# **Complexity: Goods and services guide**

## What is complexity?

In terms of procurement, complexity relates to the level of intricacy and scope of issues involved in procuring a good or service. It is measured by considering the internal and external influences on a procurement activity such as risk, total cost of ownership and market dynamics.

The level of complexity will influence your sourcing strategy and how you manage risk and contractual arrangements.

## When to assess complexity

To achieve the best value‑for‑money outcomes, you assess complexity before starting any procurement activity. Rather than assess each procurement activity on a case‑by‑case basis, procurement categories allow you to assess the complexity of groups of similar goods and services. For more information, see the [Guide to identifying procurement categories](https://buyingfor.vic.gov.au/sites/default/files/2018-10/Guide-to-identifying-procurement-categories.docx).

Where you cannot identify a procurement category, or the procurement is critical to the business or high risk to your organisation, you should complete a complexity assessment at the individual procurement activity level.

Complexity assessments at the procurement category level take place on an annual basis. For very ‘stable’ categories, where the complexity level is unlikely to change, you might do less complexity assessments (e.g. once every three years). For example, the complexity level of office furniture is unlikely to change whereas a procurement category in an evolving market place such as information technology is more likely to change.

You might also need an additional complexity assessment if there is a significant change to a procurement category during the year or for any new categories.

A complexity assessment may not be required in certain circumstances, including:

purchases from government departments and public bodies;

purchases from state purchase contracts (SPC) and sole entity purchase contracts (SEPC); or

where legislation or binding agreements exist that require a category to be procured in a specific manner.

Note: You may need a complexity assessment when complying with the rules of use of a SPC or a SEPC

## Complexity assessment tools and templates

Two complexity assessment tools and templates are available on the Procurement Victoria website to help with your complexity assessment:

1. An initial complexity assessment tool and template to work out whether a procurement category is ‘transactional’. A detailed assessment is not required for transactional procurements.
2. A detailed complexity assessment tool and template to assess categories that are unlikely to be transactional.

The complexity assessment process uses a scoring system to determine the complexity quadrant for each procurement category/activity.

Note: You can refine the standards in both complexity assessments to ensure they are interpreted in the most appropriate way for your organisation. For example, defining a low level of interruption to an organisation’s core services is likely to differ significantly between an organisation providing utility services (e.g. electricity) and an organisation delivering social services (e.g. provision of interpreter services). Comparing market analysis knowledge with other organisations can provide reassurance that your procurement categories are appropriately assessed.

## Complexity assessment model

The complexity assessment considers attributes of Goods/services/markets and the value created through procurement to identify an appropriate approach to market.

The matrix in the following table shows the four complexity quadrants (transactional, leveraged, focused, strategic) associated with goods/services/markets and the Value created through procurement.

Complexity assessment matrix

|  |  |  |
| --- | --- | --- |
| **Value created through procurement** | **Standardised  goods and services market**  **Scores between 0 - 30** | **Specialised goods and services market**  **Scores between 30 - 60** |
| **High value**  **Scores between 30 - 60** | Leveraged  (quadrant 2) | Strategic  (quadrant 4) |
| **Low value**  **Scores between 0 - 30** | Transactional  (quadrant 1) | Focused  (quadrant 3) |

The following table outlines the types of procurement activities generally associated with each quadrant.

|  |  |  |
| --- | --- | --- |
|  | Quadrant | Description |
| **1** | Transactional | Low‑value and low‑risk transactions where approved suppliers (e.g. SPCs) are not available.  Note: Where a procurement category is assessed as transactional but involves developing an SPC or SEPC, the assessment of complexity should be elevated to the leverage quadrant and related sourcing preference. |
| **2** | Leveraged | Frequently used goods/services in a competitive marketplace that are procured by an individual organisation or whole of government, where the organisation has the ability to drive value. |
| **3** | Focused | Procured goods/services where a limited number of suppliers are available or where novel commercial arrangements are in place. May include whole of government contracts. |
| **4** | Strategic | Goods/services in a competitive market that are high value, where business criticality is high, and/or where the good/service is of State significance. May include whole‑of‑government contracts. |

To determine which quadrant a procurement category would be assigned to, refer to the following complexity drivers. These drivers are linked to goods/services/markets and value created through procurement.

