

Australian Communications and Media Authority

Department of the Prime Minister and Cabinet





A better practice guide for NBN providers

Improving information provision to customers using behavioural insights







What?

Introduction

Millions of customers are migrating from a traditional copper telephone network to a high speed National Broadband Network (NBN). This change reflects the growing importance of internet services to society and the economy in Australia.

However, it has required Australians to consider what kind of communications services they need and how they might use those services.

This gives consumers an opportunity to make a choice about who they want as a retail service provider and what services they need.

As services delivered over the NBN have different characteristics, consumers now have the ability to make decisions based on a range of factors.

Retail service providers are the main point of contact for consumers. They have a responsibility to ensure consumers can make an informed choice about their services during the necessary transition to the NBN.

This guide presents an opportunity for retail service providers to support their customers in making the best choice.

Purpose

This guide helps providers develop better information for consumers about key elements of the NBN. It suggests a range of good practices which support better consumer decision-making and assist consumers to choose appropriate plans to suit their needs.

This includes suggestions relating to:

- How key facts about NBN services can be drawn out;
- The type of language used; and
- Optimal length, order and presentation of plan information.

Who should use this guide?

This guide has been developed for retail service providers so they can consider the way consumers make decisions when they are developing materials for their customers.

Research by the ACMA shows that the better informed a consumer is about the NBN services they are selecting, the more satisfied they are with the resulting service.



Better practice Checklist

To make it easier for consumers to compare NBN plans:



Draw out key facts, specifically highlighting speed and price. This helps consumers get the information they need without feeling overwhelmed.



Be short and to the point. When presenting information, try to stick to a single page. Documents longer than one page are not ideal for consumers who wish to compare key elements of multiple plans side by side.



Present information in a standard way. This can help consumers compare plans and identify the plan that best suits their needs.



Use a combination of text, diagrams and tables. This is more effective than single-format presentations when providing information.



Order information carefully. Choices can be influenced by the way information is structured.



Use conversational language. Avoid jargon, as simple language is more likely to be well received and understood.



Use standard terminology. Use simple, salient speed benchmarks when describing NBN plans to consumers.

In practice

NBN retails service providers are required to provide specific information in two separate documents:

- 1. Key Facts Sheet: NBN Services (KFS) as required in the Telecommunications (NBN Consumer Information) Industry Standard 2018 (which commences on 21 September 2018), and
- Critical Information Summary (CIS) as currently required in Communications Alliance Industry Code C628:2015 Telecommunications Consumer Protections Code.

Many retail service providers are working hard to ensure that their plans are displayed in ways that both follow regulation and are helpful to consumers.

This guide offers some examples of better practice for retail service providers. This will make it easier for consumers to understand their service needs and choose a plan that reflects these needs. Consumers are more likely to be satisfied with their service when they understand the different NBN tiers and choose plans in line with their use and budget.

The principles outlined in this guide can be applied generally to most modes of communication, such as websites, emails, and letters.

The following example of a "Key Facts Sheet: NBN Services" does not comprise every area that providers may be required to cover under the regulations. Rather, it serves as a sample for providers to observe better practice principles in action.

What to Aim for

- ✓ Show plans side-by-side. Consistency in the way that plans are displayed helps standardise presentation and makes it easier to compare them.
- ✓ Highlight the NBN speed as a key factor. This can help make differences more noticeable.
- ✓ *Use tangible examples.* This helps consumers better understand what different speeds mean even in the presence of technical language.
- ✓ *Use images to highlight key information.* This can increase the likelihood that consumers consider speed as well as price.

What to Avoid

- Do not list choices vertically.
 This makes them difficult to compare.
- Do not emphasise or highlight certain plans over others. This may lead consumers to stick with the status quo rather than engage fully in a comparison across plans.
- Avoid using jargon where at all possible.
 Where the use of jargon is unavoidable, provide a plain language explanation.

Key Facts Sheet: NBN Services



SPEED HOW FAST?

Α



NBN12² 8 Mbps download²

В



NBN25¹ 18 Mbps download² C



NBN50¹
44 Mbps download²

D



NBN100¹ 79 Mbps download²

¹This indicates the maximum possible speed (Mbps) you can receive off-peak (11pm-7pm).

