



# Applying behavioural insights to the Personal Property Securities Register

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# Who?

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## **Who are we?**

We are the Behavioural Economics Team of the Australian Government, or BETA. We are the Australian Government's first central unit applying behavioural economics to improve public policy, programs and processes.

We use behavioural economics, science and psychology to improve policy outcomes. Our mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.

## **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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# Executive summary

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## **An efficient and easy-to-use Personal Property Securities Register (PPSR) enables Australian businesses to manage the risk and reduce the burden associated with buying, selling and using assets as collateral to secure lending.**

The PPSR makes it easy for businesses to safeguard their security interests (money owed to them); helps businesses make informed purchasing decisions by letting them know whether the asset they are purchasing has outstanding financial obligations tied to it; and facilitates secure lending to businesses by financiers.

Businesses can register on the PPSR by completing an online form hosted by the Australian Financial Security Authority (AFSA). Since 2012 Australian businesses and individuals have completed over 22.8 million registrations. Businesses need to get key elements of the registration *exactly* right. Even a small mistake may render the registration invalid, exposing the business to greater financial risk.

AFSA commissioned BETA to understand why some businesses create inaccurate registrations and suggest how to improve the register. We interviewed PPSR lawyers and advisers, small and large businesses, and AFSA's National Service Centre staff.

We also analysed 2.7 million business registrations on the PPSR. Around 2 per cent contained obvious errors and a further 10 per cent contained possible errors.

Some registrants found it difficult to understand and navigate the register and interpret the guidance material. Other challenges included the accurate identification of assets and the grantor (the other party in the registration). There are also marked differences in how experienced and inexperienced registrants approach the registration process.

To address these problems we have recommended that AFSA:

1. Simplify language in the registration form, guidance material and AFSA/PPSR websites
2. Help registrants prepare for the registration by providing an intuitive overview
3. Introduce an analytical tool to suggest the appropriate collateral class
4. Provide registrants with certainty by including a template for grantor details
5. Introduce guidance and tools to help registrants choose the correct grantor identifier
6. Introduce self-help decision tools to resolve common queries
7. Strengthen the 'review' section of the PPSR form.

To measure the effectiveness of these interventions we have also recommended introducing a survey to test registrants' comprehension of the registration process.

Our findings provide AFSA with a roadmap to improve the PPSR registration process and may be applicable to the administration processes for other government programs.

## Box 1: The PPSR registration process at a glance

Every PPSR registration requires at least two parties, the ‘secured party’ and the ‘grantor’. The secured party may be a financier, lender or a retention-of-title supplier (although other arrangements can and do exist). When the secured party enters into a financial arrangement with the grantor (for example by lending funds, selling goods on payment terms, or leasing goods), they can protect the priority of their claim against other creditors by creating a PPSR registration.<sup>1</sup>

The PPSR registration records the secured party’s claim over the personal property the grantor used as collateral.<sup>2</sup>

Figure 1 - Overview of the PPSR registration process



When making a registration, the secured party selects a broad category under which the personal property falls. This is known as the ‘collateral class’. Depending on the collateral class selected, the registrant (secured party) may need to provide additional information about the personal property.

In most circumstances, the registrant (the secured party) must also provide information about the other party in the transaction (the grantor).<sup>3</sup>

Businesses can complete the registration via the PPSR website or via a private portal.<sup>4</sup> Most self-lodging businesses we spoke to always register via the PPSR website. PPSR advisers, lawyers and those handling large volumes of registrations use their own or third party portals to create their registrations, but still use the PPSR portal to complete ad hoc registrations.

- 1 Or via another form of transaction which raises a debt obligation.
- 2 Personal property is defined as any sort of property that is not land, buildings or fixtures. Examples include goods, motor vehicles, planes, boats, intellectual property and bank accounts.
- 3 Some collateral classes with universal serial numbers, such as automobiles, do not require the grantor to be identified.
- 4 Some frequent PPSR users create and manage their own private PPSR portals. There are also businesses that use their portals to provide PPSR registration services to their clients.

# Why?

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## **The PPSR provides confidence when buying, selling and using assets to secure lending. Errors in registration can be costly for business.**

The PPSR helps businesses and individuals secure lending and increase working capital by making it easy to see whether an asset is being used to 'secure' debt or credit.

Using the register, businesses can record whether an asset is being used as security for a loan. The PPSR registration establishes the registering business' prior claim over assets (or other personal property) ahead of other creditors. For example, if a business provides goods on credit, it would register its interest in these goods on the PPSR. Should the other party default or go bankrupt, the business could reclaim its goods (or the value thereof).

The register is also used when purchasing goods or making lending decisions. Anyone can search the register to see whether an asset has an outstanding financial obligation tied to it. Financiers can use the register to assess whether a business is in good financial health.

The PPSR provides certainty for individuals and businesses when making important financial and purchasing decisions.

### **The register has grown steadily since its inception**

Since the PPSR's establishment in 2012, Australian businesses and individuals have completed over 22.8 million registrations. Currently there are over 10 million active registrations, with around two million new registrations each year. As at 30 June 2019, the most commonly registered asset category was 'motor vehicle', with approximately 4.8 million active registrations (48.4 per cent of all active registrations).

### **Even a small mistake in the registration form may render it invalid**

Businesses register on the PPSR by completing an online form managed by AFSA. Businesses need to get key elements of a registration *exactly* right. If registrations are not created in line with legislation, the security interest of the registering business may not be valid under the *Personal Property Securities Act 2009* (PPS Act 2009).

While AFSA manages the register, it does not have all the required information to check if submitted registrations are correct. It is possible some businesses are unaware their registrations may be invalid.<sup>5</sup>

Invalid registrations could be very costly for individuals and businesses. A recent case saw an Australian company's ability to recover assets worth \$23 million jeopardised, because it incorrectly used an ABN instead of an ACN when making its registration (*OneSteel Manufacturing Pty Limited (administrators appointed)* [2017] NSWSC 21).

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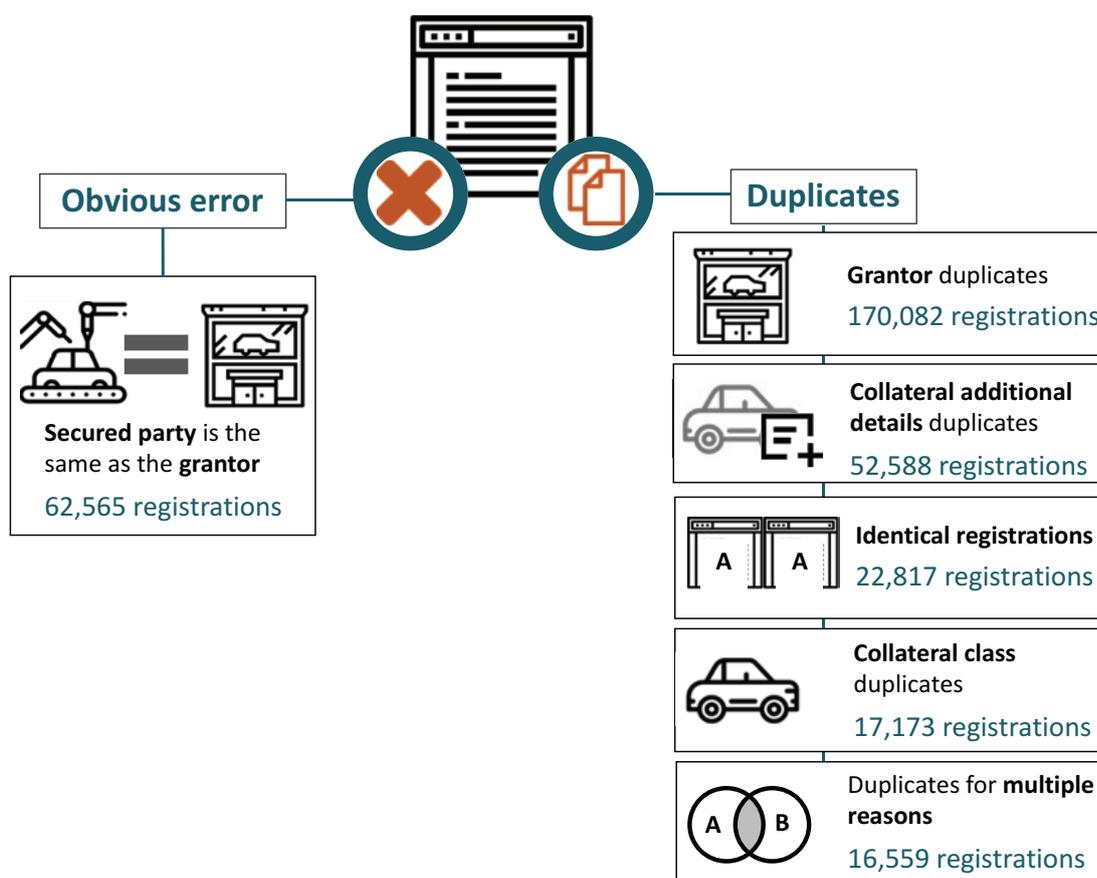
<sup>5</sup> For the purposes of this report, we define 'incorrect' and 'invalid' registrations as ineffective registrations under the PPS Act 2009.

## Around two per cent of all registrations we analysed contained obvious errors

We analysed 2.7 million business PPSR registrations made between 2012 and 2019 using the PPSR online registration portal.<sup>6</sup> We found 62,565 registrations with obvious errors (around **2.3 per cent** of all registrations we analysed) and 256,402 registrations with possible errors (around **9.5 per cent** of all registrations we analysed).<sup>7</sup> This latter group is made up of registrations which are almost identical to another registration on the PPSR, except for one small variation. These registrations are called ‘duplicate’ registrations.

These figures reveal a significant number of Australian businesses may have potentially invalid registrations. Appendix A provides more information on our quantitative analysis and results.

Figure 2 – Incorrect registrations: obvious errors and duplicates



6 In total, we received select details of 2,740,055 PPSR registrations made by businesses via the PPSR online interface between January 2012 and June 2019. Details we received included the registration number, the account customer number, user id, secured party information, the secured party group id, start/end date, grantor information, the giving of notice identifier, collateral class and description, ‘PMSI’ status, ‘subject to control’ status, ‘inventory’ status and the serial number.

7 Our analysis found nearly 20 per cent of all duplicate registrations could be traced back to a single secured party. Forty thousand duplicate registrations naming this secured party were recorded between 2015 and 2018, which accounted for more than half of the growth in total duplicates over this period. To make trends in duplicate activity more broadly representative, this secured party has been removed from our analysis.

# What is causing these ‘errors’?

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To better understand reasons for inaccurate PPSR registrations, we also:

- Conducted semi-structured interviews with AFSA National Service Centre employees (six interviews), PPSR advisers, lawyers and specialists (10 interviews), and self-registering PPSR businesses (nine interviews); and
- Observed calls received by six AFSA National Service Centre employees.

