁴⁴ This is because the provision of sufficient information to enable a customer to make informed decisions is intended to safeguard, where it is appropriate, the ability to make and receive calls in the event of a power failure, including the ability to make calls to emergency services. Thus the policy will not extend to internet data services or OTT services, such as those supplied by medical or security alarm providers. The policy will also not apply to OTT telephony services where connection to the FTTP infrastructure is not provided directly by the CSP (for example, Skype).

Option 1: Leave it to the market

Under this option (the status quo) the government would rely on CSPs to ensure that they obtain and record informed consent of customers in relation to backup power

⁴⁴ Standard telephone service is defined under section 6 of the Telecommunications (Consumer Protection and Service Standards) Act 1999.

supply for relevant NBN services, based on CSPs effectively complying with the wholesale broadband agreement and that agreement being adequate.

From 19 December 2013, backup power supply arrangements under the wholesale broadband agreement apply⁴⁵, enabling CSPs to offer customers a service without backup power supply where CSPs affirm to NBN Co that they have obtained informed consent. Under the wholesale broadband agreement if a provider chooses not to offer (or a customer chooses not to install) a battery backup unit, a CSP must:

- > provide the customer with sufficient information to allow customers to make an informed decision as to whether they require battery backup functionality
- > obtain informed consent
- > retain a record of all communications with the customer in relation to their decision.

In addition, post 1 October 2014 the above obligations apply to circumstances where a CSP offers services with a mandatory battery backup unit, or if given the option, a customer chooses to install a battery backup unit.

The wholesale broadband agreement obligations are supported by NBN Co providing CSPs with **non-binding** informed consent guidelines⁴⁶ (including checklists) that provide recommendations to assist the development of a CSPs' own individual sign-up processes, including by telephone, online and face-to-face.

Option 2: Industry develops a guideline and/or code

Two sub-options are available under this option:

- > a self-regulatory guideline
- > a co-regulatory registered code.

A guideline is a self-regulatory option typically prepared to provide industry participants with a set of key principles and practices on certain matters, based on the collective and agreed views of those involved in its development. Compliance is not mandatory.

An industry registered code is a code developed by a body or association that represents a section of the telecommunications section, and which is registered by the ACMA under Part 6 of the *Telecommunications Act 1997* (the Act).

Whilst listed as an option, the industry has indicated it is not currently developing a code that would address the issue of optional battery backup on fibre networks, in part because the industry prefers Option 1.

Option 3: The ACMA develops a principles-based service provider determination

Under this option, the ACMA would make a service provider determination⁴⁷ under section 99 of the Act⁴⁸ to impose obligations on CSPs regarding the development and implementation of informed consent and document retention processes for optional backup power supply. Option 3 is a revised service provider determination from that

⁴⁵ [Source](#)

⁴⁶ [Source](#)

⁴⁷ Subsection 99(1) of the Act gives the ACMA power to make a written determination setting out the rules that apply to service providers in relation to the supply of specified carriage services. Section 3.13(2) of the *Telecommunications Regulations 2001* enables the ACMA to make a service provider determination setting out rules that apply to CSPs in relation to a customer's interests as regards the supply of the services.

⁴⁸ Refer section 98, 99

used in the public consultation process in December 2013. It was developed in response to stakeholder feedback on the earlier version of the service provider determination and then subjected to targeted stakeholder consultation in May 2014.⁴⁹

This earlier version of the determination was similar to option 4 (below) in that it stipulated in detail the nature and extent of the information required to be given to the customer and how the record of informed consent was to be captured and retained. This version of the determination was heavily criticised by stakeholders, primarily for its overly prescriptive nature and the likelihood that it would result in information overload for customers. It is analysed below as option 4.

Option 3 is regarded as a principles-based determination is intended to give CSPs flexibility to determine how best to meet their informed consent obligations within their respective business operating environments. For example, it would allow CSPs to take account of the distinctive nature of their own service offerings and the varying information requirements and comprehension abilities of different customers. It seeks to strike a balance between the need to fully inform customers and the potential for customers to experience information overload during the sales process. It does this by setting broad principles and allowing individual CSPs determine how they provide information and obtain and record informed consent.

Under the Act, CSPs are required to comply with service provider rules.⁵⁰ In the event of non-compliance with a service provider rule, the ACMA has a range of enforcement options, including seeking pecuniary penalties through the courts.⁵¹

Under Option 3, the ACMA seeks to address the deficiencies identified in respect of options 1 and 2 – namely by ensuring sufficient information is provided to customers, obtaining an informed decision from customers and ensuring that record-keeping processes are adequate to constitute documentary evidence of informed consent.

In this regard, a service provider determination would specify in general terms:

- > the matters to be addressed in information provided to customers about the consequences of a decision to take a service with or without backup power supply
- > the content of records of customer decisions regarding backup power supply
- > the period for which such records must be retained.

Under Option 3, CSPs have greater flexibility in determining how to implement the consumer safeguard while continuing to prescribe core (but minimal) information requirements. **Appendix A (Table 9)** provides additional evidence to demonstrate that a principles-based service provider determination imposes obligations substantially consistent with what is required under the wholesale broadband agreement.

⁴⁹ Stakeholder consultation comprised:

- > a Communications Alliance working group meeting
- > a consultation paper
- > two industry workshops
- > two opportunities to submit written submissions (the second commenting on a revised service provider determination)

⁵⁰ Section 101 of the Act.

⁵¹ See sections 102 and 103 of the Act.

Option 4: The ACMA develops a prescriptive service provider determination

This option relies on the same statutory power as Option 3: that is, the making of a service provider determination under section 99 of the Act. In contrast to Option 3, Option 4 has a much greater level of prescription in the type of information that must be conveyed to customers and retained by the CSP. A draft determination of this type was included in the consultation process undertaken in December 2013.

The principal difference between option 4 and option 3 is the stipulation of the information required to be given to consumers under Option 4. While the option 4 service provider determination would cover the same broad subject matter areas as under Option 3, the content of the option 4 determination would be prescribed in considerably more detail. Such prescription could include requiring CSPs to:

- > tell the customer that backup power supply service will only power devices connected to a network termination device during a mains power failure if the customer equipment connected to the network termination device: does not require mains power to operate; or is provided with an additional backup power supply (such as an uninterrupted power supply);
- > tell the customer that the customer should confirm with the appropriate customer equipment vendor whether the customer has any special requirements relevant to the supply of a backup power supply service
- > provide information to consumers about the factors that may influence estimated time periods for which a backup power supply service would enable the continued supply of a specified carriage service during a mains power failure
- > keep records for two years after a provider ceases to supply service to a customer
- > where the sales process was via phone, keep a contemporaneous electronic voice recording of the customer's acknowledgement or decision
- > record the date on which the wholesale network provider is informed of the customer's decision.

4. Impact analysis

Measuring the economic impact of each option requires the costs and benefits to be taken into account. For the purposes of illustrating the benefits associated with regulated information provision, this section includes estimations associated with reducing the:

- > rate of inappropriate backup power supply installation
- > costs of remediating wrong decisions
- > costs due to loss of life or harm.

The groups in the community that are likely to be impacted by the options set out in this RIS are:

- > consumers as outlined in '*The number of potentially impacted consumers*' in this section
- > CSPs that supply standard telephone services to residential customers using a NBN FTTP connection. There are estimated to be approximately 60 NBN access seekers, of which 40 currently provide standard telephone services to residential customers in this market⁵²
- > NBN Co, as a wholesale network provider and provider of backup power supply units.

These groups may experience benefits that include lower risk to life or harm and lower liability and reputational damage resulting from adverse events.

The types of costs incurred may include administrative costs, lost time, compliance burdens, inconvenience and delay.

For the purposes of analysing and assessing the impact of the options, Option 1 should be read as a baseline assessment against which others can be compared.

Previous cost estimates

The cost estimates detailed in this RIS are substantially less than the initial estimates made in the ACMA's options-stage RIS.⁵³ This is largely a consequence of changes in government policy regarding NBN deployment technology.

The original service provider determination costing was based on 93 per cent of premises potentially being given the choice of a backup power supply at the premises.⁵⁴ In line with the government's April 2014 Statement of Expectations regarding NBN Co's rollout, it is now estimated that 26 per cent of premises in the fixed line footprint will be served by FTTP technology. Additional changes to the scope of the policy that confines it to residential customers of standard telephone services offered on the NBN have also had an impact on the overall cost estimates.

In addition, the ACMA based its initial draft service provider determination on the extremely detailed NBN Co informed consent guidelines. Following extensive consultation, the draft service provider determination obligations were substantially

⁵² Estimate is based on ACMA staff desktop research.

⁵³ Options-stage regulation impact statement Consumer safeguards for optional backup power supply arrangements, November 2013, ACMA, published 6 December 2013 [here](#)

⁵⁴ Shareholder Ministers Statement of Expectations to NBN Co, 17 December 2010.

reduced to require only core elements that ACMA believes are critical to obtaining an informed decision. The outcome of this consultation process is the development of Option 3 (principles-based determination), which has significantly lower costs for CSPs.

Costs and benefits

The following criteria have been used to analyse each of the four options:

Criteria relating to how the options address the policy problem

1. effectiveness of each option at meeting the policy objective
2. date of effect
3. consistency and clarity of information provided to customers by CSPs
4. number of potentially impacted consumers

Criteria relating to implementation of the options

5. level of CSP discretion
6. robustness of the audit and compliance regime
7. mechanisms for enforcement and escalation
8. expected level of compliance
9. the extent to which the option provides certainty
10. the impact of behavioural bias
11. total costs to industry and consumers
12. total net benefit

For comparison purposes, **Table 2** presents a summary of the criteria for assessment across each option along with summary conclusions. Two criteria share a common assessment across all options:

4. the number of potentially impacted consumers
10. the impact of behavioural bias

A summary of each option's assessment against each criteria is provided in a comparative table at the conclusion of this chapter (**Table 7**).