Complexity assessment considers two elements:

* Goods / markets / services
* Value created through procurement

Goods / markets / services addresses:

* How customised are the requirements?
  + The level of customisation required to the good / service
  + The required level of customisation will consider whether the organisation is buying a ‘defined’ good / service or an outcome, e.g. to achieve a KPI
* Substitutes / suppliers:
  + The role of the good / service in enabling the core services or core operations of the organisation
  + Includes consideration of any security implications and if good / service supports a critical asset
* Criticality to core services
  + The number of substitute goods / services from the category or the number of suppliers available to produce / perform the procurement activity
  + When determining and assessing the number of suppliers, only include suppliers with the capability to fulfil the requirements
  + Ease in replacing a supplier in event of failure
* Supply market dynamics
  + The impact government purchase may have on market e.g. impact on competitive landscape potential to create a monopoly
  + The impact the government purchase may have on local market

Value created through procurement addresses:

* Procurement spend / costs
  + The total cost of ownership of the procurement activity
  + The cost includes initial setup, maintenance, finance, disposal, transition, change management impacts and contingencies associated with price volatility factors
* Impact of demand aggregation
  + Potential financial / non-financial benefits from aggregation of demand (integration across departments and public bodies) or attracting new players to a market
  + Through demand aggregation would the procurement comprise a significant market share to influence the cost of the procurement category?
* Indirect impacts
  + Assess the extent to which the procurement activity would advance the broader objectives of the organisation or Government e.g. reducing environmental impact, supporting leading edge technology development / research

**Application of complexity drivers to the four complexity quadrants checklist** describes the typical characteristics of goods and services in each quadrant. Please note that characteristics may vary across procurement categories and are indicative only.

## Complexity assessment process

The complexity assessment process considers the type of complexity assessment to be applied (unless exceptions apply) and identifying appropriate sourcing strategies based on the complexity assessment results.

The following figure illustrates the complexity assessment process.



The figure is a flow chart. The flow chart has 8 steps, as follows:

|  |  |
| --- | --- |
| **Step** | **Action** |
| 1 | Select the category for assessment. |
| 2 | Is complexity assessment required?  If yes, go to step 3.  If no, complexity assessment not required (documentation of reason(s) required). |
| 3 | Review categories to I.D. likely transactional categories.  If transactional, go to step 6.  If non transactional, go to step 6. |
| 4 | Perform initial complexity assessment. |
| 5 | Is the procurement category assessed as transactional?  If yes, go to step 7.  If no, go to step 6. |
| 6 | Perform detailed complexity assessment. |
| 7 | Identify appropriate sourcing strategies. |
| 8 | Procurement process continues. |

### Step 1: Select the category for assessment spend data

Select your category or spend data, then proceed to Step 2.

### Step 2: Is a complexity assessment required?

Complete a preliminary review of each procurement category to decide whether a complexity assessment is required for the procurement category, e.g. existing SPC. If a complexity assessment is not required, document your reasons for this decision. If it is required, proceed to Step 3.

### Step 3: Review categories to identify likely transactional procurement categories

Consider whether a given procurement category is likely to be assessed as transactional based on the description in Table 2. Proceed to Step 4 and perform the initial complexity assessment (refer to the **Initial complexity assessment tool**) to confirm whether the procurement is transactional or otherwise.

Where the category is not likely to be transactional, proceed to Step 6 and begin the detailed complexity assessment (refer to the **Detailed complexity assessment tool**).

### Step 4: Perform initial complexity assessment

After completing the assessment, proceed to Step 5.

### Step 5: Is the item assessed as transactional?

Using the results of the initial complexity assessment, determine whether the procurement category meets the characteristics of transactional complexity. If yes, proceed to Step 7. If not, proceed to Step 6 of the process and perform the detailed complexity assessment.

Note: Where a procurement category is assessed as transactional but involves developing SPCs and SEPCs, the assessment of complexity will be elevated to the leverage quadrant.

### Step 6: Perform detailed complexity assessment

The detailed complexity assessment is for assessing non‑transactional procurement categories and will link each category to one of the other complexity quadrants (focused, leveraged, strategic).

### Step 7: Identify appropriate sourcing strategies

Each procurement category will be linked to a complexity quadrant, which will allow you to identify sourcing strategy options. This indicative guidance should be used as input into the development of a formal sourcing strategy rather than a replacement.