Our key findings are outlined below, with a more detailed overview in Appendix B.

## The registration process is challenging

Across the board, PPSR users we spoke to saw the register as a valuable risk mitigation tool and had a high degree of trust in the register. However, comments raised during these interviews suggest some people found the registration process challenging. These sentiments were echoed in our discussions with AFSA’s National Service Centre employees, PPSR lawyers and PPSR advisers.

There is a steep learning curve associated with creating new registrations and the process is particularly difficult for ‘first-timers’. Once the registrant has completed around four to six registrations the process becomes easier. The grievances most often expressed by PPSR users and AFSA’s National Service Centre employees are presented below:

- **Technical language.** The most common frustration expressed by self-lodging businesses and PPSR advisers is interpreting the technical language used in the form and on the PPSR website. This view was shared by AFSA’s National Service Centre employees who often receive calls seeking to clarify information found on the form and website. Even the ‘glossary’ and ‘help’ sections were seen as challenging.
- **Comprehension and relevance.** New registrants are confused about what information they need to provide and how the questions on the registration form relate to their circumstances. This was particularly the case for questions in the ‘collateral class’ and ‘grantor’ sections.

AFSA’s National Service Centre employees must not provide tailored or legal advice to callers. This means employees are not able to answer questions in terms specific to the registrant and often need to refer registrants to PPSR regulations.

- **Help tools.** Registrants felt the form’s ‘help’ function needed improvement. Some were frustrated the ‘help’ definitions were written in terms just as technical as the questions themselves.

Accessing embedded help tools also proved to be a burden to some registrants. Clicking on the ‘help asterisks’ moved registrants away from the registration interface, making it difficult to navigate back.

- **Register layout.** The process of completing the entire registration - from creating a PPSR.gov.au account, to creating a secured party group, selecting a collateral class and selecting the grantor - did not seem intuitive to some users.

Despite these challenges, most of the users we interviewed expressed a high level of confidence in their ability to use PPSR and believed they registered correctly.

## Creating duplicate registrations is often a deliberate, risk-mitigating behaviour

New and potential PPSR registrants we interviewed saw little value in creating duplicate PPSR registrations. Some of the more experienced registrants, PPSR lawyers and advisers stated they sometimes create duplicate registrations due to:

1. **Ambiguity around the grantor identifier.** Users would create duplicate registrations with a different grantor identifier in each. Alternatively they would create only one registration, but within this registration, list multiple identifiers. Trust and trustee grantors were seen as particularly challenging to register. Some users indicated they create duplicate registrations against the trust and the trustee to ensure 'all bases are covered'.
2. **Ambiguity around the collateral class.** Sometimes duplicate registrations were made because the most appropriate asset class is unclear. In other cases, a security interest will legitimately require multiple registrations to cover all elements of the secured collateral classes.

Some advisers we interviewed adopted a 'better safe than sorry' mentality in their approach to PPSR registrations and advise their clients to do the same. The cost and effort of creating duplicate registrations was perceived to be much less than the potential cost of the registration being wrong. This approach was also reported by some AFSA National Service Centre employees, who believed many registrants deliberately create duplicate registrations. Some employees reported they believe this behaviour provides users with a sense of being 'covered'.

## Registrants found the grantor and collateral class sections particularly difficult

Across the board, new and experienced registrants we interviewed found it challenging to select the collateral class and identify the grantor. These businesses were nonetheless satisfied they completed these sections correctly (although many less-experienced registrants still struggled to explain the hierarchy of grantor identifiers). Some less-experienced registrants didn't realise the importance of getting the grantor section right.

Businesses and PPSR advisers said it was difficult to obtain information on grantors' corporate structure and to correctly identify them in the registration form. To guide them, registrants readily use the Australian Business Register (ABR) and the Australian Securities and Investment Commission (ASIC) look-up tools. These look-ups are the only sources of publicly-available information to check grantor information and were often used by registrants of all experience levels. Using the ABN to identify the grantor was often the default approach.

More experienced registrants relied on contracts drafted during the negotiation stage to input grantor details. Documents such as purchase order agreements, credit applications, settlement deeds and bills of sale were used when available. Lawyers would often ask their clients to contact grantors directly if there was uncertainty.

The inexperienced registrants we interviewed found the ‘collateral class’ section particularly challenging. People were confused about what needed to be entered into the free-text box. As a result, lawyers and advisers would often provide guidance to their clients about selecting the most appropriate collateral class.

### **Businesses and advisers differ in how they approach the registration process.**

Our research suggests cohorts approach the registration process differently:

- **Less-experienced registrants** often call AFSA’s National Service Centre seeking guidance on the entire registration process. These users often refer to the PPSR website, the PPSR business guide and the ‘help’ features within the registration form. Less-experienced users often do not understand the importance of getting the registration right and are often lax in their preparation.
- **Experienced registrants** try to collect necessary information before attempting the registration.
  - For the collateral class section, registrants would rely on documents outlining the specifications of the security interest (for example, invoices from suppliers).
  - For the grantor section, these registrants relied on the *contracts* they have in place with the grantor (for example, purchase order agreements, credit applications, settlement deeds and bills of sale).
  - These registrants readily use the ‘look-up’ tools provided by the ABR and ASIC to verify the grantor information they provide.
- **PPSR advisers and lawyers** rely on contracts between the two parties. Advisers provide their clients with contract templates to assist them in obtaining the required information. A few lawyers include PPSR questions as part of their due diligence process or in the contract the counter-party must sign. PPSR advisers and lawyers are more likely to rely on the PPS legislation for information.

### **Inexperienced registrants may be more subject to a number of behavioural biases which contribute to erroneous registrations**

Smaller businesses tend to be more susceptible to behavioural biases than larger corporations (Wilson & Sonderegger, 2016). They typically do not have well-established decision-making processes involving multiple people. Small and medium-sized enterprises (SMEs) more commonly rely on the judgement of a few key people (such as owners and managers). These businesses may be experiencing cognitive and/or choice overload, may be overconfident and rely on incorrect mental shortcuts when completing the form. Coupled with their lack of prior experience in using the PPSR, these behavioural biases may lead some to create incorrect registrations.

A summary of behavioural biases affecting registrants is provided in Box 2. A more detailed description can be found in Appendix C.

## Box 2: Behavioural biases affecting registrants

### Cognitive overload

When presented with an overwhelming amount of information, unclear or competing priorities, or situations where mistakes can incur significant consequences, people tend to experience **cognitive overload** (Kirsh, 2000).

While PPSR registrants want to register correctly, some do not have the tools or experience to follow the registration process, find the form and guidance confusing, or are unsure where to get help. This combination of factors leads to some PPSR users being subject to cognitive overload. As a result, some PPSR registrants may disengage from the registration process, seek professional advice, persevere despite a poor understanding of requirements or rely on shortcuts to complete the registration process.

Cognitive overload can be reduced by simplifying language, providing guidance and helping registrants navigate the process.

### Choice overload

Increasing the number of available options can at times decrease individuals' motivation to engage and reduce their satisfaction with the final choice (Scheibehenne, et al., 2010). When too many choices are available, people aim to simply end the choice-making ordeal, finding a merely satisfactory choice, rather than the optimal outcome (Lyengar & Lepper, 2000; Mick, et al., 2004; Reutskaja & Hogarth, 2009). This is known as '**choice overload**'.

During the registration process, PPSR registrants are presented with numerous (and sometimes confusing) options. Choice overload can contribute to errors as registrants may be focussing on progressing through the form rather than making an optimal decision.

Successful approaches to reduce choice overload include reducing the number of choices and using aids (such as filters and pre-filled information) to simplify the decision-making process.

### Optimism bias and overconfidence

People tend to overestimate the likelihood of positive events, and underestimate the likelihood of negative events. This is known as **optimism bias** (Sharot, 2011). Coupled with **overconfidence**, an overestimation of one's ability (Moore & Healy, 2008), PPSR registrants may persevere with a poorly completed registration form.

Businesses we interviewed were confident they always complete their registration correctly. Some of this confidence may be misplaced. This overconfidence may be due to some businesses not having the knowledge needed to comprehend the complexity of the PPSR registration. In other words, due to their lack of skill and knowledge, these businesses do not realise they are making a mistake. This is often known as the **Dunning-Kruger effect** (Kruger & Dunning, 1999).

# Recommendations

We propose seven relatively simple steps to help registrants avoid mistakes, improve comprehension of the process, help resolve queries and improve information available to registrants.

- 1 Simplify language in the registration form, guidance material and websites
- 2 Help registrants prepare for the registration by providing an intuitive overview
- 3 Introduce an analytical tool to suggest the appropriate collateral class
- 4 Provide registrants with certainty by including a template for grantor details
- 5 Introduce guidance and tools to help registrants choose the correct grantor identifier
- 6 Introduce self-help decision tools to resolve common queries
- 7 Strengthen the 'review' section of the PPSR form

We also recommend AFSA user-test the proposed changes as part of any rollout schedule.

## Recommendation 1 - Simplify language in the registration form, guidance material and websites

Almost all cohorts use the AFSA/PPSR website to guide them through the registration process, while new registrants readily use the 'help' feature within the registration form. During our interviews many registrants noted these materials are often too technical.

A number of 'simplification' strategies are outlined in Figure 3, with further discussion found in Appendix C.

Figure 3 - Simplification strategies

Simplification element	Summary
<b>Adopt appropriate language</b>	Many PPSR registrants may not be familiar with the technical language used in the registration form and help materials. Tailor language to suit the audience (for example change words like 'indenture' to 'agreement') and employ readability checks and user testing.

Figure 3 - Simplification strategies continued

Simplification element	Summary
<b>Simplify registration questions and guidance material</b>	Use appropriate language to simplify questions and guidance materials presented to registrants. Provide greater clarity on what is expected in responses (e.g. what is required in the free-text box).
<b>Supplement and restructure guidance material</b>	Use layering to explain technical concepts more easily. Layering refers to parallel explanations being provided at different levels of complexity, describing the same concept in a variety of ways. The top-level description is written in layperson's terms, with further levels providing more granular detail.
<b>Reduce unnecessary information</b>	Registrants' attention reserves and cognitive resources are limited. By removing information which is not absolutely necessary to perform an action, we help registrants concentrate and follow through with their intentions.
<b>Use visual aids</b>	Visual aids help people grasp concepts, workflows and processes more intuitively. Introduce visual aids to simplify guidance material.
<b>Adopt a clear structure</b>	Information should be structured so it makes sense to registrants. Appearance of the form and guidance materials could be improved by placing key messages up front, breaking up the content with subheadings and using lists and good typography practices.

