



Approval of products

1. Purpose

This document describes the procedure to carry out assessment and approval process for strategic products. The objective of the process is to assure that strategic products used in new constructions and renewals of water and sewerage network infrastructure fulfil Sydney Water's requirements.

2. Scope

This procedure applies to strategic products used in water and wastewater network infrastructure being newly constructed and renewed.

Strategic products are products and materials commonly used in construction of water supply and wastewater systems whose attributes are deemed to be critical to the performance of the systems during their service lives. It is expected that the products have a long service life, typically more than 15 years for electrical equipment, 25 years for mechanical equipment and 50 years for civil structures before replacement is required.

Strategic products are classified into two broad categories, standard and non-standard products. **Standard products** are strategic products that have been commonly used by Sydney Water and have corresponding national/international product specifications. Certain standard products whose continuities of supply are critical for Sydney Water operations and/or delivering significant cost benefits when procured in continuous mode, may be further selected to be procured under long-term supply contract arrangements. Standard products are not individually listed; instead Sydney Water keeps a list of product specifications for standard products.

Non-standard products are products that appear to provide equivalent or better functional performance than standard products, but for which an appropriate national/international product specification is not readily available. Approved non-standard products are individually listed.

Product specification is a document that aims to objectively specify essential features and performance criteria required. It is also used in assessing and approving a product and accrediting a supplier. Product attributes and performance criteria specified must allow conformance to be objectively determined by a 3rd party.

Consequently, the main difference between the processes for standard and non-standard products is the additional needs of:

1. Creating an appropriate Sydney Water product specification that captures Sydney Water's needs from such product to assess the product objectively.
2. Trialling a non-standard product for a period that enables verification of the expected benefits.

Once the specification has been fully developed and accepted as a national/international specification, and the product has been demonstrated to meet Sydney Water's needs, then it can be changed to have a standard status and no longer to be individually listed in Sydney Water approved non-standard product listing.

3. Procedure in detail

3.1 Responsibilities and Authority

The person accountable for this process is the Engineering Manager in Asset Lifecycle. The Engineering Manager is assisted by one or more appointed officers (Officer) who is responsible for the day-to-day activities related to the process. Where required, upper-level managers may be involved for resolving complex assessments.

Technical Forum represents various stakeholders in Sydney Water. The forum is formed to allow consultations on technical matters related to design and products used in network infrastructures. They are required to review and endorse, if appropriate, the recommendations made by the Officer. Only recommendations endorsed by the Technical Forum will be approved by the Manager.

3.2 Overview

There are seven interrelated activities in the approval process for strategic products.

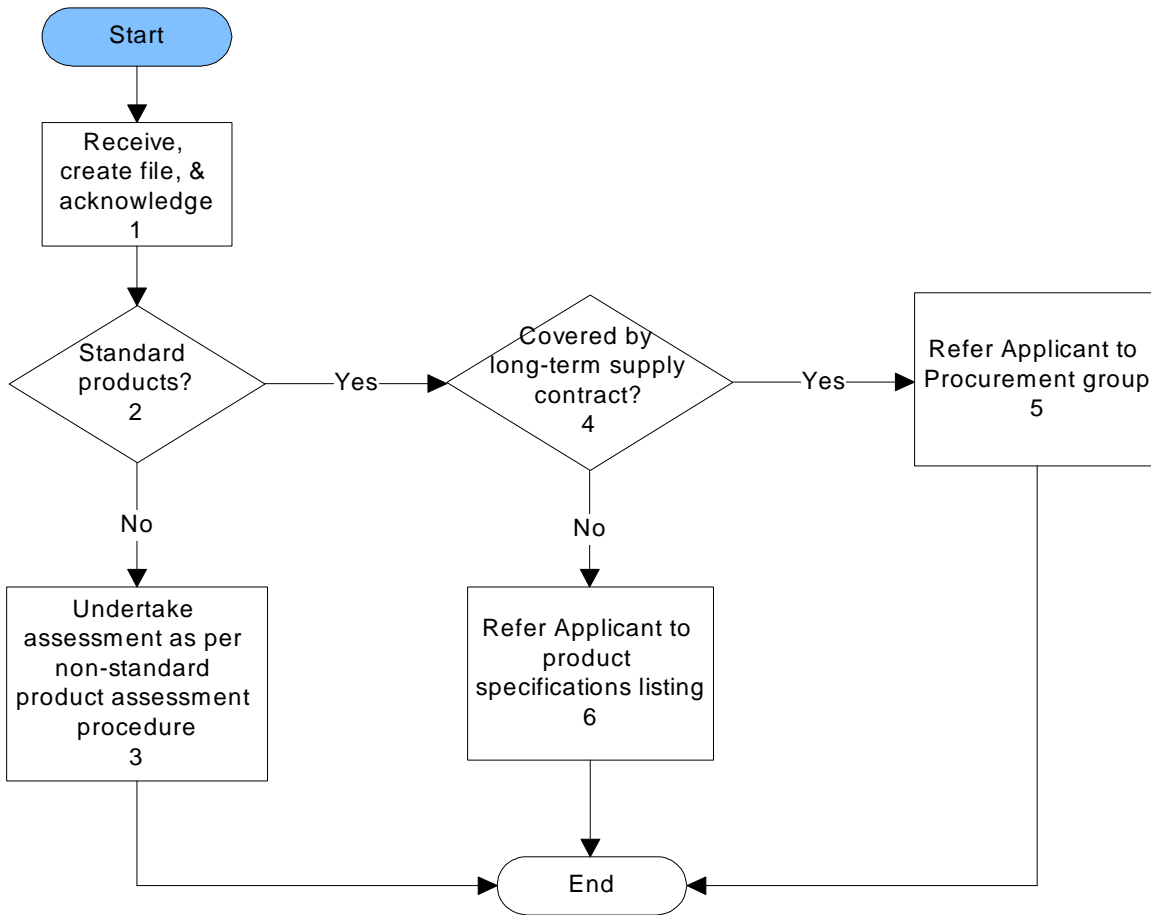
1. Approving strategic products
2. Assessing non-standard products
3. Review of product approval status
4. Adopting non-standard products as standard products
5. Adopting and developing product specifications
6. Review of product specifications
7. Processing appeals