Table 2: Summary impact of each option

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a principle-based service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
Factors that address the policy problem				
1. Effectiveness at meeting the policy objective	Low , this option poses the highest risk to life	Low , with the risk reduced more if: the content of a code or guideline is clear and consistent; and a large number of CSPs adopt the code or guideline.	Moderate	Moderate
2. Date of effect	N/A – current	December 2014 (Guideline) there may be further delays March 2015 (Code) , there may be further delays	October 2014*	October 2014
3. Consistency and clarity of information provided to consumers by CSPs	Low	Moderate	High	High
4. Number of potentially impacted customers	High . Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.	High . Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.	High . Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.	High . Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.
Factors that relate to implementation				
5. Level of CSP discretion	High	Moderate	Moderate	Low
6. Robustness of audit / compliance regime	Low	Unknown	High	High

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a principle-based service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
7. Enforceability / ability to escalate	Low	Moderate	High	High
8. Expected level of compliance	Unknown	Unknown	High	Moderate
9. Level of certainty / minimal variability	Low	Moderate	High	High
10. Impact of behavioural bias	Moderate	Moderate	Moderate	Moderate
11. Total costs to industry and consumers	N/A	\$1.985 million (Code) over ten years	\$2.315 million over ten years	> \$2.315 million over ten years
12. Total net benefit ⁵⁵	-\$1.656 million	Not quantified	\$1.656 million over ten years	Not quantified
Summary				
Unquantified net impact	Low: The ACMA has made a speculative estimate that 10% of customers may make an incorrect decision. Of these, an additional speculative estimate has been made that 50% (of the 10%) may make a decision that increases the risk to life or harm under this option	Improvements in the risk to life and harm due to implementation of a guideline or code have not been estimated	Low: The ACMA has made a speculative estimate that 5-7.5% of consumers may make a decision that puts their property, health or life at risk under this option, hence, an improvement in the range of 2.5–5.0%	Improvements in the risk to life and harm due to implementation of a prescriptive service provider determination have not been estimated
Conclusion	Option 1 is the baseline	Option 2 provides flexibility, but the consumer outcome is highly uncertain	Option 3 has the highest net benefit	Option 4 provides the greatest level of certainty in consumer information but has the highest cost on CSPs

Legend

⁵⁵ As the proposed option(s) is proactive regulation there is no market or empirical evidence with which to quantify the likely loss of life (and associated financial loss) in this calculation and therefore this calculation and it has been excluded.

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a principle-based service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
Most beneficial: Green Moderately beneficial: Orange Least beneficial: Red				

Quantifying the assessment

Many of the primary benefits resulting from the available options are not, at this stage, quantifiable. This is because:

- > the must opt approach to battery backup does not commence until 1 October 2014; and
- > the disconnection of copper networks is at an early stage (commencing from May 2014).

Despite this, there is value in considering regulatory options in advance of quantifiable evidence. ACMA modelling, qualitative and quantitative analysis (where available) has been undertaken for each option and outlined below.

Quantifiable costs and benefits generally fall under one of the following three categories:

1. Reduced risk of loss of life or harm.
2. Administrative costs.
3. Industry compliance costs for the relevant regulatory intervention.

The ACMA has used its best endeavours to portray the costing fairly. The following common data set and assumptions for the period 2014–2023 have been used across the options:

- > Approximately 2.9 million FTTP connections are expected to be made to the NBN during the period 2014–2020. This estimate is based on data in the Strategic Review.⁵⁶
- > Approximately 500,000 FTTP connections are expected to be made to the NBN during the period 2021–2023. This estimate is based on industry data provided to the ACMA on the number of new CSG eligible standard telephone connections made each year, and assumes that 26 per cent of these connections will be made using FTTP.
- > Seventy per cent of services are residential. This is based on industry data provided to the ACMA that identifies a residential/business standard telephone service ratio.
- > Eighty per cent of FTTP services on the NBN will include a standard telephone service. ACMA research data shows that approximately 25 per cent of consumers choose to use a mobile phone only, and do not rely on a standard telephone service at their premises.⁵⁷
- > Forty per cent of customer interactions will be conducted online. This is based on data quoted by the CEO of Telstra at the October 2013 annual general meeting.⁵⁸
- > The wage costs utilised to calculate the impact on industry and individuals use the ABS Cat. No. 6306 *Employees Earnings and Hours*, 2012.

⁵⁶ Source: NBN Co [Strategic Review](#), December 2013, p97.

⁵⁷ Source: Roy Morgan Single Source. Staff have speculatively estimated 80 per cent. The 25 per cent data point does not imply that 75 per cent of households will have a STS connected, as many mobile-only consumers live with consumers that use a fixed-line STS.

⁵⁸ "Mr Thodey said the size of the offshore workforce is being affected by more customers looking online for services. He said 40 per cent of transactions were online last financial year, up from 30 per cent the previous year." [Source](#)

Vulnerable customers

The policy problem is especially sensitive, and attracts a particularly high level of risk, in relation to vulnerable customers. These include customers without an alternative means of communication in the event of a power failure and those who are elderly or disabled or have difficulty understanding English. Telstra (the only CSP that offers priority assistance) priority assistance customers receive a battery backup unit on a mandatory basis⁵⁹. However, not all vulnerable customers that experience a time critical or life threatening event will be Telstra priority assistance customers.

Scoping the group of vulnerable customers that are not priority assistance is challenging. However, the following data is relevant to considerations:

- > 1.3 million Australians (seven per cent) aged 18 years and over relied solely on their fixed-line telephone at December 2013
- > When examined by age, reliance on the fixed-line telephone increases significantly for older Australians, with 25 per cent (855,000) of those aged 65+ and 48 per cent of those aged 80+ having only a fixed-line telephone service (no mobile) at December 2013
- > On a demographic basis, people aged 65+ are more likely than the general population to have lower levels of education and income, live alone in a capital city and be female.⁶⁰

Methodology – probability of an adverse event occurring and the number of people likely to be affected

The ACMA's methodology to identify the probability of a relevant adverse event occurring and the number of people likely to be affected is based on a number of variables including:

1. The likelihood of a **power outage** at any given minute during a year.⁶¹
2. The likelihood of a customer requiring **access to an emergency service number**.⁶²
3. The likelihood of number 1 and 2 occurring concurrently.⁶³
4. The likelihood the customer requires access to and from a **residential fixed line**.⁶⁴
5. The likelihood the customer lives in an area supplied by **FTTP infrastructure**.⁶⁵

⁵⁹ Around 4 per cent of all fixed-line residential telephone services in operation: at June 2013 there were 6.53 million Telstra retail fixed-line telephone services in operation. Of these, approximately 256,549 were priority assistance customers.

⁶⁰ ACMA, Older Australians resist cutting the cord, 2014

⁶¹ On average, consumers experience 345 minutes of power outage per year, therefore the probability of a household experiencing a power outage at any given minute is 0.0656 per cent. This data applies to the national Energy Market (NEM) only which excludes Western Australia and the Northern Territory.

⁶² There were 8.8 million calls made to an emergency call service number in 2012–13, and of these, 60 per cent (5.3 million) were genuine.

[ACMA Communications Report 2012–13](#), p49 and [here](#)

⁶³ Calculated by multiplying the probability of a household experiencing a power outage at any given minute (0.0656 per cent) by the number of genuine calls made per year to an emergency call service number (5.3 million).

⁶⁴ Thirty-one per cent of calls to an emergency call service number were made from a fixed line. ACMA industry supplied data.

Seventy per cent of calls made are residential-based on business/residential lines ratio. ACMA industry supplied data.

⁶⁵ NBN Co estimate that twenty-six per cent of premises will be served by FTTP infrastructure. Source: NBN Co [Strategic Review](#), December 2013, p97.

6. The likelihood of a consumer not having been adequately informed and consequently having made the wrong decision not to acquire the battery backup service.⁶⁶

In addition, the ACMA has made a speculative estimate, (based on research findings outlined later in Section 4 – Option 3 – Benefits), that a regulated option will improve consumer safeguard outcomes for approximately 2.5–5.0 per cent of affected customers (that is, 25–50% of those who made a wrong decision).

The impact of behavioural bias

All policy options provide some requirements for CSPs to provide information about the battery backup capability of their services, prior to a customer selecting a service. This information, however, may not have a corresponding and consequential impact on a customer's choice due to the existence of behavioural bias. Behavioural market failures can arise when individuals make decisions, or are perceived to make decisions, which are against their own best interests. Drivers of such behaviour include:

- > choice overload – where consumers have to compare many products and features leading to confusion, random choice, or even failure to make any choice
- > heuristics – where consumers take short cuts (for example, by following rules of thumb such as what others say/do) when the decision environment is complex
- > framing biases – where consumer choice is influenced by the context in which information is presented. For example the information may be delivered in such a way as to lead the consumer to make a choice that better serves the purposes of the person making the offer.

Behavioural biases will remain regardless of the option implemented. However, it is important to note as a limitation that may result in customers making choices that are not in their best interests.

Option 1: Leave it to the market

Because Option 1 is the status quo – that is, does not involve regulatory or quasi-regulatory intervention – there are no additional costs associated with the implementation of Option 1.⁶⁷ However, Option 1 may be subject to costs including those associated with loss of life or harm. These costs are assessed based on the likelihood of CSP compliance with the requirements of the wholesale broadband agreement and the resulting change in customer awareness of battery backup options.

Benefits

The primary benefit of Option 1 is its high **level of CSP discretion** and **lower regulatory costs imposed on CSPs**. As the NBN Co wholesale broadband agreement only sets broad, high-level principles relating to informed consent and documentation and the accompanying guidelines are not contractually binding, CSPs have a wide discretion in how they implement these provisions. It is desirable for the policy problem to be addressed in a way that has minimal disruption on CSPs' services and processes. Option 1 recognises that CSPs are best-placed to seek consumers' informed consent efficiently.

⁶⁶ The ACMA has made an assumption (for the reasons outlined in section 1 – What is the policy problem – The problem) that five per cent of customers will not be adequately informed to make their decision about battery backup and will subsequently make the wrong decision to not acquire the battery backup service.

⁶⁷ This RIS does not attempt to assess the costs associated with CSP compliance with the wholesale broadband agreement.

Disadvantages and costs

This option has the **lowest effectiveness at meeting the policy objective**, meaning it poses the highest risk of loss of life or harm. It takes limited steps to reduce the level of risk associated with the policy problem. In summary:

- > As outlined in section 2, the incentives in the current market structure and framework (comprised of the wholesale broadband agreement, existing consumer protections like the ACL and TCP Code or naturally-occurring market forces, such as the desire to reduce reputation damage) are not sufficiently compelling to address the policy problem, resulting in market failure.
- > Existing industry practice suggests CSPs will not sufficiently raise consumer awareness and understanding of the policy problem to enable consumers to make an informed choice about their battery backup needs.
- > While some providers are explaining the impact of ordering their service (which may not come with battery backup), providers may not be making the consumer aware that battery backup is an option and explaining the benefits and limitations of battery backup. This scenario does not lead to informed decision making about their battery backup needs.
- > Low consumer awareness that CSPs are not required to offer battery backup may lead to incorrect decisions with serious consequences.