## Recommendation 2 - Help registrants prepare for the registration by providing an intuitive overview

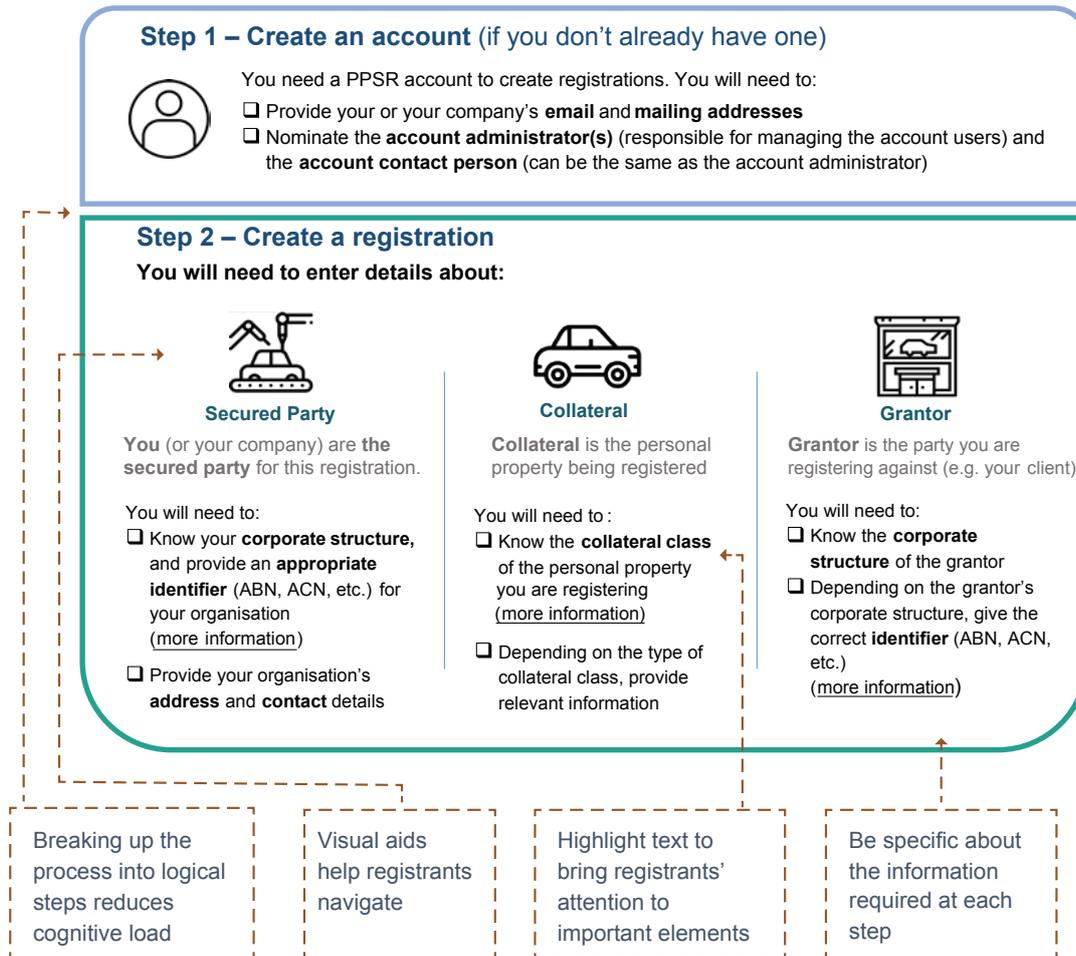
A notable difference between new and experienced users is the level of preparation the experienced registrants undertake before attempting a registration. We can help new users get a sense of the registration process by expanding on the existing 'registration overview' information provided on the website.

Figure 4 - Existing 'registration overview' information



We suggest a revamped, behaviourally informed overview (Figure 5), providing a top-level explanation of the registration process and highlighting information required from the registrant. We suggest keeping the overview as simple as possible and linking to more detailed information.

Figure 5 – Example of behaviourally informed registration overview and checklist



Should registrants elect to view ‘more information’ under the ‘secured party’ section, we suggest providing them with a more detailed explanation. Once registrants have clicked through to this screen (see Figure 6 below), we can outline a slightly more technical explanation of concepts, while keeping it relevant by including an example.

Figure 6 - Example of more detailed information – secured party groups

### What is the secured party group?

A **secured party group** (SPG) is the individual or organisation who holds the **security interest** in a good or asset they provide. Should the other party in the arrangement default or go bankrupt, the secured party could get their goods back. There can be more than one person or company making up a secured party group.

If you are a first time registrant, you must create an SPG before you can complete your registration.

The SPG can be a single entity (for example, a company or an individual), or be made up of multiple people and/or organisations.

Each SPG is allocated two different numbers:

- a unique SPG number
- an access code

Make sure you keep these two numbers safe—you need them both.

*Example*  
*Printer Pty Ltd manufactures printing equipment. Page Pty Ltd leases a printer from them.*  
*In this case, **Printer Pty Ltd is the secured party.** It makes a PPSR registration over goods it provides Page Pty Ltd. If Page Pty Ltd is unable to pay, Printer Pty Ltd will be able to make a claim to get the printer back.*

**Secured Party**  
Printer Pty Ltd
**Collateral**  
Printer
**Grantor**  
Page Pty Ltd

### What ‘identifier’ should I use for my SPG?

When creating an SPG, you’ll be asked to provide an identifier. An ‘identifier’ is either a name or a number that identifies an organisation. It is very important to use the correct identifier, otherwise the registration may be invalid.

For more information on what identifier you’ll need to use, click on your ‘corporate structure’.

Sole trader or an ‘individual’

Partnership

Body corporate or company

Trust or trustee of a trust

Other

Provide more detailed and technical information

Provide access to further information

Make the concept relevant to the registrant with an example and visual aids

To help people prepare for their registration, we recommend linking to further information to select the appropriate ‘corporate structure’ for their secured party group. Figure 7 sets out the process for choosing the correct identifier in an easily understandable manner.

Figure 7 – Identifier hierarchy for secured party groups

### Body corporate (including companies) Choosing the right identifier for your secured party

If your secured party has an **Australian Registered Scheme Number (ARSN)**, use it to register

If you do not have an ARSN, use your **Australian Company Number (ACN)**

If you do not have an ACN, use your **Australian Registered Body Number (ARBN)**

If you do not have any of these identifiers, use your **secured party’s name** as it appears on your constitution

### Recommendation 3 - Introduce an analytical tool to suggest the appropriate collateral class

Some registrants were confused by the collateral class options presented in the ‘Collateral’ page of the register. Selecting the appropriate collateral class was particularly difficult when the correct option was not immediately obvious, or the asset appeared to fit into multiple options.

To help registrants select the correct collateral class, we suggest **embedding a text categorisation tool** alongside the current collateral class selection menu (see Figure 8). Text categorisation (or classification) is an analytical tool used to extract meaning from text, categorise the data and present likely options. This tool could be used to analyse text typed by the registrant and then provide suggestions of the most appropriate collateral class categories.

Providing suggestions for the appropriate collateral class will give users a smaller selection of options and could reduce choice overload. This may lead to more accurate selections, increase confidence in the decision making process, and lead to a reduction of erroneous registrations.

Figure 8 - Example of text categorisation tool

**Collateral 1**

We use text categorisation to help you select the most appropriate collateral class. Type a brief description of the personal property below.

Description:

**Suggested collateral classes**

- Watercraft Use 'Watercraft' to register a boat, ship or other vessel (other than a seaplane) that is intended to be used on water and has an official number issued by the Registrar of Ships, or a hull identification number (HIN)
- Other goods If your watercraft has an outboard motor, you will need to register it separately under the 'other goods' collateral class.

If you do not want to use the tool above, select one collateral class from the categories below.

Tangible property	General property	Intangible property	Financial property
<input type="radio"/> Motor vehicle	<input type="radio"/> All present and after-acquired property	<input type="radio"/> Account	<input type="radio"/> Chattel paper
<input type="radio"/> Watercraft	<input type="radio"/> No exceptions	<input type="radio"/> General intangible	<input type="radio"/> Currency
<input type="radio"/> Aircraft	<input type="radio"/> With exceptions	<input type="radio"/> Intellectual property	<input type="radio"/> Document of Title
<input type="radio"/> Agriculture		<input type="radio"/> Circuit layout	<input type="radio"/> Intermediated security
<input type="radio"/> Other goods		<input type="radio"/> Copyright	<input type="radio"/> Investment instrument
		<input type="radio"/> Design	<input type="radio"/> Negotiable instrument
		<input type="radio"/> Patent	
		<input type="radio"/> Plant breeder's right	
		<input type="radio"/> Trade mark	

[Back to top](#)  
[Add another registration](#)

< Previous | Cancel | Save as pending | Save as template | Next >

Registrant would enter the description of the asset into the free-text box

Based on text entered, registrant is offered most suitable collateral classes

Registrant may also be warned about common errors when registering a particular collateral class

### Recommendation 4 - Provide registrants with certainty by including a template for grantor details

To help registrants choose the most appropriate grantor identifier, we recommend providing a **template** to obtain relevant grantor information *before* starting the registration process. The registrant may ask the grantor to complete the template, possibly by incorporating the template into their existing contract suite. Most PPSR lawyers and advisers already do this and have developed their own in-house versions. If AFSA was to develop a standard grantor template, it would extend this tool to all users, and would be particularly helpful in certain complex areas, such as determining if the grantor is a trust or a trustee. The template could be shared on the AFSA website for access prior to registration and/or included in the ‘grantor’ section of the registration process. On the other side of the template, it would be useful to include a glossary of the acronyms used on the form.

An example of the template is provided in Figure 9 below.

Figure 9– Grantor information template

Dear <grantor’s organisation name>,

We ask you to please complete this form. Information you’ll provide will help us correctly complete the PPSR registration. Once complete, please send it to <secured party group’s email>.

Thank you,  
<Secured party group’s signoff>



**The official name of your business:** \_\_\_\_\_

Does your entity have an ARSN?  Yes, it is \_\_\_\_\_  No ARSN

Does your entity have an ARBN?  Yes, it is \_\_\_\_\_  No ARBN

What is your corporate structure (tick one)

Company  Body corporate  Sole trader  Trust  Other \_\_\_\_\_

**Trusts only**

If your corporate structure is a trust, what is your ABN: \_\_\_\_\_  No ABN

If you don’t have an ABN, is your trustee a:

Company with the following ACN \_\_\_\_\_

Individual with the following name \_\_\_\_\_ and date of birth \_\_/\_\_/\_\_

Other- please provide name(s) of trustees \_\_\_\_\_

**Sole traders and individuals only**

What is your name \_\_\_\_\_ and date of birth \_\_/\_\_/\_\_

**All other entity types**

Does your entity have an ACN? Yes, it is \_\_\_\_\_  No ACN

Does your entity have an ABN?  Yes, it is \_\_\_\_\_  No ABN

Date: \_\_\_\_\_

## Recommendation 5 - Introduce guidance and tools to help registrants choose the correct grantor identifier

Some businesses we spoke to had difficulties completing the ‘grantor’ section of the registration process. These businesses identified two specific issues:

1. **Confusion about the appropriate identifier to use** (ABN, ACN, ARSN, person’s name). While the PPSR regulations outline which identifier should be used by a particular entity and in what order, these rules are not immediately obvious when completing a registration. If the wrong identifier is used, the registration may be invalid.
2. **Reliance on the grantor to provide correct corporate structure and identifier information.** This reliance would be reduced by the template suggested above, but the grantor may still provide erroneous information in the template. This would lead the secured party to still create an incorrect registration.