The key deliverables of this process are the publications of approved strategic products list and strategic product specifications.

4. Detailed Procedure

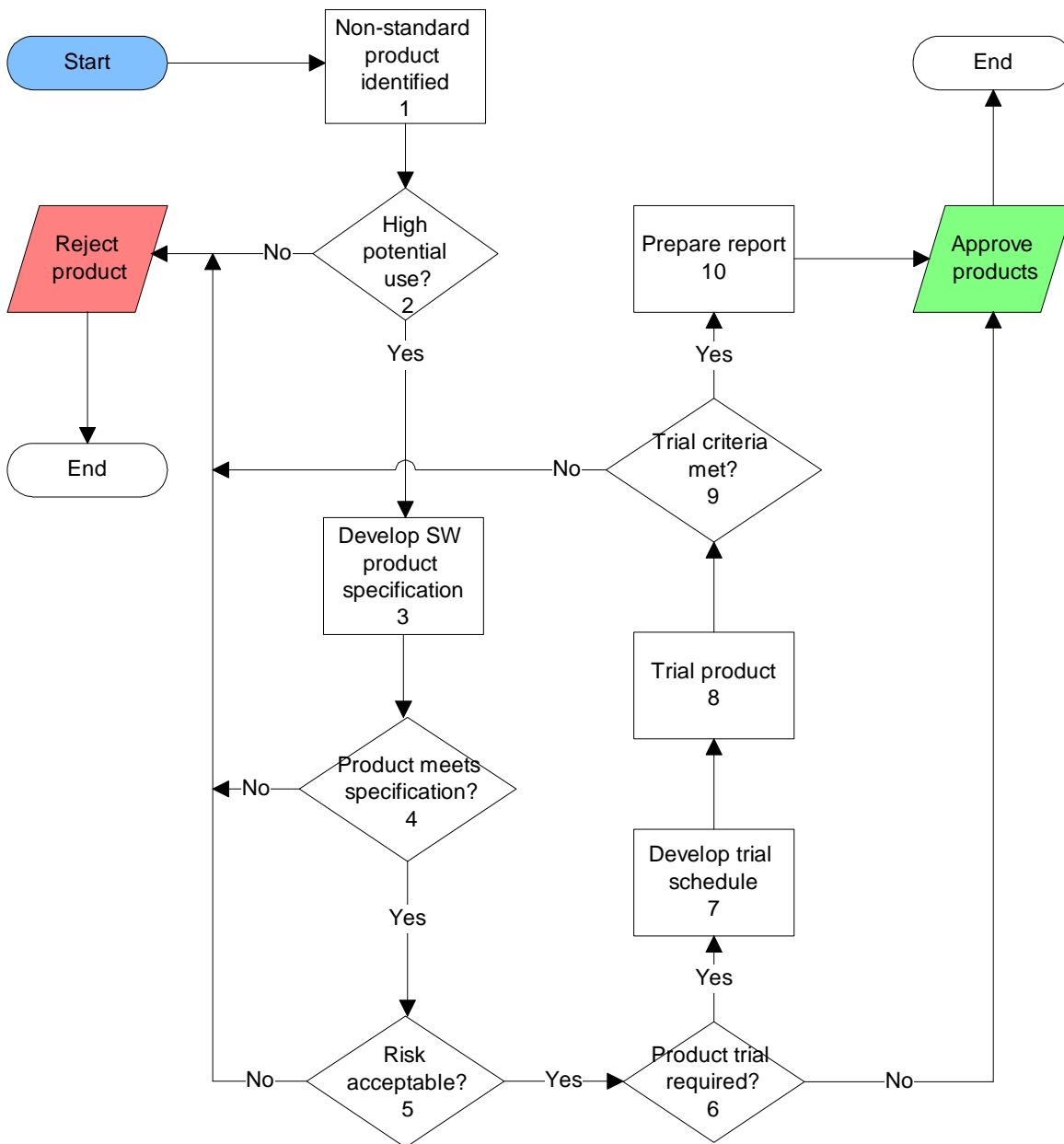
The following sections detail each activity using a general flowchart followed by written descriptions.