Incentives to comply

Existing incentives alone are not compelling enough for CSPs to assist in meeting the policy objective because the **audit and compliance regime under the wholesale broadband agreement is not sufficiently robust for this purpose**. NBN Co has advised that it is unable to proactively undertake any audits or compliance checks to ensure the objectives are being met. Feedback through the ACMA's consultation process suggests it is more likely that limiting the risk of civil liability will be the key driver for industry compliance. Nevertheless, the **expected level of compliance** under the status quo may not be adequate, especially given the potential risks to personal safety that may arise should a customer not have sufficient information to make an informed decision.

Lack of enforcement ability

There is also **limited ability to enforce** desirable behaviour where non-compliance is detected by NBN Co or consumers. The guidance provided by NBN Co around implementation of optional battery backup is non-binding and not contractually enforceable (since it is not contained in the wholesale broadband agreement). As a wholesaler, NBN Co also does not deal directly with end-users, meaning that consumers who are dissatisfied with their CSP's battery backup processes will need to raise concerns with their CSP or, thereafter, the TIO. The ACMA has no role in ensuring contractual compliance under the wholesale broadband agreement. This does not provide the consumer with mechanisms for rapid resolution of concerns.

Inconsistency of information provided to consumers

There is also expected to be **limited consistency and clarity of information provided to consumers by CSPs**. The wholesale broadband agreement does not prescribe any information that must be provided to consumers. The information provided to consumers is left to the discretion of the CSP. Critical information, such as the fact that battery backup is available for FTTP connections but may not be on offer from the particular CSP may not be given to consumers.

Negative costs associated with Option 1

The ACMA estimates that, as the net benefits under Option 3 are not realised under Option 1, the costs of Option 1 total **at least \$1.6 million over a ten year period**. This excludes significant costs that may be incurred due to loss of life or harm.

Summary

As discussed in section 2, the ACMA does not believe current industry practice or market incentives are sufficient to reduce any inefficient use of government resources or reduce the risk of loss of life or harm to consumers and hence meet the policy objective. This is because:

- > market forces do not provide sufficient incentive for CSPs to act in advance of an adverse outcome
- > the wholesale broadband agreement and existing consumer protections do not adequately manage the identified risks
- > without a clear, more specific standard of information, consumers may not receive information that sufficiently enables them to make an informed choice
- > without effective enforcement mechanisms, there are limited consequences for CSPs who do not ensure consumers are adequately informed about battery backup arrangements where an adverse outcome eventuates.

As the existing regulatory and non-regulatory arrangements do not provide sufficient compliance and enforcement mechanisms, or provide sufficient commercial incentive for CSPs to implement the recommendations of the complementary guidelines to the wholesale broadband agreement, consumers are being placed at an unacceptable level of risk.

Option 2: Industry develops a guideline or code

Costs differ between a guideline and code option as CSPs are able to recover the costs associated with developing a consumer-based industry code. There are no relevant compliance costs associated with a guideline as it does not involve intervention by government.

Many aspects of Option 2 are also unknown as the design and nature of a guideline or code would depend on industry discussion and agreement. In particular, the **robustness of an audit and compliance regime** and **expected level of compliance** are unknown.

Although industry may develop a guideline or code that provides a sufficiently robust compliance regime or level of compliance, there is a low level of support for additional requirements beyond those in the wholesale broadband agreement. For this reason, it is likely that compliance aspects (and therefore to some extent the effectiveness at meeting the policy objective) of Option 2 will be similar to Option 1.

Benefits

A code or guideline would be industry-led, providing industry with a **moderate level of CSP discretion**. Option 2 is more effective than Option 1 at ensuring clear industry expectations and **a consistent and clear standard of consumer information**. However, the development and implementation period of guidelines or a code is expected to take a significantly longer than Option 3.

Disadvantages and cost

Noting the high degree of uncertainty about the content of a code or guideline, the ACMA's assessment is that this option is **unlikely to meet the policy objective**, based on the underpinning assumption that industry will negotiate a code or guideline that is as close to Option 1 as possible. Additionally, it is not clear to what extent guidelines would be adopted, or codes would be complied with by industry. If industry is unable to attract support, Option 2 does not vary significantly from Option 1. These two factors mean Option 2 may not reduce the level of risk to loss of life or harm.

However, if a code or guideline is developed that is closer to the provisions of the draft service provider determination, the level of risk to consumers will significantly reduce. The ACMA's regulatory experience suggests that codes that are drafted effectively can considerably improve outcomes for consumers. Following the amendment to the TCP Code, for example, the number of complaints significantly decreased and consumer satisfaction improved (refer Section 5, 'Existing consumer protection mechanisms').

These potentially beneficial outcomes aside, until there is greater indication from industry that it is prepared to voluntarily negotiate consumer outcomes through a code or guideline, the effectiveness of this option meeting the policy objective is assessed as low.

A code or guideline also has a significantly **delayed date of effect given no work has commenced**. Although industry feedback in early 2014 suggested a code or guideline could be in place by March 2015 and December 2014 respectively, the lack of industry willingness to date and the lack of consensus on how to approach the policy problem within industry, raises doubt that a code or guideline could be developed (and registered with the ACMA, if applicable) within that timeframe.

The **ability of consumers to escalate complaints** and the **certainty** that a code or guideline provides to consumers depends on a few factors, including the content of the code or guideline and whether a code is registered with the ACMA. Registering a code with the ACMA would provide a greater level of certainty than that provided under the wholesale broadband agreement (Option 1).

The quantifiable aspects of this option (and financial impact upon CSPs) will depend on the approach adopted. Nevertheless, it is assumed that an industry code will attract a greater cost to industry than a guideline, in terms of its ongoing administration and its internal compliance costs (in part due to its enforceability risk).

Summary

The uncertainty of the code or guideline development process makes their efficacy difficult to assess. The lack of industry support in negotiating a code or guideline to date suggests that there would, however, be some difficulty in persuading CSPs to voluntarily engage in the development process or adopt a code or guideline.

There are benefits in establishing clear industry expectations in relation to the implementation of optional battery backup and, if a code were registered with the ACMA and adopted by industry, will provide consumers with appropriate escalation mechanisms.

It is reasonable, however, to assume that (if CSPs were to commence development of a code or guideline) industry will pursue informed consent and record-keeping provisions that are efficient and may not satisfactorily meet the stated policy objective.

Table 3 outlines the estimated costs of Option 2 – development of a code. Given the uncertainty related to the rigour with which industry would draft provisions of a code, the effectiveness of and level of compliance with a code, benefits for option 2 have not been quantified. The ACMA have assumed however, that due to the reduced compliance and enforcement incentives, the benefits of a code do not outweigh the benefits of a service provider determination in this instance.⁶⁸

The regulatory costs shown represent the incremental increase in regulatory burden above what CSPs are required to do under the wholesale broadband agreement.

⁶⁸ It has been assumed (based on ACMA research) the service provider determination will glean a consumer safeguard improvement of approximately 2.5–5.0 per cent of affected customers.

Table 3: Quantified costs of Option 2 – Code

	Out years										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	TOTAL
Costs											
Administrative costs											
Reporting costs ⁶⁹	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	120 000
Compliance costs											
ICT development ⁷⁰	240 000	-	-	-	-	-	-	-	-	-	240 000
Developing training schedules and training existing staff ⁷¹	107 000	-	-	-	-	-	-	-	-	-	107 000
Update existing information material for consumers ⁷²	22 000	-	-	-	-	-	-	-	-	-	22 000
Governance changes and seeking legal advice ⁷³	144 000	-	-	-	-	-	-	-	-	-	144 000
Inform customers and keep records ⁷⁴	594 000	-	-	-	-	-	-	-	-	-	594 000
Customer – lost leisure time ⁷⁵	758 000	-	-	-	-	-	-	-	-	-	758 000
TOTAL COSTS TO INDUSTRY AND CONSUMERS	1 877 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	1 985 000

⁶⁹ Based on a speculatively estimated resource requirement of: 8 hours for each of 3 staff (large business) and one staff (medium businesses) per year, at \$35.26/hour

⁷⁰ Based on a speculatively estimated resource requirement of: an estimated 37.5 hours for each of 3 staff (large businesses) at \$50.69/hour; and 75 hours for each of 3 staff (large businesses) at \$50.69/hour

⁷¹ Based on a speculatively estimated resource requirement of: training schedule costs: 30 hours (large businesses) at \$35.26/hour; and 15 hours (medium size businesses) at \$35.26/hour; staff training: 2 hours per staff member for approximately 800 sales staff at \$35.26 for large businesses; approximately 3.5 hours per staff member for approximately 38 sales staff at \$35.26 (medium businesses).

⁷² Based on a speculatively estimated resource requirement of: 15 hours for medium businesses and 30 hours for large businesses at \$35.26/hour.

⁷³ Based on a speculatively estimated resource requirement of: 22.5 hours for each of 3 staff (medium businesses); and 45 hours for each of 3 staff (large businesses) at \$50.69/hour

⁷⁴ Based on a speculatively estimated extra 60 seconds interaction with the CSP (over the status quo) to inform the customer and make a record; Sixty per cent of the interactions would be in the store front or on the phone, with 40 per cent [online](#); and a linear rollout over the 10 year period.

⁷⁵ Based on a speculatively estimated customers' 10 minute call to the CSP and lost leisure time rate of \$27/hour.

Option 3: The ACMA develops a principles-based service provider determination

Benefits

The primary benefit of a service provider determination is that it establishes **very clear and consistent expectations in relation to information provided to consumers** by CSPs. Although the service provider determination has been redrafted to remove onerous requirements for CSPs, it continues to provide greater standardisation of the approach to informed consent and record keeping. This addresses the problem of inconsistent and confusing information provided by CSPs (discussed in Section 2, *'Inconsistent Information'*).

In this sense, it is **most effective at meeting the policy objective**, and reducing the risk of loss of life or harm. It is important to note, however, that it is not possible to eliminate all risk to the continuity of telecommunications services.

Following extensive consultation, the revised draft service provider determination was drafted to reflect the accompanying guidance to CSPs in the wholesale broadband agreement. In effect, it seeks to build from a common law definition of 'informed consent', which includes the need to provide consumers with a broad understanding of the implications of a decision, commensurate with the consumer's capacity to understand the information.