²This is the typical download speed you can expect during busy periods (7pm-11pm).

If your line cannot provide the speed tier of your plan and this cannot be fixed, you can move to a lower speed plan or exit your contract without charge (for FTTN, FTTC and FTTB connections only).

PRICE HOW MUCH?

\$59/month

100 GB Data

\$69/month

500 GB Data

\$79/month

1000 GB Data

\$99/month

1500 GB Data

USE

WHAT CAN I DO WITH IT?

1 - 2 people

at the same time



- ✓ Emails + browsing
- Online gaming
- ★ HD Video streaming

2 - 3 people

at the same time



- ✓ Emails + browsing
- ✓ Online gaming
- ★ HD Video streaming

3 - 4 people

at the same time



- ✓ Emails + browsing
- ✓ Online gaming
- ✓ HD Video streaming

5 people

at the same time



- ✓ Emails + browsing
- ✓ Online gaming
- ✓ Ultra HD/4K videos

NOTES



Technical Limitations

NBN service will not work during power failures unless connected using FTTP and an NBN battery backup power supply unit is installed and working. Your speed or performance may be reduced by other factors such as your in-home setup and wiring. Talk to your provider about what you can do to improve performance. For example, elevating your router above the ground may improve your speed as electrical objects such as a fridge may be acting as a damper.



Medical Alarms / Security

Before entering into a consumer contract, you should find out if any medical or security alarm services you want to use are compatible with an NBN service. If your medical or security alarm services are not compatible with an NBN service, you should identify what alternatives are available. You can do this by contacting the provider of your medical or security alarm service.

A closer look: applying behavioural principles

Using images to highlight The title must be "Kev Facts Sheet: NBN Showing offers side-by-side Services" (KFS). Among other key information can and providing consistency in requirements, the KFS must be no longer the way that plans are increase the likelihood than one A4 page and in a font size that is that consumers consider displayed make it easier to at least equivalent to 12 point Times New speed as well as price. compare them. Roman (Section 7*). Highlighting the NBN Example) speed as a key factor Key Facts Sheet: NBN Services can help make the differences between SPEED **HOW FAST?** plans more salient. В C D You must indicate typical download speeds during busy 18 Mbps download2 44 Mbps download² 79 Mbps download2 8 Mbps download2 periods. The busy period for consumers ¹This indicates the maximum possible speed If your line cannot provide the speed tier of your is 7-11pm (Section (Mbps) you can receive off-peak (11pm-7pm). plan and this cannot be fixed, you can move to a lower speed plan or exit your contract without 8*). Where speed tier ²This is the typical download speed you can expect during busy periods (7pm-11pm). charge (for FTTN, FTTC and FTTB connections only). information is included, it is PRICE HOW MUCH? recommended that the busy period \$59/month \$69/month \$79/month \$99/month speeds font size 100 GB Data 500 GB Data 1000 GB Data 1500 GB Data should be at least as large as the speed tier font size. If you use speed tier You must tell consumers who will have FTTN. Including information about price is not information to describe NBN FTTB or FTTC NBN connections what remedies mandatory but consumer plans in a way that are available to them if it is established that the recommended. refers to specific speeds (for physical telecommunications network example "NBN12" or infrastructure underlying their connection is not "NBN100"), you must inform capable of providing the NBN speed under their consumers that this consumer plan. You should specify all the represents the maximum available remedies including any compensation possible speed that is or whether they can move to a lower speed plan available during off-peak or exit the contract without penalty periods (Section 8*). (Section 8*).

^{*}As required in the Telecommunication (NBN Consumer Information) Industry Standard 2018

A closer look: applying behavioural principles

You must indicate the approximate number of people that can participate simultaneously in the common online activities identified using different devices (Section 8*). We recommend using images to illustrate this.

You must identify the types of common online activities that the NBN consumer plan would suit. For NBN plans of speed tier 12/1 Mbps or less, the KFS must also show common online activities that the NBN plan would not be suitable for (Section 8*). We recommend presenting information in a standardised way to allow an easier comparison. Using tangible examples helps consumers better choose even in the presence of technical language. Please note the activities listed are only some examples.