4.1 Approving Strategic Products



Task details	Responsibility	References
1. Receive application. Send acknowledge in writing. As necessary, request clarification or additional information or advise alternative action to be taken if this process is not applicable to the product.	Officer	
2. Determine whether the product is standard or non-standard. If there is no existing specification acceptable to Sydney Water, the product is classified as non-standard product. Manage commercial-in-confidence information in a secure manner	Officer	
3. The product should be assessed in accordance with the non-standard product assessment process described in Section 4.2.	Officer	
4. If the product is a standard one. Determine whether it is covered by long-term supply contract arrangement.	Officer	
5. If the product is covered by long-term supply contract arrangement, then refer the Applicant to the Procurement Group.	Officer	
6. If the product is not covered, refer the Applicant to our product specifications listing. Inform the Applicant of the terms of supplying products to Sydney Water.	Officer	

4.2 Assessing Non-Standard Products

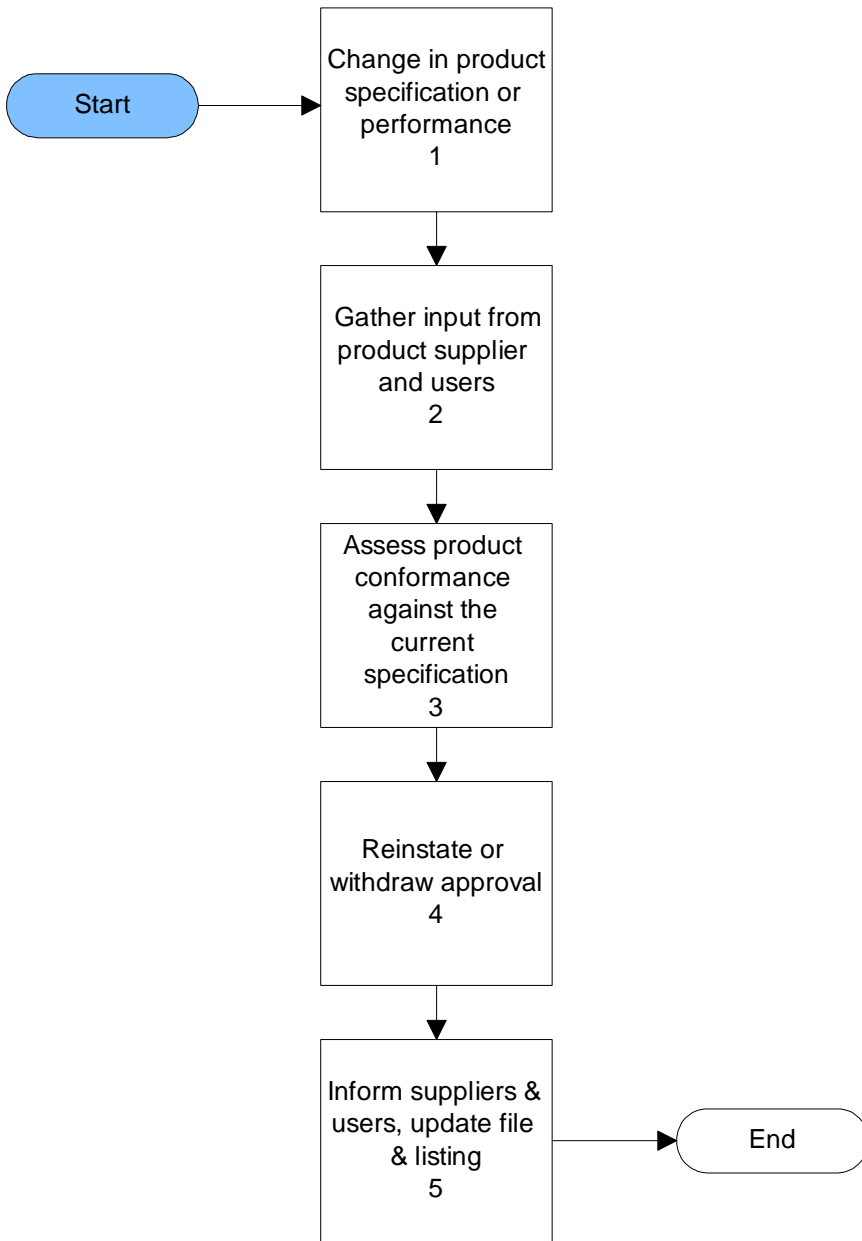


Task details	Responsibility	References
1. Receive application. Send acknowledge in writing. As necessary, request clarification or additional information or advise alternative action to be taken if this process is not applicable to the product.	Officer	
2. Identify the level of (potential) need in Sydney Water. Consult with relevant stakeholders. Identify the sponsor i.e. stakeholder who will benefit the most from the use of the product. If there is low level of need and/or no sponsor, then the product should not be further assessed. Inform the Applicant of the decision. Keep records all communications and findings. Manage commercial-in-confidence information in a secure manner	Officer	
3. Develop Sydney Water product specification for the non-standard product being assessed. It must document Sydney	Officer	