Evidence of effective regulation

ACMA research demonstrates a clear link between regulation requiring clear, concise, easily comparable consumer information and improved consumer awareness leading to better informed decisions. Research findings include:

- > In the year following the introducing of the TCP Code, (which focuses on clear and consistent consumer information), the TIO experienced an **18 per cent decline in telecommunications complaints**.⁷⁶
- > In a media release regarding the release of the TIO's annual report, Telecommunications Industry Ombudsman Simon Cohen said "A clear commitment from telcos to do better by their customers, an improved industry code and a focus on compliance are paying dividends."⁷⁷
- > The ACMA's *Reconnecting the Customer—Tracking consumer outcomes* report confirmed increased consumer satisfaction with and usefulness of the new measures contained in the revised TCP Code.⁷⁸
- > Thirty-two per cent of customers in the market had seen or received a Critical Information Summary (a consumer information tool required by the TCP Code) at the time of the survey and 82 per cent of them found it useful. The ACMA notes the survey was conducted soon after the implementation of the amended code and expects awareness of Critical Information Summaries to increase.⁷⁹
- > Seventy per cent of customers in the market thought that it was easy to compare offers, and 29 per cent reported that it is easier than 12 months earlier to evaluate or compare telecommunications products and offers.⁸⁰

⁷⁶ [Source](#)

⁷⁷ Source: *ibid*

⁷⁸ [Source](#) —Reconnecting the Customer—Tracking consumer outcomes

⁷⁹ [Source](#) —Reconnecting the Customer—Tracking consumer outcomes, p89.

⁸⁰ [Source](#) —Reconnecting the Customer—Tracking consumer outcomes, p86.

- > Bill payers who had seen a Critical Information Summary, compared to those who had not, were *more likely* to say that it was easy to evaluate and compare offers (76 per cent compared with 67 per cent) and that it was *easier than 12 months earlier* (34 per cent versus 27 per cent), prior to the introduction of Critical Information Summaries.⁸¹
- > In its submission to the *Reconnecting the Customer* draft public inquiry report, representative body the Australian Mobile Telecommunications Association (AMTA) agreed that the amendments to the revised TCP Code would deliver significant consumer benefits in part due to enhanced information provision requirements.⁸²

In summary:

- > a service provider determination establishes a **highly robust audit and compliance regime**. The record keeping provisions of the draft service provider determination enable appropriate complaint management processes. Consumers are able to raise complaints up to six months after the conclusion of their service, or within six years (depending on which comes first). This is expected to result in a **high level of compliance** compared to the other policy options.
- > In instances where non-compliance is detected, consumers have **clear escalation mechanisms**.
- > If the ACMA determines that there has been a breach of a service provider determination there are **a number of enforcement options available** (outlined further in Section 3), with graduated levels of severity.

Identified financial benefits include:

- > decreased rate of inappropriate backup power supply installation reducing the costs of remediating wrong decisions
- > reduction of the economic costs associated with the risk of loss of life or harm.

Reduction of inappropriate backup power supply installation

If customers are not provided with the appropriate information about whether they require a backup power supply unit, it is possible that backup power supply will be installed where it is not required. A clear financial benefit of appropriate information provision therefore is the reduction in the rate of inappropriate backup power supply units.

The ACMA sought industry input on the extent to which an informed consent regulation would reduce the rate of inappropriate backup power supply unit installation but did not receive any quantification. As such, there is no definitive evidence upon which to estimate the quantum of this benefit.

However, to illustrate the potential quantum of this benefit the ACMA has made the following speculative estimate:

- > If there is insufficient information provision, **five per cent** of the premises have a backup power supply unit installed when it is **not required**.

⁸¹ [Source](#) –Reconnecting the Customer—Tracking consumer outcomes, p91.

⁸² [Source](#): AMTA submission to the ACMA's Reconnecting the Customer – Draft public inquiry report, June 2011

Using this speculative estimate, along with the data and assumptions in the section ‘*Quantifying the assessment*’, it is estimated that 106,036 additional premises will install a backup power supply service where it is not required.

It is estimated that the unit itself costs approximately \$50, and requires half an hour installation⁸³ at \$33.20 an hour⁸⁴ which brings the per-unit cost of a battery installation to \$69.26.

If we make a speculative estimation that regulated information provision reduces this rate of inappropriate installation of backup power supply units by 25–50 per cent, then the benefit is approximately \$1.3–2.8 million, with a median of **\$2.1 million (over a ten year period)**.

Reduction in the costs of remediating wrong decisions

The costs associated with remediating inappropriate decisions are related to the rate of inappropriate decisions, that is, units installed where they are not required, and units not installed where they are required.

As outlined above, the costs of remediating wrong decisions include:

- > time costs and delay costs associated with customers obtaining the outcome they are now seeking
- > costs to industry in installing or removing backup power supply units as appropriate.

It is not clear how many end-users are likely to remediate a wrong decision, noting the starting assumption above of five per cent of premises having a backup power supply installed where this was not required. It can be argued that those people who originally did not have a backup power supply service unit installed but decided at a later date that it is required would be more likely to go to the trouble of obtaining a unit.

In order to illustrate the benefit of avoiding the remediation of inappropriate decisions, it has been speculatively estimated that **between 25–50 per cent of those (2.5–5.0 per cent of premises) will remediate their incorrect decision**. The costs associated with remediating poor decisions include:

- > time costs for installation of the battery noting that the installer would be required to travel to the premises and install the battery (speculatively estimated to be 1.5 hours)
- > time costs (leisure time lost) for individuals contacting their provider is speculatively estimated to be 10 minutes per customer to contact the service provider.⁸⁵

The benefit gleaned from prevention of inappropriate battery backup installation totals approximately \$1.3–2.5 million, with a median of **\$1.8 million (over a ten year period)**.

⁸³ Travel time is excluded as the technician is already onsite installing the network termination device.

⁸⁴ Technicians and Trades Workers default wage, plus 16 per cent for on-costs and fixed costs per employee

⁸⁵ Forecasts included in this document assume a discount rate of 10 per cent, and an inflation rate over the period of 2.5 per cent. Estimates of benefits are in real present value terms. Installation costs are at \$33.20 an hour ([Technicians and Trades Workers default wage](#) p 34), plus 16 per cent for on-costs and fixed costs per employee. The default value of an individual's leisure or unemployment time has been estimated at \$27 per hour.

Reduction in the economic costs associated with the loss of life or harm

As outlined under option 1 (the status quo), one of the key benefits of an informed consent scheme is the reduction in the risk of loss of life or harm.

Where an end-user is unaware of the battery backup service or does not understand the implications of declining the service, they may have an elevated risk of loss of life or harm. It is likely that some people, particularly vulnerable end-users or those at an elevated risk of illness or death, would be more likely to choose to have a backup power supply unit installed than the general public. If an acceptable quality of informed consent is not required, it may result in a number of these people not having a backup power supply unit installed and increase their personal risk.

Access to fixed line telecommunications has been shown to be a crucial in time critical or life threatening situations. In 2012–13, approximately **2.71 million calls**⁸⁶ were made to the emergency call service **from a fixed line**.

Despite the high penetration of mobile services in Australia (24.9 million handsets as at 30 June 2013), fixed line services have particular advantages over mobiles when contacting emergency services. These include not being reliant on mobile network coverage or capacity (mobile network black spots exist and mobile networks can be congested in times of community emergencies), not requiring a handset to be charged and automatic identification of the location of the caller.

Using the assumptions and data outlined above in the section '*Methodology – probability of an adverse event occurring and the number of people likely to be affected*', ACMA modelling shows that over a ten year period, approximately 97 residential customers without battery backup are likely to require a fixed line to call an emergency call service number during a power outage. Hence, based on the speculative estimation of an improvement in consumer outcomes of 2.5–5.0 per cent, **a regulated solution may mitigate the risk of loss of life or harm to approximately 24–49 consumers (a midpoint of 37 customers) over a ten year period.**

Given the value of statistical life as of 2013 is estimated at \$4.12 million and a statistical life year \$178,000⁸⁷, the reduction in the loss of life or harm to any of the 24–49 customers gleans significant economic benefits.

Reduction in costs due to reputational damage

Another potential benefit associated with information provision is the reduction in the reputational risk that would occur if there was some publicised event that resulted in a risk of loss of life or harm. For example, if there was an event where the lack of backup power supply resulted in a death or harm, it may have any impact on the willingness of consumers to migrate to the NBN, which would reduce the economic benefits associated with this infrastructure. It is not possible to quantify this impact and cost although it may be material.

Timeliness

A service provider determination is a **more timely solution** than Option 2 and Option 4, as it allows CSPs to progress changes to their systems and processes at the same time that they are already progressing these changes due to the wholesale broadband agreement.

⁸⁶ 2012-13 data Emergency Call Service Provider (Telstra)

⁸⁷ According to Department of Prime Minister and Cabinet guidelines outlined in 2007, the value of statistical life is \$3.5 million and the value of a statistical life year is \$151,000. Indexation has been applied using the RBA inflation calculator. [Source](#)

Costs and disadvantages

A quantification of estimated costs (and benefits) for Option 3 is provided at **Table 4**. The regulatory costs (and benefits) represent the incremental increase in regulatory burden (and benefit) above what CSPs are required to do under the wholesale broadband agreement.

An individual CSP's regulatory burden will depend in part on its current consumer information provision and record keeping practices. The extent to which a CSP has implemented procedures in accordance with the wholesale broadband agreement will have an impact on the changes required to comply with the proposed service provider determination. CSPs with rigorous corporate governance practices (often the larger CSPs) will therefore experience a reduced impact.

CSP discretion under a service provider determination

By virtue of establishing a clear and consistent standard across the industry, a service provider determination inevitably reduces the amount of flexibility that CSPs are able to demonstrate. This concern is somewhat mitigated by the extensive amount of consultation undertaken by the ACMA in redrafting the service provider determination to be responsive to industry concerns (reducing the impact of the service provider determination).

Net impact of a service provider determination

As outlined above, regulated processes have been shown to positively influence CSP behaviour and in turn improve outcomes for customers. Poor customer experience in the telecommunications industry as evidenced in the ACMA's *Reconnecting the Customer Inquiry*, combined with the genuine consequences of no action as shown above, demonstrate that on balance, this option is considered to be **net beneficial to the value of approximately \$300,000–\$2.9 million, or a median of \$1.7 million over a ten year period**. Importantly, this amount excludes any additional (potentially significant) benefit gleaned from the reductions in economic costs associated with the risk of loss of life or harm.