USE WHAT CAN I DO WITH IT? 1 - 2 people 2 - 3 people 3 - 4 people 5 people at the same time at the same time at the same time at the same time ✓ Emails + browsing ✓ Emails + browsing ✓ Emails + browsing Emails + browsing Online gaming ✓ Online gaming ✓ Online gaming ✓ Online gaming HD Video streaming X HD Video streaming ✓ HD Video streaming ✓ Ultra HD/4K videos

NOTES



Technical Limitations

NBN service will not work during power failures unless connected using FTTP and an NBN battery backup power supply unit is installed and working. Your speed or performance may be reduced by other factors such as your in-home setup and wiring. Talk to your provider about what you can do to improve performance. For example, elevating your router above the ground may improve your speed as electrical objects such as a fridge may be acting as a damper.



Medical Alarms / Security >

Before entering into a consumer contract, you should find out if any medical or security alarm services you want to use are compatible with an NBN service. If your medical or security alarm services are not compatible with an NBN service, you should identify what alternatives are available. You can do this by contacting the provider of your medical or security alarm

You must inform consumers about the **technical limitations** of the NBN service. The limitations that must be provided are specified in Section 9*. They include the fact that an NBN service will not function during a power blackout unless the service is connected using FTTP and an NBN battery backup power supply is installed and working. Factors at the consumer's residence or business premises can affect or reduce speed and performance. You need to give common examples of the factors at the consumer's premises that may affect speed/ performance – these could include the standard of in-house cabling, the quality of the router, electrical interference, or physical factors such as the distance between the router and Wi-Fi connected devices – and state what actions consumers can take to reduce the effect of such factors (Section 9*).

You must tell consumers who use a medical or **security alarm** that they should make their own enquiries about compatibility with an NBN service. This includes checking with the providers of these services to see whether their alarm will work on the NBN. The Key Facts Sheet must also advise consumers to check what alternatives are available if their existing alarm service is not compatible with the NBN. Affected consumers must also be informed that they should do these checks before entering into a contract for a new NBN service (Section 10*).

^{*}As required in the Telecommunication (NBN Consumer Information) Industry Standard 2018

The theory behind the practice

How do behavioural insights build on traditional economic approaches to improve broadband consumer choice?

The previous section of this guide provided practical guidance for retail service providers on how best to present information to consumers.

This section illustrates how such practical guidance is rigorously based on evidence from behavioural economics. It explains how people typically process information and make decisions, outlines some common behavioural biases and highlights how those biases apply to consumer decision-making in the context of the NBN. Lastly, it offers examples to demonstrate how the way NBN plans are displayed can exacerbate behavioural biases.

Traditional economics assumes consumer behaviour is influenced by a limited number of predictable factors:

- Consumers have a stable set of preferences;
- Consumers base their choices on this stable set of preferences; and
- When properly informed, consumers should always make choices in their best interests.

However, there is increasing recognition that consumers systematically depart from traditional economic assumptions. For example, consumers' preferences and choices are impacted by factors such as cognitive, social and emotional biases.

Traditional economics would not take into account any of these factors. Emotions and cognitive biases are supposed to be irrelevant in influencing a rational person.

Evidence from behavioural economics suggests consumers do not always make decisions in their best interests and consumers deviate from the optimal choice, even when properly informed. Several behavioural concepts may apply in the context of the NBN (see "Behavioural Concepts at a Glance" boxes).

Knowledge gap: information asymmetry and consumer needs

A fundamental issue appears to be that many consumers do not understand their internet service needs. A survey conducted by the ACMA found 45 per cent of respondents did not know the speed of their NBN internet plan.¹

Promoting broadband speeds represents a shift in the Australian market, with Australian consumers used to choosing home broadband plans based on primarily price and data allowance.² More recent evidence suggests cost is the main driver of consumers' choice (29 per cent) followed by speed of connection.¹

Consumers' confusion around the meaning of NBN speeds is compounded by the variety of terms used to describe speed ranges by broadband retailers, such as 'boost', 'max' and 'superfast'.