Task details	Responsibility	References
<p>Water requirements from the product or type of the product. The specification may refer/amend to other specifications.</p> <p>If required, gather input from internal and/or external subject matter experts to assist in the formulation of the specification.</p> <p>Where possible, the requirements should be quantitative. This would assist in undertaking an objective assessment. At the end of the product assessment, the draft specification is to be reviewed and finalised.</p>		
<p>4. Assess the product against the draft product specification. If the product does not meet SW requirements, then the product should not be further assessed.</p> <p>Inform the Applicant of the decision. Keep records all communications and findings. Manage commercial-in-confidence information in a secure manner.</p>	Officer	
<p>5. Carry out risk assessment to identify any possible negative consequences related to the use of the product and identify methods to manage those risks. If the product has unacceptable risk(s), then the product should not be further assessed.</p> <p>Inform the Applicant of the decision. Keep records all communications and findings. Manage commercial-in-confidence information in a secure manner.</p>	Officer	
<p>6. Assess whether product trial is required. Field trial is required to demonstrate that the proposed product can be safely installed in-situ and achieve the claimed parameters and quality.</p> <p>If the product has been used successfully in Australia and comprehensively assessed by an independent organisation, such as WSAA, with a positive outcome, then the product should be directly approved. Otherwise it should be trialled first in the field.</p> <p>If the product does not require trial, then the product can be approved for use directly.</p>	Officer	
<p>7. Develop product trial schedule that includes pass (success) criteria and trial duration period. Testing and monitoring will be required to verify the installed product properties and performance. The trial may be complemented by accelerated laboratory/simulated testing.</p> <p>The structures where the trial is conducted shall have identical or similar physical conditions and scale to where the product is intended or designed to be installed.</p>	Officer	
<p>8. Trial the product in accordance with the trial schedule.</p> <p>A work method statement and risk assessment shall be prepared. The trial shall be undertaken by trained personnel and witnessed by Sydney Water personnel.</p> <p>The Supplier/Contractor typically bears the risks and costs associated with the field trial and testing.</p>	Officer	
<p>9. Assess the trial outcomes with the trial schedule. If the product fails to meet the pass criteria, then the product should be rejected.</p> <p>Inform the Applicant of the decision. Keep records all communications and findings. Manage commercial-in-confidence information in a secure manner.</p>	Officer	

Task details	Responsibility	References
<p>If the decision has an adverse effect to the supplier, inform them that they have the right to appeal the decision, provided there are grounds for appeal.</p>		
<p>10. Prior to approving the product for use, document trial outcomes in a written report. The draft product specification and risk assessment should be reviewed and finalised considering the trial outcomes.</p>	Officer	