Table 4: Net economic benefit of a service provider determination (Option 3)

	Out years										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	TOTAL
Costs											
Administrative costs											
Reporting costs ⁸⁸	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	150 000
Compliance costs											
ICT development ⁸⁹	240 000	-	-	-	-	-	-	-	-	-	240 000
Developing training schedules and training existing	138 000	-	-	-	-	-	-	-	-	-	138 000
Update existing information material for	22 000	-	-	-	-	-	-	-	-	-	22 000
Governance changes and seeking legal advice ⁹²	144 000	-	-	-	-	-	-	-	-	-	144 000
Inform customers and keep records ⁹³	712 000	-	-	-	-	-	-	-	-	-	712 000
Customer – lost leisure time ⁹⁴	909 000	-	-	-	-	-	-	-	-	-	909 000
TOTAL COSTS TO INDUSTRY AND CONSUMERS	2 180 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	2 315 000

⁸⁸ Based on an estimated resource requirement of: 10 hours for each of 3 staff (large business) and one staff (medium businesses) per year, at \$35.26/hour

⁸⁹ Based on an estimated resource requirement of: an estimated 37.5 hours for each of 3 staff (large businesses) at \$50.69/hour; and 75 hours for each of 3 staff (large businesses) at \$50.69/hour

⁹⁰ Based on an estimated resource requirement of: **training schedule costs:** 30 hours for each of 2 staff (large businesses) at \$35.26/hour; and 15 hours for each of two staff (medium size businesses) at \$35.26/hour; **staff training:** 3 hours per staff member for approximately 800 sales staff at \$35.26 for large businesses; approximately 5.5 hours per staff member for approximately 38 sales staff at \$35.26 (medium businesses).

⁹¹ Based on an estimated resource requirement of: 15 hours for medium businesses and 30 hours for large businesses at \$35.26/hour.

⁹² Based on an estimated resource requirement of: 22.5 hours for each of 3 staff (medium businesses); and 45 hours for each of 3 staff (large businesses) at \$50.69/hour

⁹³ Based on an estimated extra 60 seconds interaction with the CSP (over the status quo) to inform the customer and make a record; Sixty per cent of the interactions would be in the store front or on the phone, with 40 per cent [online](#); and a linear rollout over the 10 year period.

⁹⁴ Based on a customers' 10 minute call to the CSP and lost leisure time rate of \$27/hour.

Benefits											
Reduced risk benefits											
Reduction in costs incurred by the risk of loss of life or harm	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>	<i>nc</i>
Operational benefits											
Reduction in the rate of inappropriate backup power supply installation (median)	300 000	280 000	261 000	243 000	226 000	211 000	197 000	133 000	124 000	115 000	2 090 000
Reduction in costs incurred by remediating wrong decisions (median)	269 000	250 000	234 000	218 000	203 000	189 000	176 000	122 000	114 000	106 000	1 881 000
<u>TOTAL (MINIMUM) BENEFITS TO INDUSTRY AND CONSUMERS</u>	569 000	530 000	495 000	461 000	429 000	400 000	373 000	255 000	238 000	221 000	3 971 000
<u>TOTAL NET BENEFIT OF OPTION 3 – DETERMINATION</u>	-1 611 000	515 000	480 000	446 000	414 000	385 000	358 000	240 000	223 000	206 000	1 656 000

nc: not calculated

Option 4: The ACMA develops a prescriptive service provider determination

Option 4 provides the same benefits as Option 3 in managing the identified policy problems. The substantive difference between Option 3 and Option 4 is the additional costs imposed on CSPs.

The costs associated with Option 4 are significantly greater where a CSP has existing business processes (including administrative and IT systems) that are not consistent with the more prescriptive requirements of the service provider determination. In this situation the CSP must:

- > develop new or amended business processes that are consistent with the requirements of the service provider determination
- > re-design its product offerings to ensure consistency with the service provider determination.

The quantum of the costs associated with Option 4 will depend on the deviation from CSP product offerings and business processes from the service provider determination. The variability of such offerings and processes in the market makes a precise assessment difficult. However, based on the original consultation process and the costs estimated at the options-stage, the ACMA speculatively estimates that the costs of a prescriptive approach to be two to three fold that of a principles-based approach, that is, in the order of **\$4.6–6.9 million over a ten year period**.

Regulatory cost offsets

Table 5 outlines the regulatory burden to businesses and individuals for the preferred option (Option 3).

Table 5 groups the affected parties as follows:

- > Business includes telecommunications CSPs who supply standard telephone services to residential customers supplied by FTTP technology on the NBN
- > Individuals include residential customers who request a standard telephone service that is to be supplied by FTTP technology on the NBN

Table 5: Option 3 – Regulatory burden – Average annual compliance costs (in addition to the status quo (Option 1))

Costs	Business	Community organisations	Individuals	Total cost
Total by sector	\$141,043	\$0	\$90,911	\$231,954

The ACMA proposes to offset the regulatory burden on business through assignment of some of the red tape savings associated with the introduction of NBN optional backup power supply. The savings associated with the introduction of NBN optional backup power supply were estimated by the Department of Communications to be \$21.1 million per annum. The ACMA identified the move to NBN optional backup power supply as a red tape saving for the purposes of the deregulatory program. Given that it is directly related to the informed consent requirements being considered in this RIS and impacts on the same stakeholders, it is appropriate that it be used as the cost offset for the new regulation.

Table 6 summarises the cost of the regulatory burden and the offset discussed above.

Table 6—Regulatory burden and cost offset – Average annual compliance costs (in addition to the status quo (Option 1))

Costs	Business	Community organisations	Individuals	Total cost
Total by sector	\$141,043	\$0	\$90,911	\$231,954
Cost offset (\$m)	Business	Community organisations	Individuals	Total business
Agency	\$0	\$0	\$0	\$0
Within portfolio	\$141,043	\$0	\$90,911	\$21,100,000
Outside portfolio	\$0	\$0	\$0	\$0
Total by Sector	\$0	\$0	\$0	\$0
Proposal is cost neutral? Yes				

Proposal is deregulatory No
Balance of cost offsets \$20,868,046

Comparison of assessment criteria

A comparison of each assessment criteria for the four options is provided below in **Table 7**.

Table 7 - Comparison of assessment criteria across all RIS options

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
Description	NBN Co's wholesale broadband agreement governs CSPs' disclosure, informed consent and record-keeping activities relating to battery backup. Where the wholesale broadband agreement does not specify a requirement, the course of action is up to the CSP.	NBN Co's wholesale broadband agreement operates in tandem with a code or guideline developed by industry. A code can be registered with the ACMA. It is not clear which specific aspects of disclosure, informed consent or record-keeping may interact between the two mechanisms until the code or guidelines are developed.	A SPD requires CSPs to inform consumers of battery backup issues on a principles-basis, with requirements in relation to disclosure, informed consent and record-keeping. However, the SPD provides flexibility for CSPs in presenting the required information to consumers.	A SPD codifies the requirements of NBN Co's wholesale broadband agreement with prescriptive requirements in relation to the information required to be conveyed to consumers and retained by CSPs.
Aspects of the options that address the policy problem				
1. Effectiveness at meeting the policy objective	Low. This option poses the highest risk to life and harm. Additionally, consumers are less likely to make informed choices about battery backup units, meaning they are more likely to have inappropriate battery backup capability for their needs in the case of an emergency.	Low, with the risk reduced more if the content of a code or guideline is clear and consistent and a large number of CSPs adopt the code or guideline. The level of risk is elevated by the potential time delay in the development of a code or guideline and the gap between copper disconnections and implementation of the regime.	Moderate. A service provider determination is the most effective option to minimise risk to life and harm. Consumers are more likely to make informed choices. Even in the inevitable event of emergencies, if a customer has unsatisfactory battery backup arrangements, they are the responsible party for making that decision, reducing potential liability considerations for CSPs.	Moderate. A service provider determination is the most effective option to minimise risk to life and harm. Consumers are more likely to make informed choices. Even in the inevitable event of emergencies, if a customer has unsatisfactory battery backup arrangements, they are the responsible party for making that decision, reducing potential liability considerations for CSPs.

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
2. Date of effect	N/A – current	December 2014 (Guideline) there may be further delays March 2015 (Code), there may be further delays	October 2014.	October 2014. However, the higher level of prescription may mean that CSPs object to the relatively short timeframe for implementation.
3. Consistency and clarity of information provided to consumers by CSPs	Low. High variability in the approaches used by CSPs to communicate information. No minimum standard for clarity of information beyond NBN Co Guidelines.	Moderate. High variability in the approaches used by CSPs to communicate information (with some consistency for CSPs that adopt the code or guideline). Some standards for clarity of information, as determined by a code or guideline.	High. Requirements for consistency and clarity are set out in regulation. However, CSPs retain sufficient flexibility to present the information consistent with their own business processes.	High. Prescriptive requirements for consistency and clarity are set out in regulation.
4. Number of potentially impacted customers	High. Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.	High. Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.	High. Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers..	High. Up to 2.1 million FTTP customers will receive information to make a decision. A speculative estimate of 10% of residential customers in a FTTP area may make an incorrect decision about battery backup when connecting their fixed line service. This totals 212,000 customers.
Aspects of the options that relate to implementation				
5. Level of CSP discretion	High. The wholesale broadband agreement provides limited detail	Moderate. CSPs have limited discretion in the implementation of a	Moderate. CSPs are provided with specific requirements about how to	Low. CSPs are provided with highly prescriptive requirements about how

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
	about how the broad objectives should be implemented, allowing CSPs to use significant discretion in determining how to individually interpret and implement the objectives.	code or guideline but they have significant discretion in whether to adopt the requirements in a code or guideline.	implement a service provider determination.	to implement a service provider determination.
6. Robustness of audit / compliance regime	Low. NBN Co has advised that it is unable to proactively undertake any audits or compliance checks to ensure the objectives are being met.	Unknown. This would depend on the content of the code or guideline, as negotiated by industry.	High. Education, audit and compliance verification would occur as per the ACMA's ongoing processes and activities.	High. Education, audit and compliance verification would occur as per the ACMA's ongoing processes and activities.
7. Enforceability / ability to escalate	Low. NBN Co does not deal directly with end-users, and so they are required to raise any concerns with their RSP (who may be at fault) or, thereafter, the TIO. Civil penalties could be sought by a consumer through the courts.	Moderate. CSPs could be compelled to comply with the code. Consumers could also raise concerns with the TIO or seek civil penalties through the courts. Guidelines are not enforceable.	High. Escalation options include a tiered hierarchy of enforcement options: 1) a formal warning to comply with the SPD; 2) a remedial direction to comply with the SPD; 3) acceptance of an enforceable undertaking in relation to the SPD; 4) pecuniary penalties being sought through the courts. Consumers could also raise concerns with the TIO or seek civil penalties through the courts.	High. Escalation options include a tiered hierarchy of enforcement options: 1) a formal warning to comply with the SPD; 2) a remedial direction to comply with the SPD; 3) acceptance of an enforceable undertaking in relation to the SPD; 4) pecuniary penalties being sought through the courts. Consumers could also raise concerns with the TIO or seek civil penalties through the courts.
8. Expected level of compliance	Unknown. Some large CSPs may view reputational damage as sufficient incentive to comply. Although, the ACMA's experience in	Unknown. Until there is some indication of the extent to which CSPs will sign up to a code or guideline, there is no evidence of	High. Compliance with regulatory instruments is expected to be much higher than any other mechanism, considering the enforcement	Moderate. Compliance with regulatory instruments is expected to be much higher than any other mechanism, considering the