To reduce these concerns, we suggest embedding tools to explain which identifier should be used for a particular entity and tools to ‘double check’ whether the correct identifier was chosen.

### 5.1 Be explicit about which identifier must be used by embedding decision aids

Figure 10 - Current grantor input section

**Grantor 1**

**Grantor: \***

Individual (Including sole traders)

Organisation

**Does the organisation have an ARSN? \* ?**

Yes

No

**Does the organisation have an ACN? \* ?**

Yes

No

**Does the organisation have an ARBN? \* ?**

Yes

No

**Select an entity type: \* ?**

Partnership

**ABN: \* ?**

The PPSR registration form already outlines the steps for selecting the appropriate grantor identifier by asking a series of questions (for example ‘Does the grantor have an ARSN?’) to determine which identifiers apply to the grantor (see Figure 10). While this approach implicitly outlines the order of identifiers, some businesses we interviewed did not understand these questions were structured to communicate a distinct ‘identifier hierarchy’. Rather, some businesses skipped ahead and simply looked for a familiar identifier to use.

We suggest two approaches to help registrants choose the correct grantor identifier to use. First supplement the guidance material and be explicit about the relevance of the identifier order. For example, Figure 11 is a pop-up box which clearly explains the correct hierarchy of identifiers for a grantor operating as a company. The same approach could be adopted to guide users to the correct identifier for other entity types (trusts, partnerships, etc.).

Figure 11 – Hierarchy for grantor identifiers

**Choosing the right identifier for your grantor**

When your grantor is a company and is not acting as a trustee for a trust, you must use their:  
**Australian Registered Scheme Number (ARSN)**

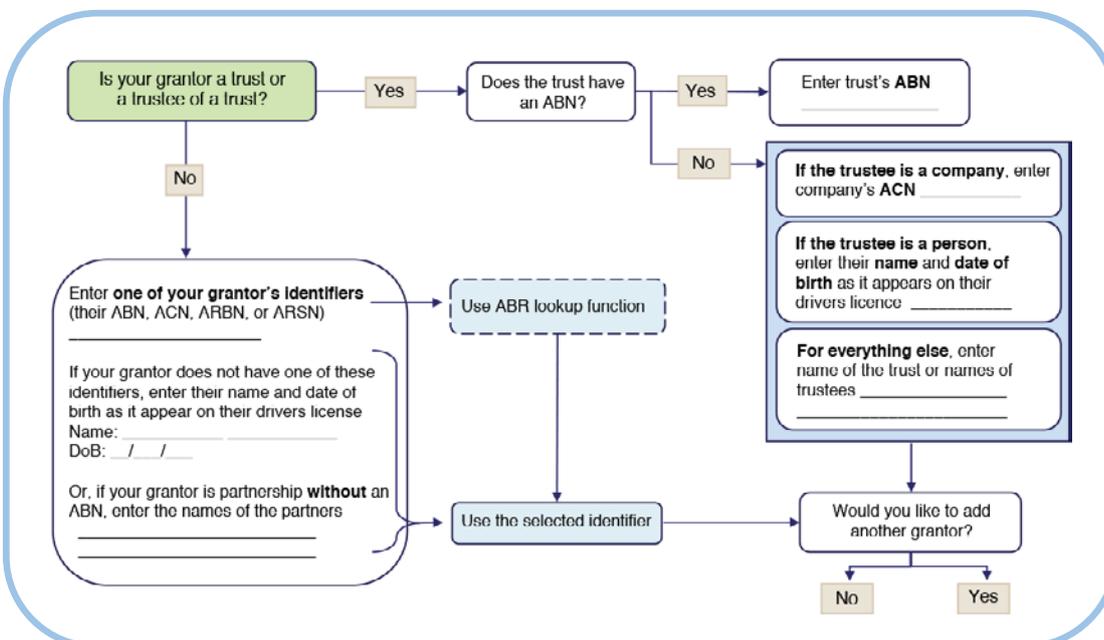
If the grantor does not have ARSN, use their:  
**Australian Company Number (ACN)**

If the grantor does not have an ACN, use their:  
**Australian Registered Body Number (ARBN)**

If the grantor does not have an ARBN, check that your grantor is a company.

Second, consider embedding an interactive ‘grantor identifier’ decision-tree to help registrants choose the right identifier. A schema of the proposed decision tree is outlined in Figure 12. Decision trees simplify complex decision making processes by seeking and evaluating the most important information in a logical order (Müller-Hansen, et al., 2017). For this decision tree, we suggest presenting the user with one question at a time, until a correct identifier has been nominated<sup>8</sup>. Various points in the decision tree could link back to grantor identifier hierarchy pop-ups (as in Figure 11).

Figure 12- Grantor identifier decision tree



We recommend AFSA includes these guidance tools on the page when the registrant is choosing the grantor’s identifier, or as part of broader guidance on the PPSR and AFSA websites.

8 Our interviews with businesses and their advisers suggest a number of identifiers are very infrequently used (for example, identifiers arising due to the Anti-Money Laundering and Counter-Terrorism Financing Act 2006). We have omitted these identifiers from the decision-tree example, however, we do not object to them being included if implemented.

## 5.2 Help registrants error check grantors' identifiers with the ABR/ASIC look-up tools

Most registrants use the ABR or ASIC corporate look-up tools to check grantor identifiers. While the PPSR already provides a tool to verify grantors' ABN or ACN, this verification process simply informs the registrant whether the entity exists and provides its name. The current tool does not alert the registrant if the wrong identifier is chosen.

We suggest building error-checking capability into this lookup function. The ABR database holds information on an entity's identifiers (ABN, ACN, ARBN, and ARSN) and its organisational type (company, trust, sole trader). By linking these two pieces of information, we can alert the registrant when an incorrect identifier is chosen.

The proposed look-up tool would check whether the registrant entered a valid grantor identifier according to the ABR database, and if the grantor's entity type calls for a different identifier to be used, it would alert the registrant. For an example of such an alert, consider Figure 13.

Figure 13 - Grantor identifier error alert

You searched for ABN: 01 123 456 789

**Results**

**Sample Company**  
This entity is registered as an 'Australian Private Company' and has an ACN 123 456 789

For most companies, you should register an ACN instead of an ABN ([more info on grantors](#))

What would you like to use as an identifier for the Sample Company?

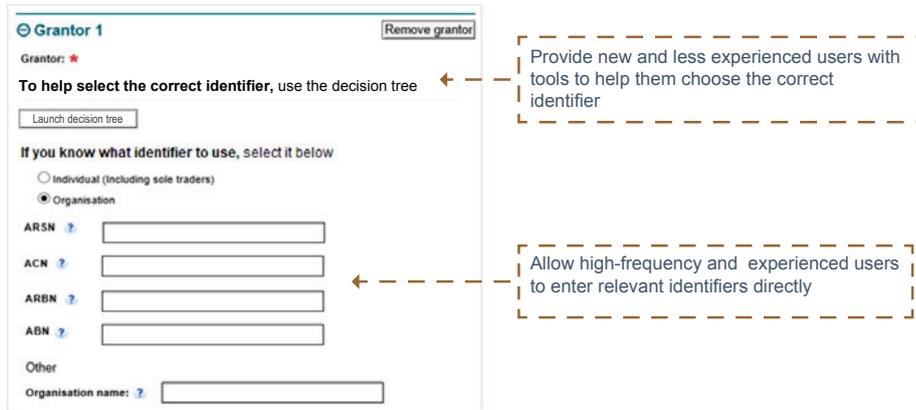
ACN

ABN

A similar error message could be set up to prevent other grantor identifier-related mistakes. For example, if the registrant inputs the ABN of a sole trader, the error message should advise the registrant to use the sole trader's name and date of birth as it appears on their driver's license.

This tool should be housed either in the 'grantor' section of the registration form or in the broader AFSA/PPSR website guidance material. If these tools are presented in the 'grantor' section, they should be optional and incorporated alongside the current register layout (see Figure 14). This will ensure experienced users are not inconvenienced.

Figure 14– Embedding the decision tree into the grantor screen



### Recommendation 6 - Introduce self-help decision tools to resolve common queries

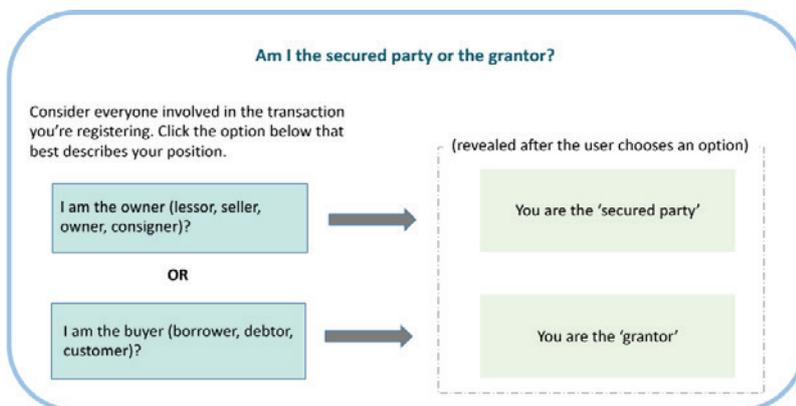
Decision tools, such as the decision tree mentioned above, help users focus on key elements of their query by stepping through a logical sequence.

We suggest establishing a number of interactive decision tools on the AFSA and PPSR websites and within the PPSR registration portal to deal with the most common queries. These tools work well in resolving simple, objective queries (such as ‘am I the grantor or the secured party?’ or ‘is this register for me?’). Interactive decision trees remove unnecessary noise from the process by only revealing the relevant question/answer and then guiding users to the next question.

Interactive decision trees are widely used by other government departments to help users make informed selections. For example, the Australian Taxation Office hosts the *Early Stage Innovation Company Tool* and the *Property Decision Tool* on its website to help taxpayers make the right decisions. A decision tool used early in the process will give registrants a high level snapshot of the issues before they invest time uploading their information to the register.