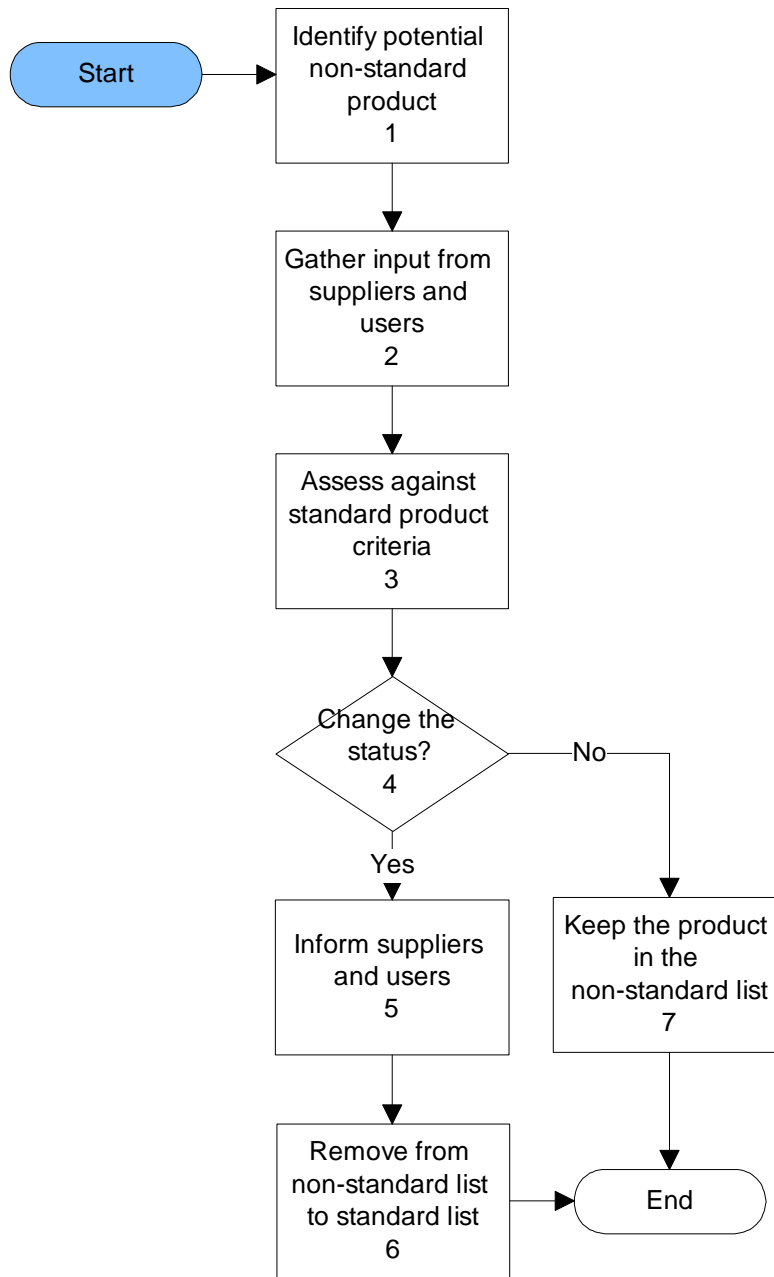
4.3 Review of product approval status



Task details	Responsibility	References
<p>1. A review is triggered when a notice/report describing change(s) of an approved product has been received or when the relevant product specification has changed.</p>	Officer	

Task details	Responsibility	References
<p>2. Receive non-conformance report or there is a change in relevant product specification. Retrieve the original file set up during and file the report/notice.</p>	Officer	
<p>3. Investigate the issue raised in the report/notice. Assess whether the product still conforms to our specifications. Consider information presented by the supplier. If required, engage internal and/or external subject matter experts to assist in the review.</p>	Officer	
<p>4. As appropriate, reinstate or withdraw the product approval. Withdrawal of an existing approval shall be made for reasons such as health & safety concerns, poor performance of a product, systemic non-conformances to specification, no longer suitable for Sydney Water applications or significant change to the product specification. Document reasons for the withdrawal and as appropriate, brief upper management. Take care to consider commercial, operational, legal ramifications from perspectives of Sydney Water and others.</p>	Officer	
<p>5. Inform applicant on the assessment outcome. If the product status changes, update the product listing. Record any new restrictions in the listing. If the decision has an adverse effect to the supplier, inform them that they have the right to appeal the decision, provided there are grounds for appeal.</p>	Officer	

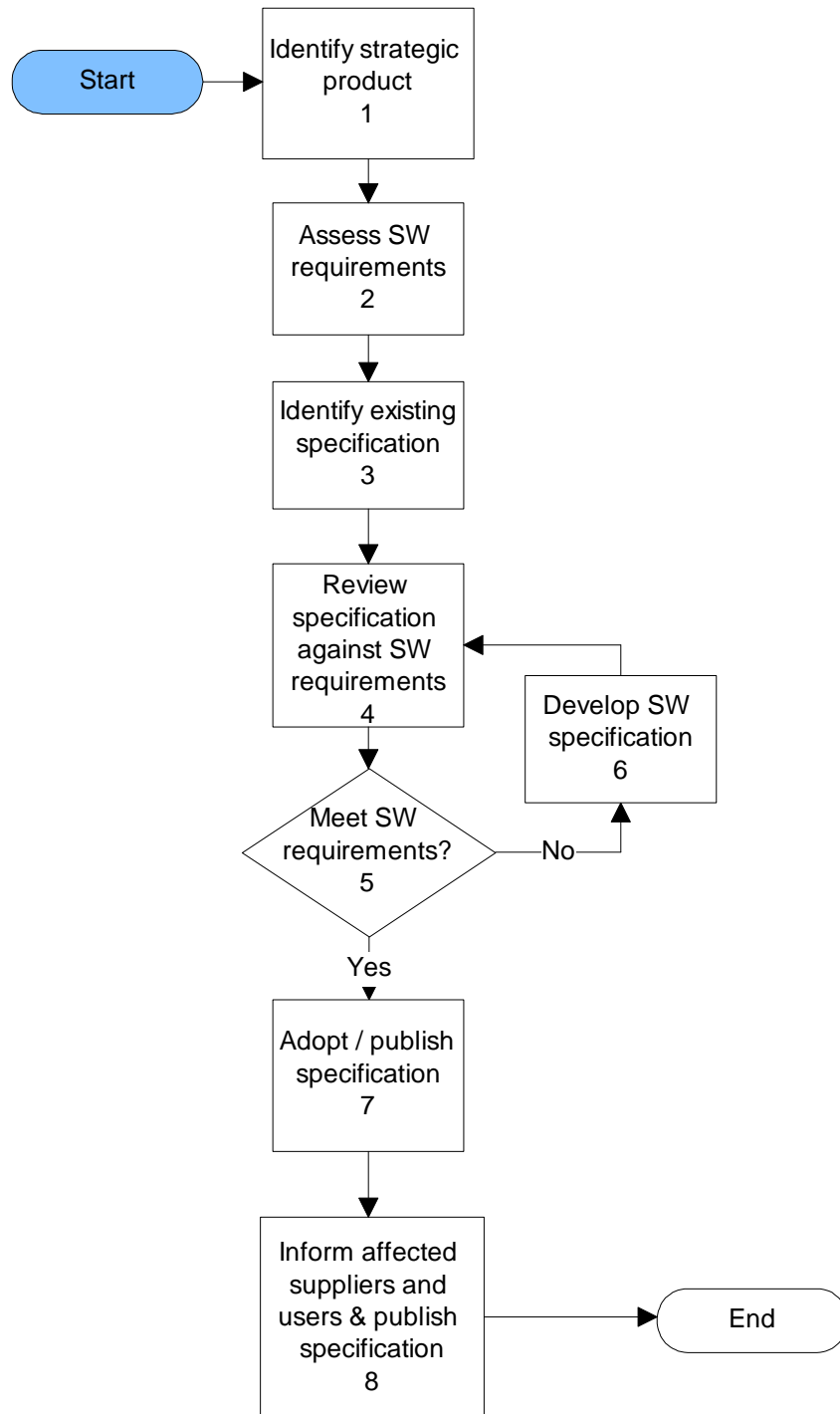
4.4 Adopting Non-Standard Products as Standard Products