	Option 1: Leave it to the market	Option 2: Industry develops a code or guideline	Option 3: The ACMA develops a service provider determination	Option 4: The ACMA develops a prescriptive service provider determination
	relation to the Telecommunications Consumer Protection Code suggests that industry compliance in the absence of a code may be low, especially with small and mid-size CSPs.	the expected level of compliance (that is, it would be assumed CSPs who voluntarily adopt a code or guideline would comply, but it is unknown how many may choose to adopt).	mechanisms available. The greater level of flexibility in Option 3 should also facilitate industry compliance.	enforcement mechanisms available. However, the potential inconsistency between the requirements of the SPD and industry processes may diminish the probability of compliance.
9. Level of certainty / minimal variability	Low. CSP arrangements can be easily changed, providing some flexibility but also low predictability and certainty for consumers.	Moderate. CSPs that choose to adopt a code or guidelines will have a greater level of inflexibility. Certainty for consumers is also not assured.	High. Consumers are given a high level of certainty that the requirements must be met.	High. Consumers are given a high level of certainty that the requirements must be met.
10. Impact of behavioural bias	Moderate. Behavioural bias may limit the ability of this option to achieve desired policy objectives. This is consistent across all options.	Moderate. Behavioural bias may limit the ability of this option to achieve desired policy objectives. This is consistent across all options.	Moderate. Behavioural bias may limit the ability of this option to achieve desired policy objectives. This is consistent across all options.	Moderate. Behavioural bias may limit the ability of this option to achieve desired policy objectives. This is consistent across all options.

5. Consultation

ACMA staff initiated a consultation process with the telecommunications industry at a meeting in July 2013 with the relevant working group under the auspices of Communications Alliance (the primary representative industry body for telecommunications in Australia) and subsequent workshops in August 2013 and May 2014 (at which time industry was provided with a revised service provider determination for comment).

Given the wide ranging implications of this policy proposal, the initial targeted industry consultation process was followed by a formal public consultation process and a further targeted industry consultation process. A media release and consultation paper were published on the ACMA website on 26 November 2013, inviting comment on the regulatory safeguards that should apply to support implementation of the government's policy for optional backup power supply on NBN delivered services. The ACMA put forward a preferred option in the consultation process which was to regulate the informed consent process and included a draft service provider determination for comment and feedback from stakeholders.

The public consultation process concluded on 20 December 2013, however, one late submission was accepted after the closing date. In total, 13 submissions were received. Copies of the submissions, which were not specifically labelled commercial-in-confidence, were made publically available on the ACMA website. Submissions received in the final targeted round of industry consultation (concluded on 22 May 2014) are also available.⁹⁵

The objective of the consultation process

The objective of the consultation process was to ensure that the ACMA's regulatory processes are informed by high quality evidence from a wide range of sources. To assist in achieving this objective, the ACMA made comprehensive information available in its consultation paper setting out the basis for the ACMA's preliminary decision to regulate and outlining specific areas where it sought comment.

The consultation paper contained a link to *Effective consultation: A guide to making a submission* which provides information about the ACMA's formal written public consultation processes and practical guidance on how to make a submission.

Public consultation process – feedback from submitters

For the purposes of this analysis, submissions have been categorised according to support or opposition for the ACMA's preliminary decision to regulate the informed consent process via a service provider determination—option 3, as set out in the options-stage RIS (but now identified as Option 4 in this RIS).⁹⁶

Submitters opposed to regulation

The submissions received from telecommunications industry participants—AAPT, Communications Alliance, Telstra, and Optus—opposed the development of a service provider determination and expressed a preference for option 1: leave it to the market.

Industry participants expressed the view that, if regulatory intervention is deemed warranted, an industry code or (preferably) a guideline may be appropriate as it would allow service providers more flexibility to develop their own systems and processes to

⁹⁵ [Source](#)

⁹⁶ Option 3 in the initial consultation is retitled as Option 4 in this RIS for clarity.

implement optional backup power supply than would be the case under a service provider determination.

While a range of issues was raised in the industry submissions, the following themes were identified:

- > There is no current industry failure or evidence to warrant regulatory intervention and a 'wait and see' approach is more appropriate. This would allow NBN Co's wholesale broadband agreement and guideline arrangements to be implemented and tested and enable a better understanding of whether there are serious deficiencies in the information provided by CSPs.
- > The number of customers who may fit a 'vulnerable customer' profile and who don't have an alternative communications service available to them in a power failure (or have access to someone who does) is relatively small and should be considered when deciding whether regulatory intervention is needed.
- > Options 2 and 4 are inconsistent with the government's broader policy position that regulation should only be imposed where absolutely necessary and should not be the default position in dealing with public policy issues.
- > It would be better to explore the adequacy of existing regulatory arrangements including the ACL and other consumer protection regulation such as the ACMA registered TCP Code.
- > The approach advocated in option 4 is likely to lead to information overload for new NBN customers and therefore be ineffective in delivering information to allow for a consumer to make an informed decision.
- > The risk of reputational damage for individual service providers and the industry as a whole and the loss of consumer confidence are strong incentives for providers to act in the best interests of their customers and implement appropriate informed consent procedures.
- > The service provider determination should exclude priority assistance customers and business customers.
- > The record-keeping rules are unwieldy and place a large administrative and cost burden on CSPs.
- > Implementation costs for industry are unnecessarily high due to an overly prescriptive service provider determination.
- > The proposed implementation time frame is not feasible.

Submitters supportive of the proposal to regulate

- > Australian Competition and Consumer Commission, NBN Co, the TIO and Telecommunications Universal Service Management Agency were supportive of some government action, with preference for Option 4 but, if this was not possible, some support was offered for industry-based initiatives to achieve consumer protection outcomes such as an industry code, rather than reliance on option 1. However, collectively, these submitters noted that timeliness of development and implementation of a code detracts from its suitability in this instance. For this reason, these submitters expressed a preference for a service provider determination over a code.
- > Although NBN Co indicated a preference for a service provider determination, it did note that implementing a service provider determination may not be warranted in the first instance, given there is no evidence currently of service providers failing to undertake adequate informed consent procedures.

- > Stakeholders supportive of the proposal to regulate the informed consent process offered a broad range of reasons in support of a service provider determination, including:
 - > A service provider determination is the most effective regulatory mechanism to minimise risk to life and harm.
 - > Given the potentially serious impacts on some end-users, amending industry codes or implementing a 'wait and see' approach is not supported for reasons of timeliness and enforceability.
 - > If no regulatory action is taken, the provision of timely and consistent information by CSPs would not be guaranteed and this would increase the likelihood of customer confusion during the transition to the NBN.
 - > A prescriptive regulation will ensure that consistent information provision and reliable record-keeping processes are in place.
 - > An industry code could potentially achieve the required outcomes; however, a service provider determination is strongly preferred for its timely implementation, increased consistency and greater enforceability.
 - > Existing regulatory tools such as the ACL and TCP Code do not require CSPs to provide the specific information required to ensure informed consent has been properly obtained in relation to optional backup power supply. Also these laws do not require records of consumer decisions to be kept. Effective recording of consent is recognised as a key factor in preventing and resolving disputes.
 - > Existing regulatory tools require neither the provision of specific information to ensure informed consent is obtained nor records of consumer decisions to be retained—which can contribute to consumer dissatisfaction in dispute resolution processes.
 - > Regulation via a service provider determination will ensure consistency in the provision of information and record-keeping processes which will reduce the likelihood of customer confusion during transition to the NBN, increasing the probability of informed customer choices.
 - > The ability of customers to make informed decisions is made more difficult by information overload. A less prescriptive and detailed service provider determination is likely to result in better understanding of information presented to customers.
 - > Customers will turn to security and personal alarm providers for advice about backup power supply thereby placing a high administrative and cost burden on this industry.

Submitter feedback on the draft service provider determination

The following points were raised by submitters about the operation of the draft service provider determination which was published as part of the consultation process:

- > The proposed time frame of four months to implement changes necessary to comply with the service provider determination is not feasible.
- > The format and content of the draft service provider determination would be difficult for customers to understand and may contribute to information overload, particularly in the context of the NBN migration process.
- > Many of the requirements in the draft service provider determination are unnecessary and onerous and some of the provisions are inconsistent with the wholesale broadband agreement.

- > The draft service provider determination should be amended to ensure that it only applies to CSPs who supply services to residential customers (not business customers).
- > The record-keeping provisions are too onerous and place a large administrative burden on CSPs.
- > The requirement for voice recordings as part of the record-keeping requirements for informed consent is excessive and unnecessary.
- > The service provider determination appears to transfer the decision about which products a CSP can offer, to the customer. The service provider determination should provide for the scenario where a CSP provides a service without a backup power supply.
- > Requirements regarding provision of information, informed consent and record-keeping for priority assistance customers are unnecessary as the wholesale broadband agreement requires CSPs to select a backup power supply service when requesting activation of service for a priority assistance customer.
- > The requirement for CSPs to retain records for a further two years after they stop supply of the service to the customer is unnecessary and onerous.
- > The service provider determination should require CSPs to provide customers with detailed information regarding the risk and effect of power failure on the Emergency Call Service, voice services for priority assistance customers and the lack of functionality of medical alarms and other devices.
- > The service provider determination should require that information is provided to the customer ahead of the formation of the service contract rather than before commencing to supply the service.

Consideration of submitter feedback

Having considered submissions to the proposal to regulate the informed consent process, a significantly revised service provider determination was prepared that picks up on all major issues raised by the submissions on the content of the draft service provider determination (Option 4). A significantly different approach is proposed in the revised draft service provider determination, which has been redrafted to be considerably less prescriptive—thereby placing a much smaller impost on industry. The revised draft service provider determination:

- > is limited to services delivered by the NBN thereby excluding CSPs using other superfast broadband networks from its requirements
- > applies only to the supply of standard telephone services using NBN FTTP technology for services supplied to residential customers (with the intention to safeguard continuity of standard voice services⁹⁷ and apply to NBN FTTP deployments for which backup power supply will be available at the premises)
- > better reflects the key current obligations on CSPs under the wholesale broadband agreement
- > excludes requirements to inform business customers (who are not considered to be vulnerable in this context) and priority assistance customers (who obtain this service through Telstra, and cannot receive an NBN service without a backup power supply)
- > doesn't contain specific requirements regarding information about personal medical and security alarms, which are covered under separate processes

⁹⁷ CSPs supplying data services only are not covered by the proposed service provider determination.