Self-help tools are also likely to benefit AFSA’s National Service Centre function in two ways. First, by allowing registrants to resolve their own queries, the volume of calls is likely to decrease. Second, it would give AFSA’s National Service Centre employees a new tool for helping callers. By referring the caller to the self-help tool and walking them through

Figure 15 - Example of decision tree - definition questions



the decision tree, no legal/tailored advice is provided to the client, but the query may be resolved.

See Figure 15 for an example of a decision aid to address the common definition question ‘Am I the secured party or the grantor?’

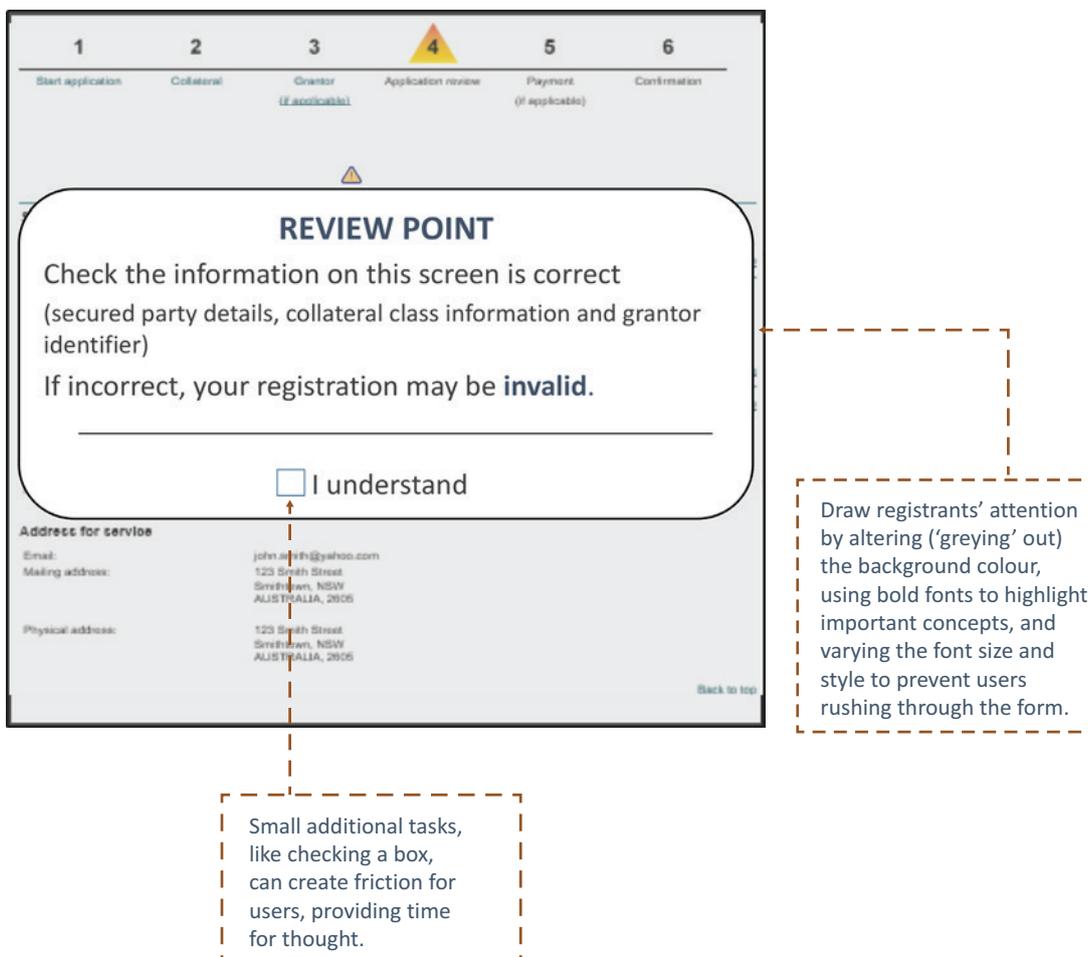
### Recommendation 7 - Strengthen the 'review' section of the PPSR form

Some new registrants do not understand the importance of correctly identifying the secured party group, the collateral class and the grantor information. The design of the registration process should convey the importance of accuracy in critical sections of the form. When we spoke to AFSA National Service Centre staff, many indicated they believe users are *'speeding through the application process'*. This may increase error rates.

While there is already a review screen as part of the registration process, we suggest overlaying a 'review point' pop-up at this point (see Figure 16). The purpose of the pop-up is to remind the registrant to check the information carefully, as inaccurate registrations may be invalid. Users would need to click through the pop-up to indicate they understand.

By introducing a pop-up with a check box, we introduce small 'friction' into the registration process. Minor additional tasks, like checking a box can provide time for thought and slow users down, increasing decision quality.

Figure 16 – Pop-up at the 'Application review' screen



Once registrants check the 'I understand' box in the pop-up screen, we suggest introducing further confirmation steps in the 'Application review' screen. As shown in Figure 17, confirmation boxes provided at the critical sections of the registration (secured party group details, collateral type and class and grantor information) would require registrants to explicitly select a course of action and review the information they have entered, rather than passively maintaining the status quo.

The minor friction created by the confirmation boxes gives registrants pause to review, and reinforces the message it is not too late to go back and amend the registration.

This pop-up screen could also display a warning message for obvious errors. For example, when the secured party group is the same as the grantor.

Figure 17 - Confirmation boxes at key parts of the 'Application review' screen

The screenshot displays three main sections of the 'Application review' screen, each with confirmation options:

- Secured party group:** Includes fields for 'Secured party group number' (100194425) and 'Secured party 1' details (Australian Company Number: 123459789, Name: The ACN does not exist in the ASIC register.). Confirmation buttons: 'I confirm the secured party details are correct' (green) and 'I want to change the secured party details' (red).
- Collateral:** Includes fields for 'Collateral type' (Commercial property), 'Collateral class' (All present and after-acquired property - No exceptions), 'Duration of registration' (7 year(s)), and 'Giving of notice identifier' (Invoice 123). Confirmation buttons: 'I confirm the collateral class details are correct' (green) and 'I want to change the collateral class details' (red).
- Grantor:** Includes 'Organisation name' (Mary and John Smith). Confirmation buttons: 'I confirm the grantor details are correct' (green) and 'I want to change the grantor details' (red).

Annotations at the bottom of the screenshot:

- Presenting confirmation boxes as an 'active choice' can induce people to slow down and reflect on the importance of the choice. This helps to reinforce the message this page is for review (rather than sticking with the status quo).
- By using colour we attract attention and reinforce the messages within each box.

# Conclusion and next steps

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## **Simple behaviourally informed designs could improve the PPSR registration process and help Australian businesses and individuals avoid potentially costly mistakes.**

The PPSR contributes to greater business opportunities for Australian businesses and individuals by providing assurance to secured creditors. While most businesses we interviewed value the function performed by the PPSR, our research revealed poor comprehension of the registration process and a high administrative burden contributes to incorrect or inaccurate registrations.

Based on insights from the behavioural sciences and our understanding of the PPSR and its users, we have identified seven simple steps to improve comprehension of the process and help business registrants avoid mistakes. Together, these steps could improve user experience, and help to reduce administrative burden and errors.

In implementing these recommendations, we also recommend AFSA consider an appropriate framework to evaluate the impact of changes to the PPSR registration form.

While focussed specifically on the PPSR, this report outlines themes and ideas relevant to the administration of other government programs. This includes how users typically interact with forms and portals, factors influencing users' comprehension and approaches to encourage accurate and honest disclosure.

# Appendix A - Additional information on ‘obvious error’ and duplicate registrations

## Around two per cent of all registrations contain obvious errors

Our sample of the PPSR register contained 62,565 registrations where the secured party is also listed as the grantor (around 2.3 per cent of all registrations we analysed). We are confident these registrations are incorrect since there is no need for a secured party to create a PPSR registration against itself.

‘Motor vehicles’ is the most common asset class being registered incorrectly. According to ABR data, the ‘rental and hiring services’ industry creates around 44 per cent of the obvious error registrations. This industry is by far the largest contributor to the total. The next largest contributor is the ‘construction services’ industry, followed by the ‘public administration’ industry (Figure 18).

Figure 18 - “Obvious errors” by Industry and Collateral Class

Category	Industry	%
<b>Top 3 industries with the largest share of all incorrect registrations</b>  (industry’s incorrect registrations / all incorrect registrations)	<b>Rental and hiring services</b>	<b>44.0%</b>
	Construction services	5.6%
	Machinery and Equipment wholesaling	5.2%
	Collateral Class	%
<b>Top 3 collateral classes with the largest share of all incorrect registrations</b>  (count of collateral class of incorrect registration / count of all incorrect registrations)	<b>Motor vehicle</b>	<b>79.5%</b>
	Other goods	18.6%
	All PAAP - no except	0.5%

The high proportion of ‘motor vehicles’ incorrectly registered warrants further attention by AFSA, but is outside of the scope of this report. This practice may be due to poorly established practices, confusion by the registrant, or as an attempt to use the register as a way of registering ownership of an asset.

There may be more mistakes than our analysis was able to pick up. Interviews with AFSA’s National Service Centre employees, PPSR users of varying levels of experience, and PPSR lawyers and advisers, suggest people find the entire registration process challenging. If possible, it may be worthwhile for AFSA to follow-up with a smaller sample of PPSR registrations more closely (contacting all parties and reviewing the underlying financial transaction documents) in order to identify other common errors.

### Around one in ten PPSR registrations may be a ‘duplicate’

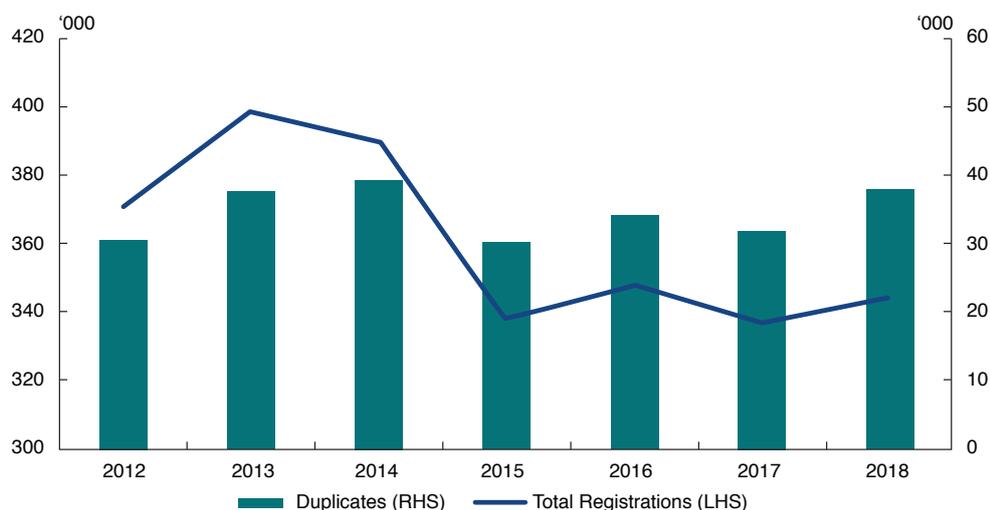
Duplicate registrations are registrations almost identical to another registration within the PPSR. We consider a registration to be duplicate if:

- The secured party creates two or more registrations within a 12 hour window, and
- All major identifiers<sup>9</sup> of the registration are either identical, or all bar one are identical.