Task details	Responsibility	References
1. Identify innovative product that: <ul style="list-style-type: none"> • has been trialled for more than 2 years • is now covered by national/international product specifications 	Officer	
2. Gather input from suppliers and users. Consider new information including trial findings. If required, engage internal and/or external subject matter experts to assist in the review.	Officer	
3. Assess whether the national/international standard may replace the relevant Sydney Water product specification. Assess whether the product still conforms to the specification.	Officer	
4. Adopt the product as a standard product where the following criteria have been achieved:	Officer	

Task details	Responsibility	References
<ul style="list-style-type: none"> • the non-standard product still falls into the definition of strategic products (refer to Section Error! Reference source not found.) • have been demonstrated through trial (or other appropriate testing) that it meets Sydney Water needs and the product specification • the national/international specification reflects Sydney Water need <p>Document the justification for adoption.</p> <p>Take care to consider commercial, operational, legal ramifications from perspectives of Sydney Water and others.</p> <p>Manage / store commercial-in-confidence information in a secure manner.</p>		
<p>5. Inform the product supplier and users on the potential outcome.</p> <p>If the decision has an adverse effect to the product suppliers and users, inform them that they have the right to appeal the decision, provided there are grounds for appeal.</p>	Officer	
<p>6. As appropriate, remove the product from the non-standard product list and enlist the national/international product specification in the standard product list. Record any restrictions in the listing.</p>	Officer	
<p>7. As appropriate, keep the product in the non-standard product list.</p>	Officer	