- > is intended to commence on 2 October 2014 (which coincides with the end of the wholesale broadband agreement transition period) so that CSPs have additional time to modify systems and processes to ensure compliance and an option of simultaneous implementation.
- > requires that records be kept that will enable the ACMA to verify compliance with the requirements until 6 months after the CSP ceases to supply service to the customer or six years (whichever is the lesser).
- > places obligations on CSPs on the basis of whether their service offering includes an option for backup power supply and provides for the scenario where a CSP does not offer a backup power supply service.
- > requires that informed consent is obtained prior to the customer agreeing to a contract to supply service.

Ongoing industry consultation

Following extensive consultation, a further round of informal and targeted consultation was undertaken in May 2014 to consider a revised service provider determination (herein called option 3) which places a much smaller impost on industry and reduces the 'information overload burden' on consumers.

All submitters were directly contacted by email and asked to consider and provide comment on the revised draft service provider determination. Two additional CSPs who did not make a submission in the initial public consultation process were also included in this consultation process. These CSPs were regarded by ACMA staff as significant market participants and likely to be impacted by the proposed regulation.

A subsequent Communications Alliance working group meeting was convened on 22 May 2014 to discuss the proposed changes to the draft service provider determination. Submissions to this second round of consultation were received from key industry stakeholders (Telstra, Optus, the TIO and the Australian Competition and Consumer Commission (ACCC)). Feedback from the meeting and submissions reiterated industry preference for Option 1 – leave it the market, under which industry would continue to operate in line with obligations under the wholesale broadband agreement. However, ACMA staff assessment was that industry was not implacably opposed to the development of a service provider determination, providing proposed changes to the draft determination were taken on board. A brief outline of the key changes proposed by industry post the working group meeting of 22 May 2014 and the ACMA's response follows:

- > reduce the scope of information provision requirements such that CSPs are not required to provide information about the implications for service continuity in respect of services supplied either with or without backup power supply. *The ACMA did not amend the determination in line with this suggestion as it considers this aspect of information is key to ensuring customers have sufficient information to make informed decisions about whether they require backup power supply.*
- > remove the requirement to provide classes of records. Industry was concerned that this requirement was unnecessary and too onerous and would require substantial changes to IT systems. *The ACMA amended the draft determination consistent with this suggestion as it may use powers under section 521 of the Act to request information from industry, if required.*
- > the period for retaining records (6 years) is too long and should be reduced. The ACMA amended the determination such that this period is either 6 years or 6 months after cancellation of the service, whichever is the shorter.
- > extend the period in which a CSP has to provide records in response to a request from the ACMA from one to two months. *The ACMA did not amend the*

determination in line with this suggestion as it removed the requirement to provide classes of records and consequently the potential for more onerous information requests.

- > remove Part 3 relating to the making retention and provision of records as section 521 is sufficient for the ACMA's purposes. *The ACMA disagreed as this part requires CSPs to also make and retain records and is essential to ensuring that there is an effective means of redress in the event of non-compliance by a CSP.*
- > regulation should be reviewed after two years of operation. *The ACMA did not make this change. It is open to receiving feedback on the operation of legislative instruments and has detailed its plans regarding implementation and review of the determination in the RIS.*

The TIO and ACCC also requested the ACMA to reconsider expanding the scope of the service provider determination to include small business customers as they would also benefit from the safeguards available under the determination. The ACMA reconsidered this issue but decided in favour of retaining the limitation of scope to residential customers only. This is because residential customers are more likely to require consumer specific protections, as business customers would be expected to have alternative arrangements in place to maintain business operations in the event of a power failure and are well placed to negotiate appropriate solutions for their business needs.

6. What is the best option?

Having considered the options to address the policy problem, a **principles-based service provider determination (Option 3)** is the preferred option because it will most effectively reduce the risk of loss of life or harm arising from end-users of specified NBN services being unable to access standard telephone services in the event of a power failure. It delivers the highest net benefit.

A **principles-based service provider determination** best addresses the three aspects of market failure that prevent the market from reducing the level of risk to consumers:

- > It strengthens incentives for CSPs to comply with NBN Co's Guidelines that accompany the wholesale broadband agreement, by establishing a strong compliance regime and providing clear, robust avenues for customers to escalate complaints (and for these complaints to be enforced).
- > It ensures CSPs cannot respond to commercial pressures and inappropriately compromise the accessibility, accuracy or comprehensibility of information provided to consumers.
- > It ensures consistency of information provided across all CSPs (including small to mid-size CSPs) and minimises the variability of delivery against the requirements. This improves consumers' awareness and understanding of the policy problem.

Although CSPs would have a low level of discretion under a service provider determination, option 3 can be implemented most easily and effectively. It would come into effect on 2 October 2014 (much sooner than a code or guideline). Although this option imposes the greatest regulatory burden of the options considered (\$2.3 million over 10 years), it only needs to result in the saving of one life over the course of ten years for the cost of the regulation to be offset (if you were to exclude the other financial benefits of the policy).

Consistent with the government's deregulation agenda, the ACMA has identified options that rely on market or industry-based mechanisms to address the identified policy problems. However, the ACMA believes the status quo presents a high level of risk to the health and safety of consumers, and due to the likelihood of market failure, it is not appropriate to be left to the market to resolve.

As recommended by the Australian Government Guide to Regulation (the Guide), an extensive consultation process has been undertaken and the preferred regulation of a service provider determination is now being recommended after possible options have been carefully examined. Following that examination it is clear that only a service provider determination reduces the inherent level of risk to the health and safety of consumers and meets the stated policy objective.

The draft service provider determination has been extensively revised to reflect comments made during the most recent consultation period (see section 5). Substantial efforts have been undertaken so that a service provider determination is as 'light touch' as possible and only includes requirements that are essential to reduce the level of risk to the health and safety of consumers. In this context, the preferred option (**Option 3**) removes many of the additional costs associated with **Option 4**. On balance, considering a service provider determination still delivers a net benefit, it is considered that this disadvantage has been addressed to the maximum practicable extent, without compromising the policy objective.

Other options considered and discounted

While a **registered code (under Option 2)** may achieve the policy objective of an informed decision about backup power supply and imposes a marginally lower regulatory burden (\$2 million over 10 years), it is less readily enforceable than a service provider determination. This is because the ACMA firstly directs a non-compliant CSP to comply with a registered code before formal enforcement action can be undertaken. Should a CSP breach a direction to comply with a code, further enforcement remedies are available to the ACMA. By comparison, compliance with a service provider determination is directly and immediately enforceable by the ACMA and a range of remedies for failure to comply can be sought without delay.

In addition, a registered code would take considerable time to be developed and considered for registration by the ACMA and thus would be significantly slower to implement – beyond the end of the wholesale broadband agreement transition period. This has potential to result in increased costs to CSPs who will incur costs to change their systems and processes to comply with the wholesale broadband agreement and additional costs in the future to make further changes to comply with a registered code.

Although an **industry guideline (also under Option 2)** imposes no regulatory burden, it is not expected to effectively achieve the policy objective of an informed decision because it would be unlikely to impose any greater obligations on CSPs than those contained in the wholesale broadband agreement. Importantly, industry compliance with a guideline is voluntary. It is therefore less likely to provide the desired level of certainty and consistency required to ensure that all CSPs have provided sufficient information and appropriately obtained and recorded an informed customer decision on a satisfactory basis.

Leaving it to the market (Option 1) is the least effective at addressing the stated policy objective. It also imposes no regulatory burden. It relies on NBN Co enforcing compliance with the wholesale broadband agreement under contract law to ensure that CSPs fully discharge their obligations in relation to informed consent. In the absence of adequate contract governance, it is possible that, in an attempt to gain a competitive market advantage, some CSPs will fail to fulfil their obligations under the wholesale broadband agreement and that harm to end-users will result.

Option 1 does not adequately specify the type and extent of information that should be provided to enable customers to make an informed decision, nor the processes for obtaining and retaining records of informed consent. It does not provide CSPs with sufficient guidance to ensure a clear understanding of their obligations towards customers in this regard.

It may also expose CSPs to liability risks should their individual informed consent practices be deficient.

In discounting this option, the ACMA has taken significant steps to consider and, where possible, accommodate the viewpoints of industry members who may be opposed to the implementation of a service provider determination. Although industry participants naturally make comments that prioritise their individual commercial interests over national public policy objectives, there are legitimate arguments raised through the consultation process that the ACMA has deeply considered.

As noted in Section 4, a **prescriptive service provider determination (Option 4)** is assessed to impose greater regulator costs than necessary to achieve the desired policy outcome.

Responses to each concern raised by industry through the consultation process are outlined below in **Table 8**.