There are legitimate reasons for creating two almost identical registrations.<sup>10</sup> We cannot tell from our analysis how many identified duplicate registrations are legitimate and how many are errors.

We found 256,402 duplicate registrations in our data on 2.7 million PPSR registrations made between 2012 and 2019 (around 9.5 per cent). The proportion of duplicates was fairly stable over this period (see Figure 19). The creation of duplicate registrations has kept pace with the broader increase in registrations created on the PPSR. In the calendar year to June 2019, duplicate registrations accounted for as much as 10.7 per cent of PPSR registrations we analysed.

Figure 19 - PPSR Registrations (2.7 million subset), Duplicates by Year



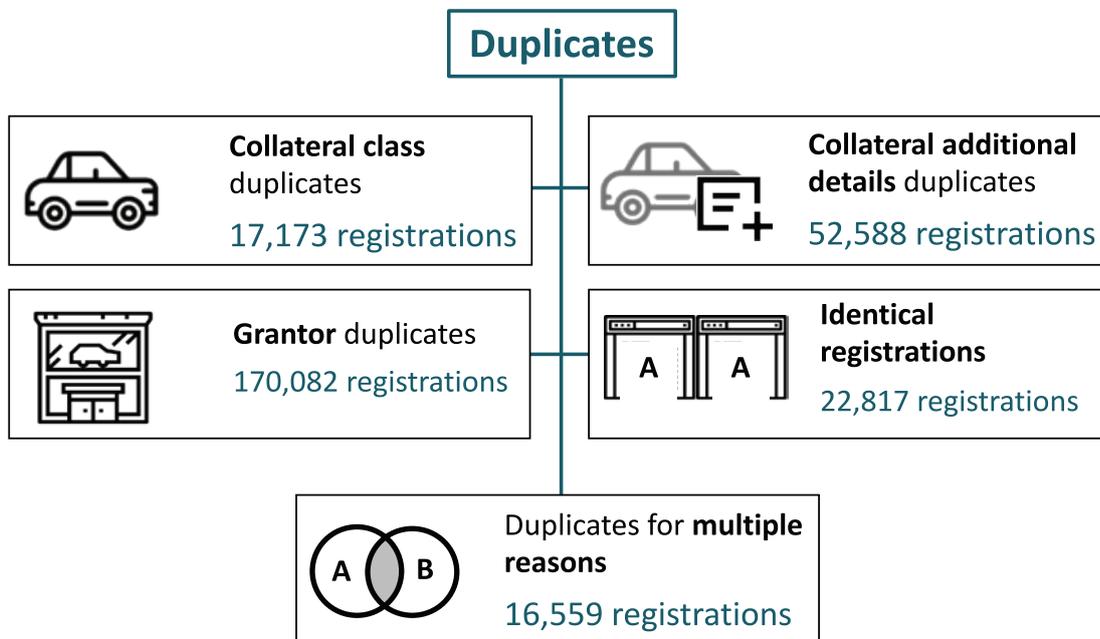
Source: PPSR

9 Secured party group identifier, collateral class, collateral description, serial number, grantor identifier and the giving of notice identifier were the primary identifiers considered in our analysis.

10 An example of a legitimate duplication could arise when registering a boat. Under PPSR collateral class rules, the boat itself would most often be registered as a ‘watercraft’. If this boat has an outboard motor, then this motor would need to be registered under ‘other goods’. These two registrations would appear as ‘duplicates’ in our dataset.

Registrants can create duplicates by varying any one of the fields within the PPSR, however three areas stand out: the collateral class section, the collateral class 'additional details' section, and the grantor section.

Figure 20 - Instances of duplicate registrations



### Grantor-related duplicates vary the 'grantor' information and not the type of identifier used

Businesses registering the same collateral, but varying the 'grantor' information is the largest source of duplicates with 173,302 duplicate registrations.

Variations of 'grantor' information can be as minor as changing the spelling of the grantor's name to providing a completely different ABN, ACN, ARSN or ARBN. Around 72 per cent of 'grantor' duplicates involve changing the grantor information. In the remaining 28 per cent of cases registrants use a different *type* of identifier in their duplicate registration (e.g. listing an ABN in a registration, followed by a duplicate registration listing an ACN, or vice versa).

As shown in Figure 21, duplicate registrations listing an ABN followed by an ACN and vice versa are by far the most common variation when grantor identifiers are changed.

Figure 21 - Grantor identifier duplicate pairs

Grantor identifier 'pairs'	Count
ABN to ACN (and vice versa)	68,965
ACN to ARBN (and vice versa)	1,560
ACN to ARSN (and vice versa)	544
ABN to ARSN (and vice versa)	361
ABN to ARBN (and vice versa)	312
ARBN to ARSN (and vice versa)	11
<b>Total</b>	<b>71,753</b>

The most common collateral classes for grantor-related duplicates are 'other goods' and 'all present and after-acquired property' (with and without exceptions) collateral classes. These three classes are present in more than 75 per cent of grantor-related duplicates.

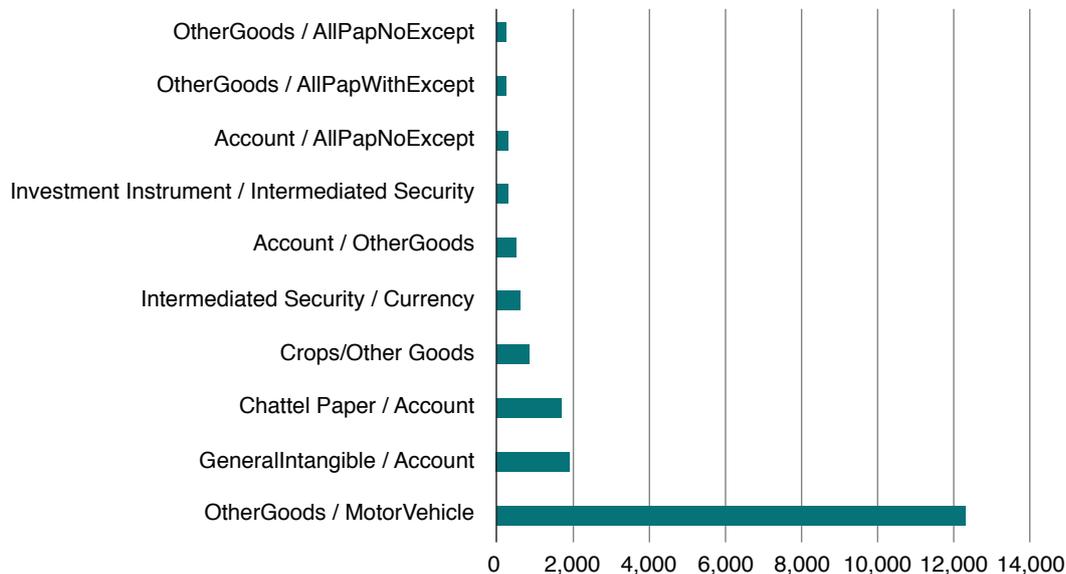
No single industry creates an unusually high number of grantor-related duplicates.

### Collateral class duplicates are highly concentrated around three collateral classes

Businesses creating multiple registrations and only varying the 'collateral class' field account for 17,173 duplicates. Over 70 per cent of these duplicate registrations involve the 'Other Goods' collateral class. Intangible and paper assets also tend to be over represented among these types of duplicates, which could reflect greater difficulty in precisely defining these types of collateral compared to other kinds of tangible assets.

The most frequent pairs appearing in the collateral class duplicates over the last seven years are recreated in Figure 22.

Figure 22 - Collateral class duplicate pairings



While the 'other goods/motor vehicle' combination is by far the most popular pair of duplicate registrations, a large number of these registrations are made by very few PPSR accounts. Ten PPSR accounts are responsible for 9,498 (74 per cent) of 'other goods/motor vehicle' registrations.

The 'auxiliary finance and insurance services' and 'finance' industries are most likely to create a collateral class duplicate. These two industries account for 60.4 per cent of all collateral class duplicates for which data is available. On the grantor side, these types of duplicates do not appear to be made against any particular type of industry.

### Collateral class 'additional details' duplicates are largely driven by 'Purchase money security interest' registrations

The PPSR form asks the registrant to input additional information relating to the collateral class. Specifically, it asks if the following elements are applicable to the asset being registered:

- Purchase money security interest (PMSI)
- The collateral is inventory
- Current assets are subject to control
- The registration is subordinate to another registration
- Proceeds to be claimed.

In all, there are 43,110 instances where one of these boxes is ticked in one registration form but not in another. More specifically, most duplicates occurred because the PMSI box was changed from one registration to the next.

Figure 23 - 'Additional details' duplicates

Duplicate registrations due to:	Count
PMSI	40,486
The collateral is inventory	3,851
Current assets are subject to control	3,992

The top five industries making 'additional items' duplicate registrations are presented in Figure 24 below. Notably, the Auxiliary Finance and Insurance Services industry creates a substantial proportion of duplicates relating to 'the collateral is inventory' and current assets are subject to control' items.

Lastly, there are 22,817 registrations appear identical to other registrations in the PPSR - at least on the basis of data made available to BETA. These duplicates could also be attributed to user input or upload error via an API mechanism.