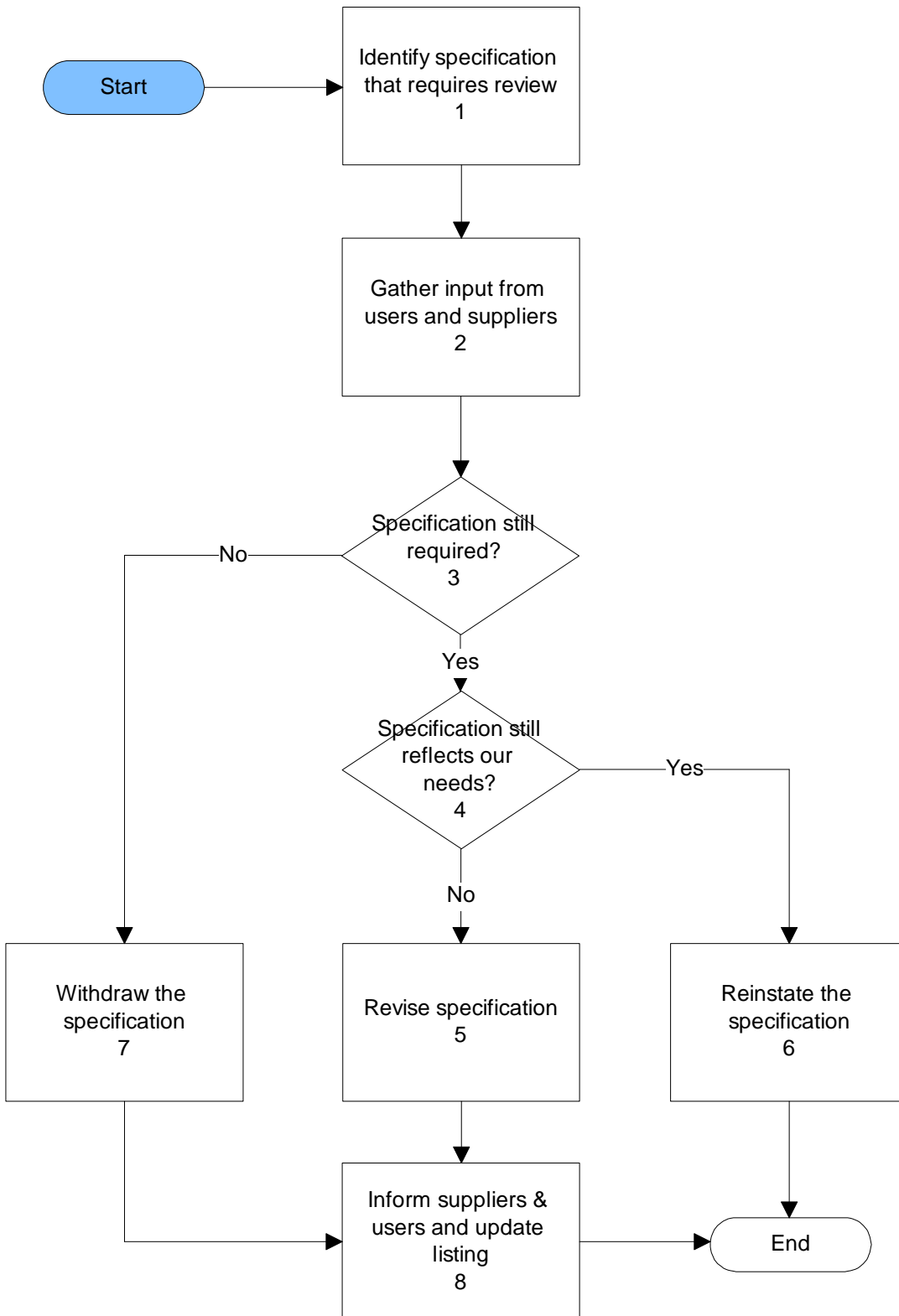
4.5 Adopting and Developing Product Specifications



Task details	Responsibility	References
1. Identify strategic product. Refer to definition in the Section 2.	Officer	
2. Assess Sydney Water requirements for the product by consult with relevant stakeholders. Where possible, the requirements should be quantitative. This would assist in undertaking an objective assessment.	Officer	
3. Identify existing specification(s) issued by the following organisations that covers the product or type of product:	Officer	

Task details	Responsibility	References
<ol style="list-style-type: none"> 1. Water Services Association of Australia (WSAA) standard 2. Standards Australia (AS) 3. International Standard Organisation (ISO) 4. Other country standard (e.g. BS, EN, DIN) 		
<ol style="list-style-type: none"> 4. Review the specification(s) against the Sydney Water requirements. Identify gaps where Sydney Water requirements are not met by existing specifications. 	Officer	
<ol style="list-style-type: none"> 5. If the existing specification fulfils Sydney Water requirements, then recommend for adoption. If there is no existing specification suitable for adoption, a Sydney Water product specification must be prepared. 	Officer	
<ol style="list-style-type: none"> 6. Develop a specification that contains specific requirements of Sydney Water. It may refer to parts of existing standard(s) and contain amendments/addendums that reflect specific Sydney Water requirements (e.g. pressure class, marking, dimension). Relevant stakeholders must be consulted during this development. 	Officer	
<ol style="list-style-type: none"> 7. Depending on the previous actions, adopt existing specification or finalise Sydney Water specification. The adoption and development of a product specification should be consulted with stakeholders in Sydney Water, such as through the Technical Forum. 	Officer	
<ol style="list-style-type: none"> 8. Publication of adoption of existing specification or development of SW specifications Inform suppliers and interested parties of new, revised, withdrawn product specifications. Respond verbally and in writing to a manufacturer or its agent's request for detailed information re Sydney Water product approval / supplier accreditation Update the Sydney Water website when new or revised product specifications have been developed 	Officer	