This lack of awareness is likely to limit consumers' ability to choose the right NBN service for their needs.

Consumers who understand their speed needs can still struggle to make the best choice when deciding on an NBN plan. This may be due to behavioural biases as well as structural barriers.

This guide does not attempt to discuss structural barriers, such as lock-in contracts or provider-held email accounts, which may discourage consumers from switching or evaluating their broadband services.

The "Goldilocks Zone" of information provision

Behavioural biases contribute to four main patterns observed in broadband consumers:

- Consumers are unsure about their service needs;
- Consumers often ignore information about their current plan;
- Consumers understand information about price but do not always understand information about speed, and this affects their decision-making when it comes to choosing plans;
- Consumers often choose broadband plans that do not reflect their service needs.

Traditionally, consumer protection has relied on the assumption that more information is the best way to reduce information asymmetry.

Behavioural economics challenges this approach. In particular, full disclosure of terms and conditions is typically not enough to encourage consumers to do what is in their best interests.³

Information should be disclosed in an effective and structured way to help consumers overcome their behavioural biases. Options include:

- Limiting the amount of information provided at any given time;
- Presenting information in a way that is streamlined; and
- Ensuring information is provided when consumers are making key decisions.

This often means less information overall, but more relevant information should be given to consumers. The challenge is to find the right amount of information.

The behavioural biases presented in this guide are broken down into two stages: those affecting consumers' understanding of their service needs, and those affecting the choices consumers make about their NBN plan and provider.

Better practices at a glance

Better practices to help consumers understand their service needs:

- ✓ Do not overwhelm consumers with too much information (to avoid information overload).
- ✓ Draw greater attention to a plan's speed and reliability, as well as price and data allowance (to overcome present bias).
- ✓ Take account of the fact that consumers can think in terms of money "buckets" (to address mental accounting).
- ✓ Avoid ambiguity. Where possible, ensure that information provided is definitive (to address ambiguity and uncertainty aversion).
- ✓ Develop consistent rules of thumb (to meet heuristic needs).

Better practices to help consumers choose:

- ✓ Use real-life examples to make concepts more tangible (and more likely to change attitudes).
- ✓ Make the decision to investigate and choose alternatives as easy and attractive as possible.
- ✓ Limit the number of choices or decisions, where possible, to only the most relevant.
- ✓ Show options and information about plans side-by-side.

Step 1: Understanding

Which behavioural biases prevent consumers from understanding their broadband needs?

Consumers are often overloaded with too much information

Information overload can occur when consumers are provided with too much information. People have a limited cognitive processing capacity. When information overload occurs, people are likely to experience a reduction in their capacity to process and understand information.⁴

Information overload increases when there is no systematic method for comparing and processing different kinds of information. In the context of consumer choice, the lack of a systematic method to present information about key elements such as price, speed and data allowance is likely to amplify the effect of information overload.

Understanding: behavioural concepts at a glance

Information overload: When overloaded with information or complexity, people are often incapable of making optimal decisions (i.e. systematically processing all available information for maximum use).

Mental accounting: People treat money differently, depending on factors such as the money's source and intended use. This tendency to put labels on money (savings, inheritance, or telecommunications money) can trigger irrational behaviours.

Consumers are influenced by mental accounting

Mental accounting describes peoples' tendency to set up mental accounts for outcomes that are psychologically separate.⁵ In other words, people tend to treat money differently according to whether it's intended for a holiday, car insurance, or leisure etc.

In the context of consumer choice, mental accounting means consumers categorise expenditures in practical mental accounts, or 'buckets.'

When estimating their service needs, consumers may automatically set aside a certain amount of money every month for internet expenditure. This implicit accounting system will influence consumers' decisions.⁶

For example, consumers receiving letters from providers suggesting plans with greater speed or data allowance need to decide whether an increase in expenditure violates their monthly mental accounting constraints.

In addition, people often make comparisons using similar mental accounts (for example their monthly mobile phone bill). This means consumers may be reluctant to pay more for their broadband service if it exceeds what they pay for other similar services.