Figure 24 - Industries making 'additional items' duplicate registrations

PMSI		
Industries	Count of duplicates	% of all 'PMSI' duplicates
Auxiliary Finance and Insurance Services	6,380	27.1%
Finance	6,181	26.2%
Machinery and Equipment Wholesaling	3,456	14.7%
Rental and Hiring Services	1,570	6.7%
Public Order, Safety and Regulatory Services	1,025	4.6%
The collateral is inventory		
Industries	Count of duplicates	% of all 'inventory' duplicates
Auxiliary Finance and Insurance Service	769	42.8%
Machinery and Equipment Wholesaling	229	12.8%
Finance	111	6.2%
Basic Material Wholesaling	101	5.6%
Rental and Hiring Services	98	5.5%

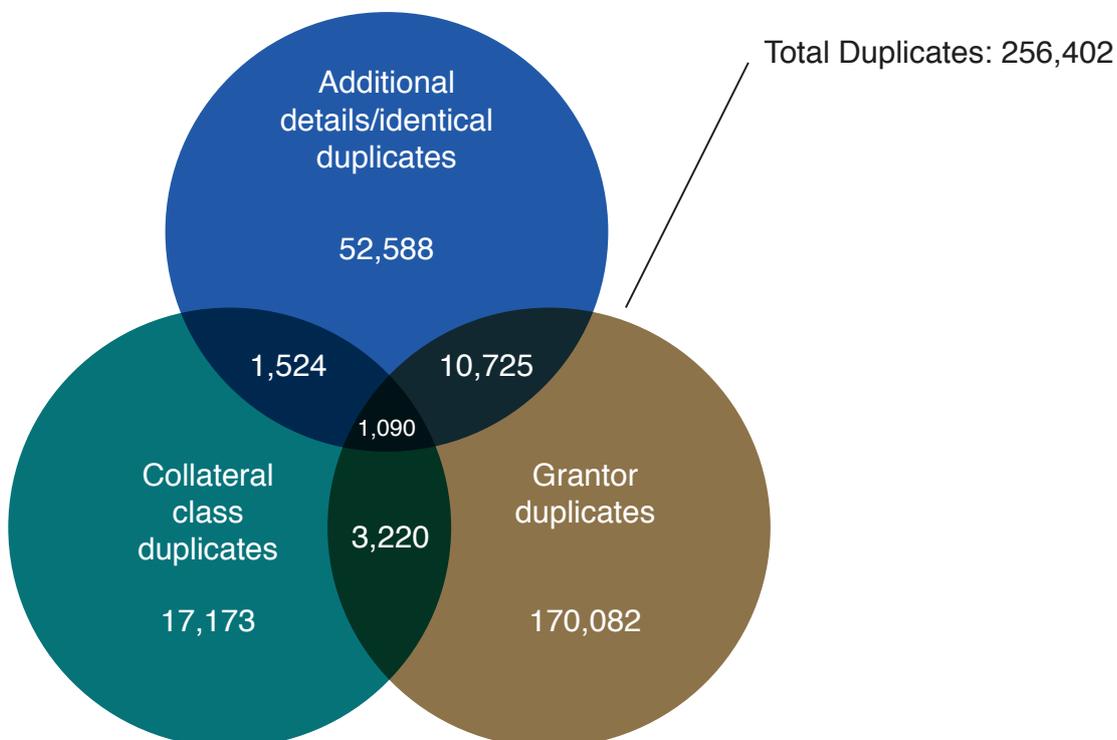
Current assets are subject to control		
Industries	Count of duplicates	% of all 'subject to control' duplicates
Auxiliary Finance and Insurance Service	792	43.6%
Machinery and Equipment Wholesaling	184	10.1%
Finance	132	7.3%
Basic Material Wholesaling	103	5.7%
Rental and Hiring Services	101	5.6%

### Some duplicate registrations can be of multiple 'types'

Some registrations exhibit characteristics flagging them as duplicates multiple times. For example, some registrants may be unsure of the 'correct' grantor identifier and of the most appropriate collateral class, meaning they may create multiple registrations with various combinations of these characteristics.

Figure 25 shows the extent to which duplicates in the PPSR exhibit more than one 'duplicate' characteristic.

Figure 25 - Duplicate characteristics



# Appendix B - PPSR qualitative research findings

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To better understand how people interact with the PPSR, we interviewed AFSA National Service Centre employees, PPSR advisers, legal experts and specialists. We also spoke to self-lodging businesses with varying levels of experience. Lastly, we had an opportunity to listen-in on calls received by AFSA's Adelaide National Service Centre.

Following our interviews, we synthesized the research and found numerous insights, linked together by nine overarching themes. The following insights formed the basis of our recommendations for the suggested behavioural design changes to the register.

## 1. **Businesses use the register as a risk mitigation tool. Newer registrants are less certain (than experienced users) about how the register works and its purpose**

**Current users find the register valuable.** Current users appreciate the register being established by the Australian Government, have a high degree of trust in the register and find it to be a valuable risk mitigation tool. Most self-lodging businesses began using the register after a grantor left them with no recourse to recoup their property/financial interest.

**New and potential users of the PPSR are less certain about the purpose of the register,** or if they need to register at all. A common misconception is the PPSR being used to register general ownership over personal property (as opposed to one's security claim in the property).

**While PPSR advisers see the register as essential and advocate for its use, the benefits of registering are hard to convey to new users.** PPSR advisers see the register as an integral part of their broader contract management process and advocate for the use of register. Advisers note it is a challenge to convey the benefits of completing a registration to their clients. Once clients understand the potential costs of *not* completing the register, they are more inclined to pursue with a registration.

## 2. **Creating a registration is difficult for new users. New and experienced users find the collateral class and grantor sections challenging**

**There is a steep learning curve** associated with creating new registrations. Once the applicant has completed a number of registrations (around four to six), they better understand the process.

**AFSA National Service Centre employees receive calls from registrants with all levels of experience.** New registrants typically require help through the entire registration process: creating an account, creating a secured party group, choosing the collateral class and deciding on the appropriate grantor identifier.

**Collateral classes and grantor sections are hard for everyone to navigate.** Both new and experienced users find the collateral class and grantor sections particularly challenging to complete. More experienced users appreciate the changes to the register and the AFSA website over the years.

### 3. There is no consistent approach to registering

**All interviewed users engage with the PPSR portal to some extent, but there are variations in how they use the portal.** Users may register on the PPSR via the AFSA portal, via their own company's portal or via a third party provider.

- Self-lodging, small to medium sized business use the AFSA portal almost exclusively; and
- PPSR advisers, lawyers and those handling large volumes of registrations use 'third party' portals to create most of their registrations, but still use the AFSA portal to complete ad hoc registrations.

**AFSA National Service Centre employees receive inquiries from all user types during the registration process, but cohorts approach registrations differently.** The approach for completing the registrations differs among cohorts:

- **Less experienced registrants often call the National Service Centre for guidance** or seeking clarity. National Service Centre employees note they receive queries from a variety of occupations and industries. Frequently, callers want to be walked through the entire registration process.
- **More experienced users collect necessary information prior to registration.** For the collateral class section, registrants rely on internal documents outlining the asset's specifications. For the grantor section, these registrants rely on contracts they have in place with the grantor.
- **PPSR advisers and lawyers** also rely on contract documents between the two parties. Often, advisers provide their clients with contract templates to assist them to capture required information needed for the PPSR. A few lawyers specially include PPSR questions as part of their due diligence process (or contract) the counter-party must sign. Advisers recommend their clients "try to encourage the secured party to complete the registration process before the agreement is signed".

**Help comes in different forms, depending on experience level.** During the registration process, all users we spoke to engage with the AFSA National Service Centre and refer to guidance found on the AFSA website. Less experienced registrants make greater use of the 'help' features within the registration form. PPSR advisers and lawyers are more likely to rely on the PPS legislation for information.

### 4. The layout and language of the website and register are not always optimised for the end user

**The user journey is not clear - new users often don't understand the multi-step process of registration.** Creating a PPSR registration is a multi-step process. For a new user, they are first required to make a PPSR account, create a secured party group and then create the actual registration. Users do not understand how these steps fit together. They often get confused about what information they need to provide and how each question relates to their circumstances.

**Some National Service Centre employees believe confusion is one of the reasons registrants rush through the form.** Users are confused by the process and want to get registration 'over and done with'. Some users we spoke to could not readily identify 'the call to action' on different pages.

**Help tools could be more helpful.** Clicking through on the 'help asterisks' moves users away from their registration interface, making navigating back difficult.

**Technical and legalistic language causes significant frustration and confusion.**

The most common frustration expressed by self-lodging businesses, and echoed by advisors, is interpreting the technical and legalistic language used in the register and on the AFSA website. This view was further supported by comments made by AFSA National Service Centre employees, who report frequently fielding questions from callers seeking to clarify information found on the register and website. Even the 'glossary' and 'help' sections are seen as challenging.

## 5. AFSA National Service Centre employees try to help callers as much as possible without providing 'tailored' or 'legal' advice

**It is hard to help without straying into 'legal advice' territory.** National Service Centre employees must only provide 'general guidance' and not 'legal advice'. Even rudimentary questions (such as whether the caller is the grantor or the secured party group) are deemed to be providing 'legal advice'. Other issues include questions around the grantor identification and collateral class selection.

**AFSA National Service Centre employees could gain from additional tools** to support callers. Employees rely on their expertise, the PPS Act and resources available on the AFSA website. National Service Centre employees often transfer information into more user friendly language.

**In the absence of other guidance, the legislation is used as a reference tool.** If AFSA National Service Centre employees are unable to provide an answer (or do not have a resource they can direct the caller to) they would refer them to the legislation.

## 6. People are generally confident they are registering correctly

**Most self-lodging businesses are confident they are completing the registrations correctly.** In the 'grantor' section, most users were confident they chose the right identifier. Small businesses who consistently register a particular category of goods are more confident in completing registrations.

**When probed for details of how they register, many made mistakes.** All registrants correctly used the ACN when the grantor was a company. However, almost all respondents incorrectly used ABN as the preferred identifier for a sole-trader business (in this instance, they should be using person's name and their date of birth).

## 7. Creating duplicate registrations is often a conscious behaviour

**Self-lodging businesses and infrequent PPSR users** state they do not create duplicate registrations and do not see the value in doing so. Some **high frequency registrants** and **specialist advisers** are upfront about when and why they create duplicate registrations. We detected three main reasons for creating duplicate registrations:

- **Due to the collateral class.** Sometimes a single item of collateral will legitimately require multiple registrations in order to ensure it is entirely covered. Other times, duplicate registrations are made because the most appropriate collateral class is unclear.
- **Due to additional collateral class options.** Similar to above, certain assets may require multiple registrations with different ‘additional collateral class’ options applied. PMSI registration was often seen as advantageous, and registrants would create separate registrations with this box checked and unchecked.
- **Due to ambiguity around grantor details.** To manage ambiguity and risk around grantor details, secured parties may create duplicate registrations with a different grantor listed in each. Alternatively they may create only one registration, but list multiple identifiers within this registration. Trust/trustee grantors are seen as particularly challenging to register against. Some lawyers state it can be difficult to gather information on the grantor and encourage their clients to create duplicate registrations.

**AFSA National Service Centre employees consider some registrants create duplicate registrations as a conscious strategy** and suggest it would be challenging to dissuade them from doing so. Some employees report they believe this behaviour provides users with a sense of being ‘covered’. Small business advisers stated “there is no such thing as over-registering”.

## 8. People find it challenging to select the appropriate collateral class

**Selecting the appropriate collateral class is particularly challenging for inexperienced registrants.** Lawyers and advisers often provide guidance to their clients about what may be the most appropriate asset class to select. People are also confused about what needs to be entered into the ‘free text’ box. Information used to complete the collateral class section would typically come from internal documents.

## 9. It is hard to identify grantor information

**Registrants readily use ABR and ASIC look-up tools.** These lookups are the only sources of publicly available information to check the grantor identification and were often used by registrants of all experience levels.