Accountability, responsibility, inputs, timing and processes for the key steps of this process

### Accountability, responsibility, inputs and timing for the key steps of this process

Accountability, responsibility, inputs, timing and process/tools for key steps in complexity assessment process are shown in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Step 2:  Is a complexity assessment required? | Step 4:  Perform initial complexity assessment | Step 6:  Perform detailed complexity assessment | Step 7:  Identify appropriate sourcing strategy |
| Accountable | Accountable officer | Accountable officer | Accountable officer | Accountable officer |
| Responsible | CPO | Delegated by CPO | Delegated by CPO | Delegated by CPO |
| Inputs | Knowledge of the procurement category, spend data or equivalent | Knowledge of the procurement category and supply‑market conditions | Knowledge of the procurement category and supply‑market conditions | Complexity assessment results |
| Timing | Annually and where a new procurement category is created, or there is a one‑off procurement event during the year | Annually where a procurement category is likely to be transactional, and where a new procurement category is created and likely to be transactional | Annually and where a new procurement category is created, or there is a one‑off procurement event during the year | Annually and where a new procurement category is created, or there is a one‑off procurement event during the year |
| Process/tools | Complexity guidance material | Initial complexity assessment tool | Detailed complexity assessment tool | Complexity guidance material |

## Path to market options

The following table outlines the sourcing strategies that are typically appropriate for each quadrant of complexity:

|  |  |  |
| --- | --- | --- |
|  | Quadrant | Typical sourcing methods in suggested order of preference |
| 1 | Transactional | Quotes, open or selective invitation to supply |
| 2 | Leveraged | State purchase contracts, Sole entity purchase arrangements, panels, head agreements, early supplier engagement, multi‑stage invitation process, open or selective invitations to supply, auctions, e‑systems, brokerage, master vendor, etc. |
| 3 | Focused | Early supplier involvement, multi‑stage invitation process, auctions, e‑systems, direct negotiation, intergovernment delivery arrangements |
| 4 | Strategic | Alliance arrangement, public private partnerships, intergovernment delivery arrangements, procurement specific designed engagement, multi stage engagement etc. |

Note: The above path‑to‑market options are indicative only. A definitive path‑to‑market decision should build on the market analysis and review stage of the procurement process. Where the complexity assessment at the category level is applicable to individual procurement activity, it is possible to move directly to the market approach stage of the procurement process. For further assistance with this process refer to the Guide to [market analysis and review](https://buyingfor.vic.gov.au/market-analysis-and-review-goods-and-services-procurement-guide) and the [Guide to market approach](https://buyingfor.vic.gov.au/market-approach-goods-and-services-policy-and-guides).

## Sourcing methods

**Quotation**: an approach to one or more potential suppliers applying simple standard engagement procedures and systems (e.g. p‑card, purchase order, standard forms, etc.) that reflect the transactional nature of the procurement.

**Open tender**: a one‑stage approach to the open market.

**Selective tender:** a competitive sole source tender open only to suppliers on a register of pre-qualified suppliers

**Multi‑stage tender**: an approach to the market involving one or more stages commencing with notification to the open market of the supply requirement including proceeding with a two stage selective tender or conducting a multi‑stage tender or electronic auction.

**Limited tender**: a direct approach to one or more potential suppliers without notification to the open market.

Other factors to consider include:

* for open tender and multi‑stage tenders an offer is put to the market and the market can determine whether to participate in the supply opportunity;
* for quotations or limited tender the organisation determines the extent of market participation by suppliers. In the case of conducting a limited tender, the market analysis would clearly identify those suppliers able to respond to the requirements of a project of high complexity, high risk and possibly critical to the business. Nonetheless, directly engaging a supplier through a quotation or limited tender (i.e. without undertaking a tender process open to all interested or selectively qualified suppliers), may be inconsistent with Australia’s obligations under free trade agreements (FTAs). Direct procurement from a supplier of choice is only permitted in special circumstances as documented in the Government procurement under International Agreements – procurement guide;
* quotation and a simple open tender approach to the market are relevant to maximising participation by Australia and New Zealand SMEs; and
* the requirement to maintain standard operating systems or a decision to proceed with an unsolicited innovative proposal may justify a limited tender approach to the market.

## Example of aligning category spend with complexity quadrants (value allocation)

The organisation may elect to develop a summary of procurement complexity by value (illustrated in the following table). This summary would be based on the results of the complexity assessment and knowledge of procurement category spend and may assist in the procurement planning process.

|  |  |  |
| --- | --- | --- |
| Complexity  quadrant | Total spend *($ million)* | Percentage of  total spend |
| Transactional | $1 | 3 |
| Leveraged | $20 | 55 |
| Focused | $10 | 28 |
| Strategic | $3 | 8 |
| Not assessed | $2 | 6 |
| Total | **$36** | **100** |

## Using this guide

This guide accompanies the [goods and services supply policies](https://buyingfor.vic.gov.au/goods-services-supply-policies). There are 5 supplies policies:

* Governance policy
* Complexity and capability assessment policy
* Market analysis and review policy
* Market approach policy
* Contract management and disclosure policy

This guide supports the [Complexity and capability assessment policy](https://buyingfor.vic.gov.au/complexity-and-capability-assessment-goods-and-services-policy).

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