Given there has been relatively little change in Australia's broadband prices over the years (despite significant increases in the amount of data offered), it is perhaps unsurprising that consumers see price as a stable and reliable benchmark for choosing plans.⁷

Consumers focus on immediate returns

People tend to prefer immediate rather than future benefits when considering their service needs, a phenomenon known as present bias.⁸

For this reason, consumers are more likely to favour the immediate benefits of a cheap NBN plan (focusing on price) over other plans more suitable for their longer term service needs (focusing on other variables such as speed or data allowance).

Present bias can cause regret if consumers lock themselves into cheap plans not adequate for their needs.

Consumers focussing mainly on price and not service needs may be one of the factors in the number of complaints about NBN speeds.

Understanding: behavioural concepts at a glance

Present bias: People tend to weight present rewards more heavily than future ones.

Heuristics: People tend to rely on mental heuristics (or "rules of thumb") to interpret information and make decisions. These mental shortcuts can be fast and effective strategies, but can also lead to systematic cognitive biases.

Uncertainty and ambiguity aversion: People generally dislike uncertainty and tend to avoid situations with uncertain outcomes.

Consumers do not like uncertainty and ambiguity

Consumers tend to avoid considering options when there is missing or contradictory information and the complexity of the information makes the outcome uncertain. Ambiguity aversion occurs when people prefer known risks over unknown risks.

Some information currently provided to consumers does not provide an adequate sense of certainty and contains ambiguous information. Uncertainty and ambiguity are inherent in much of the information provided to broadband consumers. Specifically, broadband plans promoting speed may be unfamiliar.

Consumer's uncertainty over NBN broadband speeds may make them less likely to collect and understand information about their broadband service needs. People can rely on shortcuts to interpret information and make decisions.

In the context of making a decision about an NBN plan, consumers may choose to only consider a limited number of features. For example, consumers may be more likely to interpret their internet needs in terms of price, which is a readily available and salient feature.



Step 2: Choosing

Which behavioural biases prevent consumers from choosing the most suitable plan?

Consumers prefer familiarity, and this can be problematic

People can be inclined to stick with the status quo because it is easy and familiar, leading them to overvalue their current circumstance when faced with the opportunity to switch to an alternative. 11 Research from the ACMA shows, "staying with [an] existing service provider for continuity" is considered one of the most important factors when choosing a plan or provider (fourth behind cost, speed, and keeping an existing phone number). 12

This can be problematic when it leads consumers to choose and/or keep contracts that are not best suited to their needs. For example, an early study in the US energy market found consumers are highly influenced by status quo bias: they were significantly more likely to choose their existing service when compared to an alternative, despite the alternative offer being more reliable or up to 30 per cent cheaper.¹³

Many NBN consumers are likely to be unaware of their speed needs. Thus consumers may rely on service providers to give them a benchmark for the average or 'normal' speed needs of most users.

If the lowest speed is framed as the status quo option, this (in addition to the lower price) may induce NBN consumers to default to plans with this speed. This might be the case even when it is unlikely to be the best option for them.

Consumers may base their speed expectations on high reference points

Some consumers have been presented with the highest possible download speeds when viewing different NBN plans and may become anchored to this reference point. This can lead to consumer dissatisfaction when the reference point does not reflect the reality.

A comparison of consumer awareness of broadband speeds across OECD countries found consumers were most dissatisfied when the gap between advertised and actual speeds was largest, regardless of whether their actual speeds were faster than other consumers.¹⁴

Historically some retail service providers advertise the highest possible download speed available at each speed tier of the NBN. However, actual download speeds vary over the course of the day for several reasons.

The expectation of high speeds based on the high reference point advertised by providers may lead consumers to have unrealistic expectations of their broadband service. A lack of understanding of speed needs and the factors that vary service speeds may compound this dissatisfaction.

Consumers benefit from the use of examples to determine speed needs

Research from the ACMA shows that many consumers are likely to be unaware of their speed needs and

unfamiliar with using speed as a metric for comparing plans. ¹⁵ Making the different speed options more salient to consumers can help them choose the best plan for their needs.