**Experienced users rely on contracts drafted during the negotiation stage.** Documents such as purchase order agreements, credit applications, settlement deeds and bills of sale are used when available. Lawyers often ask their clients to contact grantors directly if there is uncertainty.

**If there is still ambiguity regarding a grantor’s identifier, risk averse users create multiple registrations.**

# Appendix C - Applying behavioural insights to the PPSR

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A number of behavioural concepts are likely to apply when people are engaging with complex government forms and registration processes, such as the PPSR. We know, for instance, people's capacity is limited (or bounded) by constraints such as cognitive ability and time, and this can result in sub-optimal decision making. This appendix unpacks several related concepts - cognitive overload, choice overload and decision fatigue – and outlines how some of this could be addressed through simplification of the PPSR registration process.

## Cognitive overload may cause people to disengage

When presented with an overwhelming amount of information, unclear or competing priorities, or situations where mistakes can incur significant consequences, people tend to experience **cognitive overload** (Kirsh, 2000). Similarly, faced with a challenging form, users may delay, abandon, or incur the cost of asking someone else, such as an accountant or lawyer, to undertake the task (Bergstrom and Schall, 2014). Cognitive overload often manifests itself as a sense of being 'overwhelmed', leading to procrastination, satisficing practices or disengagement from the task.<sup>11</sup>

While PPSR registrants want to register correctly, some may not have the tools (for example, a template) or experience to correctly follow the registration process, find the form and guidance confusing, and are unsure where to get help. As a result, PPSR registrants are likely to **disengage from the registration process, seek professional advice, persevere despite a poor understanding** of requirements or **rely on heuristics or shortcuts** to complete the registrations.

The risk of cognitive overload is particularly relevant for smaller companies and sole traders. These entities are typically less experienced, do not have established processes, and are exposed to many different reporting requirements (Arcos-Holzinger & Biddle, 2016).

Strategies for reducing cognitive overload include simplifying the language, providing guidance, helping registrants prepare, and helping users navigate the registration process.

## Low comprehension contributes to cognitive overload

Incorrect PPSR registrations may stem from the fact the businesses do not have a good comprehension of what is required to complete the registration. Low comprehension adds to cognitive overload (Kirsh, 2000), and in a more practical sense makes it difficult to answer questions correctly.

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<sup>11</sup> **Satisficing** is a combination of providing 'sufficient' information to 'satisfy' minimum requirements. It occurs when a decision maker deems their work 'good enough' (by their standards) rather than striving for accuracy. This practice may result in poor registrations

Based on research into survey designs, questions are easier to understand when simple language is used (Behavioural Insights Team, 2014; Lerner, et al., 2000). As the PPSR registration process currently relies on individuals to interpret questions and terminology based on legal concepts, simplifying the language used in the questions may improve the accuracy of responses for individuals completing the register.

Sometimes, those with low comprehension are unable to recognise their comprehension is low. This is because the skills and knowledge needed for competence are the same skills needed to evaluate competence (Kruger & Dunning, 1999). It is important to bring all PPSR registrants to a minimum level of comprehension to ensure there is sufficient awareness to prompt self-reflection and critique.

### Choice overload may also be leading to incorrect selections

Increasing the number of available options can decrease individuals' motivation to engage and reduce their satisfaction with the final choice (Scheibehenne, et al., 2010). When too many choices are available, people aim to simply end the choice-making ordeal, finding a choice which is merely satisfactory, rather than being optimal (Iyengar and Lepper, 2000; Mick et al, 2004; Reutskaja & Hogarth, 2009).

This is known as '**choice overload**'. Coupled with time constraints, choice overload can:

- discourage people from seeking further information and effectively processing the information they already have (Payne, et al., 1993);
- lead people to avoid making a decision altogether and disengage with the process (Iyengar and Lepper, 2000);
- drive people to reduce the range of alternatives being considered to a more manageable number (two or three options), and potentially makes them hastily disregard the correct option (Tversky, 1972); and
- lead people to consider options one at a time and stop once they deem an option is suitable, but not necessarily the most applicable to them (Ariely & Zakay, 2001; Mick, et al., 2004; Payne, et al., 1993).

Choice overload is caused by the perceived difficulty of the decision (time constraints, potential consequences, presentation complexity), perceived difficulty of the choice set (presence of a dominant option, ability to differentiate between options), the decision maker's preference for uncertainty and the cognitive effort involved in making a decision (Chernev, et al., 2015).

Successful approaches to addressing choice overload include reducing the number of choices to the most relevant ones (Cronqvist & Thaler, 2004; Kling, et al., 2008), and using technology aids (such as 'filters' and 'pre-filled' information) to simplify the decision making process (Lynch & Ariely, 2000).

### Decision fatigue could be a problem

Related to the concepts of choice and cognitive overloads is the notion of **decision fatigue**. It takes cognitive effort to answer difficult questions, particularly when these questions are presented in quick succession. Lab studies have shown this leads to reduced cognitive function, greater tendency to procrastinate, and reduced problem solving quality (Vohs, et al., 2014).

Decision fatigue has important implications for how choices and questions should be structured. People may answer questions differently based on the order in which the questions on a form are asked. Placing difficult questions at the start may deter registrants. Conversely, difficult questions at the end may lead to errors if the registrant is getting bored or tired and wants the process to end quickly.

We recommend user testing to help determine the best structure.

## Simplifying the registration process is key

### Use appropriate language for the audience

PPSR registrants come from all industry sectors and represent all sizes of business. It stands to reason PPSR registrants have varied understanding of the PPSR, finance law and government processes. As such, the language used in the form and the guidance material should be appropriate to registrants who have had little interaction with government processes.

The purpose of using plain language is to transform written information into a language assumed to be known by the proposed audience (Bhatia, 1983). The Australian Government Digital Content Guide recommends writing in a way which would be understood by **a nine year old** (Digital Transformation Agency, 2018). While such a readability target may be impossible (or inappropriate) for PPSR registrants, the goal is to make the language as understandable as possible.

In practice, language is simplified by either changing some words to be more understandable (known as ‘simplified version’) or by paraphrasing the sentence in a way *to deliver the same message* (known as ‘simplified accounts’) (as proposed by Widdowson H. G., 1979).

### Simplified versions vs simplified accounts

To see how these approaches differ, consider researchers who attempted to improve the readability of common legal documents such as a mortgage application, agreement for sale and a lease renewal contract (Mason & Waldron, 1994).

People with little legal experience were presented with three versions of these documents. The first batch used simplified versions of archaic terms (for example, ‘indenture’ was replaced with ‘agreement’ and ‘hereinafter’ was often deleted). The second batch used ‘simplified accounts’ by shortening sentence lengths and adopting active voice. The last batch also included further definitions of legal terms.

Reading rate and comprehension of altered documents improved compared to the original legal contracts, with simplified accounts and further definition contracts performing the best.

A number of government departments already provide guidance on changing cumbersome words into their simplified versions. For example, DTA's Digital Content Guide transforms 70 commonly used bureaucratic phrases into their simpler counterparts.

A good practice is to check the readability of your documents. This is commonly done by checking the 'Flesch reading index' (a feature in MS Word).

## Simplifying language in the application form and guidance material

While simplifying the language may appear trivial at first glance, there are a couple of notable concerns.

- Changing the language without thought for established administrative processes may lead to unintended consequences (Widdowson, 1979). In the context of the PPSR, lawyers and advisers rely on carefully worded information about collateral and security interests in order to make assessments of validity under the PPS Act. Should questions be simplified without consideration for this end use, results could be detrimental.
- It may be impossible to simplify legal texts (Bhatia, 1983). Some researchers are concerned it would be impossible to simplify the text without altering (even slightly) the original intention of the text.
- Some people seek more information than your average registrant. Without full information, these people may not have the confidence to proceed with their registration.

As such, the goal of simplification is to present information **in a way which aligns with current administrative processes and conveys proper legal requirements**, while not discriminating against those who require additional information.

To do this, we recommend:

- **Simplifying questions and letting registrants know what is expected of them.** As noted above, questions in the current form have been designed to satisfy criteria set out in the legislation. As such, it is important the designed questions do not undermine the purpose of the PPSR. We suggest consulting with PPSR experts to redesign and simplify questions to be more easily understood. We also suggest providing more guidance of what is expected in an answer (length, topics covered, etc.).
- **Layering guidance material.** Layering refers to parallel explanations being provided at different levels of complexity, describing the same concept in a variety of ways. Top level description is written in layman's terms, with further levels providing more granular detail.

## Reducing unnecessary information

Reducing unnecessary information and helping people focus on the most important elements of their task is a powerful tool in encouraging behaviour change (Behavioural Insights Team, 2014). People's attention reserves and cognitive resources are limited. By removing unnecessary information, we help people concentrate and follow through with their intentions.

When considering removing unnecessary information, there are three common approaches:

- **Omission** involves deleting less important information from the document. This approach is useful when documents have been around for a while, accumulating content as a result of changing policies and processes.

- **Simplified accounts** is rewriting information to contain only the key information and convey the same underlying message.
- **Abstraction** is drawing out only the essential information and repackaging it in more accessible form. An example of abstraction is a quick start guide often included with the purchase of many electronic devices. This approach saves the reader the effort of searching and ensures key information is seen at the time it is needed.

## Employ visual aids to convey complex information

Visual aids help people grasp concepts, workflows and processes more intuitively. Process maps, infographics and decision trees are commonly used to improve government documents. These techniques could be used to supplement the PPSR guidance material.

## Adopt a clear structure and appearance

Information should be structured to make the most sense to the user (the PPSR registrant). The following approaches could be used to improve the PPSR guidance material:

- **Put a 'call to action' or key messages early, ideally as the first sentence.** Eye-tracking studies suggest people scan the page looking for key words to guide them (Curtell & Guan, 2007; Behavioural Insights Team, 2012). By putting the most important information upfront and being very clear about what is being asked of the reader, the required mental effort is reduced. For this reason it is also useful to highlight select words to draw a reader's attention.
- **Break up the content with subheadings.** To help users navigate and quickly find information they seek, make headings descriptive and relevant to your audience (General Services Administration, 2019). Question-type headings (e.g. *'What are excluded core activities'?*) provide the greatest clarity to the reader regarding what the section is about. Descriptive statement headings (e.g. *'Excluded core activities'*) and topic headings (eg. *'Activities'*) work as signposts and help users navigate the document. A combination all three approaches may be suitable for PPSR guidance.
- **Use lists to highlight a series of steps, requirements, or pieces of information in a clear way.** Lists are helpful because they allow complex information to be presented in a logical and sequential order. It is a good idea to include a 'leading sentence' to explain the list and keep the list to less than two levels.
- **Use typography tools to make the content visually appealing and easy to read.**

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