Table 8: Response to stakeholder views opposed to a service provider determination

Stakeholder view	ACMA response
<p>There is no current industry failure or evidence to warrant regulatory intervention and a 'wait and see' approach is more appropriate. This would allow NBN Co's wholesale broadband agreement and guideline arrangements to be implemented and tested and enable a better understanding of whether there are serious deficiencies in the information provided by CSPs.</p>	<p>The preferred regulation of a service provider determination is a proactive measure, due to the high likelihood and consequence to consumers of identified risks eventuating.</p> <p>The ACMA has no definitive evidence upon which to make an estimate of the likely increase in the costs resulting from the risk to life and harm due to: the early stage of copper disconnections (which only commenced from May 2014) and the transition has started for CSPs to provide batteries on an optional basis does not conclude by the time that there is substantial evidence of poor information provisions, consumers could have experienced harm or loss of life.</p> <p>Section 2 canvasses extensively why the current structure of incentives, amongst other factors, results in market failure that means this policy issue cannot be left to the market to resolve.</p>
<p>The number of customers who may fit a 'vulnerable customer' profile and who don't have an alternative communications service available to them in a power failure (or have access to someone who does) is relatively small and should be considered when deciding whether regulatory intervention is needed.</p>	<p>Although vulnerable customers are a particular concern, they are not the sole objective of this policy. Benefits including the savings gleaned from avoidance of inappropriately installed battery backup units, and the avoidance of retrofitting premises where wrong decisions were made and a battery backup unit was not installed are relevant. In addition, improving the awareness of the operation of the battery backup unit, such as the duration of backup service afforded is an important consumer safeguard.</p>
<p>Options 2 and 3 are inconsistent with the government's broader policy position that regulation should only be imposed where absolutely necessary and should not be the default position in dealing with public policy issues.</p>	<p>While the ACMA acknowledges the priority of the government's deregulation agenda, a number of options have been considered on how best to address the policy option. The status quo presents a risk to life and health of consumers, and due to the presence of market failure, it cannot be left to the market to resolve. As recommended by the Australian Government Guide to Regulation (the Guide), an extensive consultation process has been undertaken over a number of years, and the preferred regulation of an SPD is only now being recommended after all possible options have been carefully examined. Following that examination, it is clear that only an SPD reduces the inherent level of risk to life and harm of consumers. Option 3 has been recalibrated to include a new (preferred) option; namely, the development of a principles-based service provider determination.</p>
<p>It would be better to explore the adequacy of existing regulatory arrangements including the ACL and other consumer protection regulation such as the ACMA registered TCP Code.</p>	<p>As discussed in section 2, the existing provisions of the ACL and TCP Code do not provide sufficient guidance regarding <i>the specific circumstances of battery backup units</i> to achieve the stated policy objectives.</p>
<p>The approach advocated in option 3 is likely to lead to information overload for new NBN customers and therefore be ineffective in delivering information to allow for a consumer to make an informed decision.</p>	<p>As outlined in section 4, behavioural bias is common across all policy options, not only option 3. This does not lessen the case for pursuing a service provider determination. However, the original option 3 has now been revised to differentiate between a principles-based option (new Option 3) and a prescriptive option (new Option 4).</p>

Stakeholder view	ACMA response
<p>The risk of reputational damage for individual service providers and the industry as a whole and the loss of consumer confidence are strong incentives for providers to act in the best interests of their customers and implement appropriate informed consent procedures.</p>	<p>The ACMA does not consider the risk of reputation damage as a strong enough incentive for CSPs to implement adequate provisions in the absence of a service provider determination. It is also assessed that CSPs are subject to compelling commercial incentives to minimise information for consumers that informs the consumer about the limitations of the service. This is evidenced by a track record of CSPs providing accessible information to customers only following government intervention.</p>
<p>The service provider determination should exclude priority assistance customers and business customers.</p>	<p>Agreed. Service provider determination has been redrafted to accommodate.</p>
<p>The record-keeping rules are unwieldy and place a large administrative and cost burden on CSPs.</p>	<p>Partially agreed. By developing the revised Option 3, the service provider determination has redrafted to significantly lessen the record-keeping burden (for example, by excluding the need to record verbal conversation).</p>
<p>Implementation costs for industry are unnecessarily high due to an overly prescriptive service provider determination.</p>	<p>As noted above, the service provider determination has been redrafted significantly, to limit the requirements to the bare essentials required to protect consumers. The implementation costs have been offset and, when the benefits of option 3 are considered, there is a clear net benefit to a service provider determination.</p>
<p>The proposed implementation time frame is not feasible.</p>	<p>Since the consultation period, NBN Co has extended the transition period for the wholesale broadband agreement from July to October 2014. The consultation process on the service provider determination has been underway since December 2013, giving CSPs adequate notice of the need to implement. The ACMA intends to work closely with CSPs to assist them in meeting their obligations.</p>

7. Implementation and evaluation

Implementation

The proposed regulation (the *Telecommunications (Backup Power and Informed Decisions) service provider determination 2014*) is planned to commence on 2 October 2014, providing CSPs with six weeks in which to implement changes necessary to ensure compliance.

As described in previous sections, the obligations contained in the proposed determination will assist consistent informed consent processes and record-keeping being implemented across industry, enabling customers to make informed decisions about their backup power supply needs.

Operational issues associated with implementation of optional backup power supply such as provisioning, battery maintenance and alarm notification processes will be addressed via commercial arrangements agreed between industry and NBN Co under the wholesale broadband agreement. Industry has a transition period of nine months⁹⁸—from 20 December 2013 to 1 October 2014—in which to undertake modifications to systems and processes necessary to comply with optional backup power supply requirements under the wholesale broadband agreement. Minor modifications to systems and processes over and above that necessary to comply with the wholesale broadband agreement may be required as a result of the proposed regulation. However, these are not anticipated to be substantive, such that implementation of the service provider determination on 2 October 2014 will be undesirable.

To facilitate implementation, the ACMA has consulted key stakeholders throughout the development process. The ACMA has been able to provide industry with early visibility of proposed obligations and an opportunity to work through any issues it may have in implementing new processes.

Compliance and enforcement

The ACMA's approach to compliance and enforcement will be in accordance with its Compliance and Enforcement Policy.⁹⁹ This policy provides that where the ACMA identifies non-compliance it will take action that is commensurate with the seriousness of the conduct.

There are a range of remedies available to the ACMA, depending on the particular circumstances of the matter. For example:

- > If the ACMA determines that the non-compliance is minor and not deliberate, it may seek to resolve the matter through informal processes.
- > Serious contraventions or breaches may need to be addressed using the ACMA's administrative powers under the Act, which include giving formal warnings¹⁰⁰, accepting an enforceable undertaking¹⁰¹ or giving a remedial direction.¹⁰²

⁹⁸ Six months from 20 December 2013 to 19 June 2014.

⁹⁹ [Source](#)

¹⁰⁰ Under section 103 of the Act the ACMA may issue a formal warning if a person contravenes a service provider rule.

- > In the event of non-cooperation or ongoing non-compliance, the ACMA may consider seeking pecuniary penalties through the courts.¹⁰³

The ACMA proposes to work closely with industry in the first six months after commencement of the determination to ensure industry understanding of requirements and obligations such that industry implements appropriate operational processes and procedures that meet regulatory expectations of compliance. This is consistent with the ACMA's graduated approach to compliance and enforcement.

Evaluation

Evaluation of the initial implementation phase will assess whether government and parliamentary processes have been adhered to in the development and implementation of the determination.

In terms of post implementation evaluation and review, the ACMA will consider data and information obtained via the proposed monitoring activities, including:

- > desktop audits of CSP sign-up processes
- > monitoring of customer complaints made to the ACMA and TIO regarding backup power supply services
- > review of industry feedback regarding the operation of the determination.

The information obtained from these activities will assist the ACMA to identify any possible non-compliance or issues of concern that need to be addressed. It will also provide a mechanism for evaluating whether the determination is operating effectively, the scope of the problem at the time of review and identification of whether the determination continues to be the appropriate regulatory mechanism to meet the government's policy objectives. Ongoing evaluation is especially important given the expected changes to the operating environment such as new market entrants and the emergency of diverse NBN service offerings and bundles.

ACMA resources for conducting desktop audits and other evaluation activities will be drawn from within the ACMA's current staffing budget. Additional consumer research may be conducted into the informed decision process to assist the review. This may require additional funding, however, depending on future reviews of ACMA research and data collection activities, may be incorporated into existing budgets.

As the proposed regulation is a service provider rule for the purposes of section 98 of the Act, industry performance in respect of this regulation must also be monitored and reported to the Minister under section 105 of the Act. Under section 105, the ACMA is required to monitor and report to the Minister each financial year on the performance of carriers and CSPs, including industry compliance with any service provider rules that may be in place.

¹⁰¹ Under Part 31A of the Telco Act a person may give the ACMA an enforceable undertaking about compliance with the Telco Act. If the ACMA accepts an undertaking and the ACMA considers that the person is in breach of the undertaking, the ACMA may apply to the Federal Court to direct compliance, pay pecuniary penalties or pay compensation.

¹⁰² Under section 102 of the Telco Act, if a service provider has contravened or is contravening a service provider rule, the ACMA may give the provider a written direction to take specified action to ensure that it does not or is unlikely to contravene the rule in the future.

¹⁰³ Under Part 31 of the Act, the ACMA has the power to commence civil proceedings to obtain civil penalty orders, injunctive relief or enforce an enforceable undertaking.

Acronyms

ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
ACMA	Australian Communications and Media Authority
AER	Australian Energy Regulator
AMTA	Australian Mobile Telecommunications Association
CSP	Carriage service provider
FTTN	Fibre to the node
FTTP	Fibre to the premises
MTM	Multi-technology mix
NBN	National Broadband Network
NEM	National Electricity Market
OBPR	Office of Best Practice Regulation
OTT	Over-the-top
RIS	Regulatory impact statement
SAIDI	System average interruption duration index
SAIFI	System average interruption frequency index
TCP Code	<i>Telecommunications Consumer Protections Code C628:2012</i>
the Act	<i>Telecommunications Act 1997</i>
TIO	Telecommunications Industry Ombudsman

Appendix A

Table 9: Option 1 and 3 obligation comparison

NBN Co Wholesale Broadband Agreement requirements	ACMA principles based service provider determination proposed obligations (paraphrased)
<p>A1 The provider must provide the Designated End User (customer) with sufficient information to allow them to make an informed decision as to whether they require battery backup functionality.</p>	<p>B1 The provider must inform the customer:</p> <ul style="list-style-type: none"> - That the ability to make and receive calls during a power failure (including to an emergency service number) is dependent on a backup power supply being provided with the service. - That the ability to make and receive calls (including to an emergency service number) would be unavailable during a power failure without a backup power supply provided with the service - That the backup power supply will only supply power for a limited period of time. - That other powered customer equipment used in conjunction with the service would require its own backup power source to operate during a power failure.
NBN Co Wholesale Broadband Agreement requirements	ACMA service provider determination proposed obligations (paraphrased)
<p>A2 The provider must obtain Informed Consent from the Designated End User (customer).</p>	<p>B2 The provider must obtain an acknowledgement from the customer that the customer was given the information at B1.</p>
<p>A3 The provider must retain records of all communications with Designated End User (customer) in relation to their decision.</p>	<p>B3 The provider must record in writing or electronically:</p> <ul style="list-style-type: none"> · A description of the information provided at B1. · The customer's acknowledgement (and date of acknowledgement) at B2. · The customer's decision to accept or decline a backup power supply with their service. · The date the provider entered into the agreement with the customer for the supply of the service with or without the backup power supply. <p>The provider must:</p> <ul style="list-style-type: none"> - Retain records for the earlier of at least six years or six months after provider ceases to provide the service to the customer.

NBN Co Wholesale Broadband Agreement requirements	ACMA principles based service provider determination proposed obligations (paraphrased)
	- Following a written request, provide records to the ACMA.