For most consumers, the metric of megabits per second (Mbps) does not offer a meaningful metric of how suitable a plan is for their broadband needs. Using tangible examples, conversational language and visuals could help consumers under-stand what different NBN tiers will allow them to do.¹⁶

This is something some broadband providers are doing well. For example, most of the major NBN providers describe the different tier speeds in terms of basic browsing, emails, the ability to stream videos or play online games, and in relation to household size. Some providers also break this down by the number of devices that an NBN speed is likely to support at the same time. All of these real-life examples are likely to assist consumers in making better choices based on their needs.

However, these examples are not easy to find and many require the consumer to click on an additional link. The additional friction cost of opening a new link is likely to prevent many consumers from seeking further information, especially if they do not view speed as an important determining factor.

Consumers may be overwhelmed by the number and order of choices

Too many options can lead people to choose something that is not optimal, or avoid making a decision altogether (which can lead them to stick with the status quo).

Even where there is a limited number of options to choose from, people may still be prone to relativity bias and/or a decoy effect. Relativity bias occurs when we make suboptimal decisions based on irrelevant factors, such as the order of the options presented to us.¹⁷ A decoy effect occurs when an alternative option is presented that changes a person's preferences between two other options, despite this change not being rational.¹⁸

The order and comparison between the offers may lead consumers to choose plans that do not reflect

their needs or preferences. For example, many providers list the cheapest (and lowest speed) options first and with speed as a secondary feature. These factors are likely to influence the choice of plan NBN consumers select.

Side-by-side presentation is the best way to ensure options are considered simultaneously and to eliminate ordering effects. ¹⁹ A European Commission investigation into energy markets found standardising presentation of information helped consumers compare offers and identify which offer was cheapest. ²⁰

Considering options together leads to consumers making better decisions, compared to when options are shown sequentially.²¹

Choosing: behavioural concepts at a glance

Status quo bias and defaults: Many people default to the option chosen for them by a third party, or continue with their current choice or behaviour by not actively changing their circumstances.

Reference dependency: People can be anchored to a reference point that affects their ability to accurately assess alternative or future options.

Salience: Making something more tangible or prominent so that it stands out can help change behaviour.

Choice overload: Too many choices can prevent us from making the best choice or lead us to avoid making a choice altogether, leading to procrastination.

Decoy effect: Peoples' preferences can change when alternative options are presented, despite alternatives being irrelevant to their decision between other options.

Relativity bias (choice order): The order in which choices are presented can affect the decisions people make.

Who?

Who are we?



The Behavioural Economics Team of the Australian Government (BETA) is the first central unit applying behavioural economics to improve public policy, programs and processes. BETA uses behavioural economics, science and psychology to improve policy outcomes. BETA's mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.





The Australian Communications and Media Authority (ACMA) is Australia's regulator for telecommunications, broadcasting, some online content and radio communications. Our strategic intent is to make communications and media work in Australia's public interest. The ACMA's regulatory roles include ensuring that consumer, citizen and audience safeguards are efficient, effective and reflect community standards. The ACMA has a particular interest in the experience of consumers in the telecommunications industry, and a current focus on improving the experience of consumers as they transition to and use services provided via the National Broadband Network.

What is behavioural economics?

Economics has traditionally assumed people always make decisions in their best interests. Behavioural economics challenges this view by providing a more realistic model of human behaviour. It recognises we are systematically biased (for example, we tend to satisfy our present self rather than planning for the future) and can make decisions that conflict with our own interests.

What are behavioural insights and how are they useful for policy design?

Behavioural insights apply behavioural economics concepts to the real world by drawing on empirically-tested results. These new tools can inform the design of government interventions to improve the welfare of citizens.

Rather than expect citizens to be optimal decision makers, drawing on behavioural insights ensures policy makers will design policies that go with the grain of human behaviour. For example, citizens may struggle to make choices in their own best interests, such as saving more money. Policy makers can apply behavioural insights that preserve freedom, but encourage a different choice – by helping citizens to set a plan to save regularly.

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The views expressed in this paper are those of the authors and do not necessarily reflect those of the Department of the Prime Minister and Cabinet or the Australian Government.

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