4.6 Review of product specification

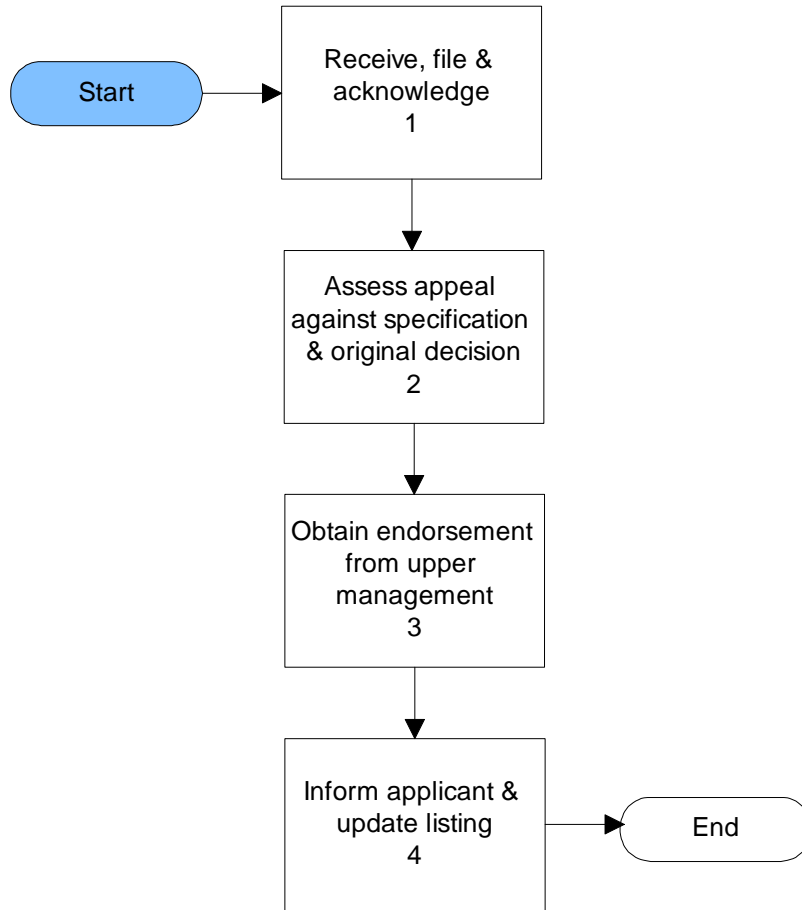


Task details	Responsibility	References
1. Identify product specification that requires review. · Sydney Water product specifications for non-standard products and the list of product specifications should be reviewed at least once every five years. Products that are	Officer	

Task details	Responsibility	References
known to change more rapidly should be reviewed more frequently.		
2. Gather input from suppliers and users. Consider new information available. Manage / store commercial-in-confidence information in a secure manner	Officer	
3. Assess whether the product specification is still required, considering the input from users and suppliers. If not, then it should be withdrawn. Reasons for withdrawal may include availability of a national/international specification that can replace the Sydney Water specification, or the product is no longer used by Sydney Water.	Officer	
4. Assess whether the product specification is still reflecting our needs, considering input from users and suppliers. If the specification still reflects our needs, then reinstate it. If not, it should be revised.	Officer	
5. Revise the specification considering the input from users and suppliers. If required, obtain advice from internal and/or external subject matter experts to assist in the revision. Review the existing product approval relative to the revised product specification. Recommend which approved products require new assessment.	Officer	
6. Reinstate the specification.	Officer	
7. As appropriate, withdraw Sydney Water product specification that is no longer in need. Document reasons for the withdrawal and as appropriate, brief management. Take care to consider commercial, operational, legal ramifications from perspectives of Sydney Water and others. Relevant products approved based on the withdrawn product specifications will also be delisted.	Officer	
8. Inform current accredited supplier on the assessment outcome. If the product status changes, update the product listing. Record any restrictions in the listing. If the decision has an adverse effect to the supplier, inform them that they have the right to appeal the decision, provided there are grounds for appeal.	Officer	

4.7 Processing Appeals

If a stakeholder (external and/internal) is not satisfied with an outcome/decision, they are entitled for an appeal. The appeal process includes review by upper management.



Task details	Responsibility	References
1. Receive appeal. Store information in the relevant file set up for the original application, if possible. Send acknowledge in writing.	Officer	
2. Review the appeal against the original assessment. Consider any new information. Confirm that the process has been strictly followed. Consider new information presented by applicant. When appropriate,	Officer	
3. Discuss the matter with upper management and obtain endorsement from them on the reinstatement or reversal of the original decision.	Officer	
4. Inform applicant on the assessment outcome. If the product status changes, update the product listing.	Officer	

5. Context

5.1 Definitions

Term	Definition	Source
Strategic Product	Water and wastewater network infrastructure products and materials whose attributes are deemed to be critical to the performance of the networks during their service lives.	Sydney Water
Standard Product	A strategic product that is commonly used in Sydney Water and has national/international product specifications.	Sydney Water
Non-Standard Product	A strategic product that appears to provide equivalent or better performance than standard products, but for which an appropriate national/international product specification is not available.	Sydney Water
Product Specification	A standard set of essential requirements for a product to meet.	Sydney Water

5.2 Roles and responsibilities

Position	Responsibility
Engineering Manager	Own and manage this procedure, appoint Officer. Approve or reject, product specifications and products.
Officer	Implement procedure, engage stakeholders, submit stakeholder endorsed recommendation to Engineering Manager.
Technical Forum (Sydney Water stakeholder representatives)	Contribute operations & maintenance, installation or other product relevant expertise to products and specifications that are part of this procedure. Consider/endorse recommendations of Officer.

5.3 Training and competencies

Position	Training or competency
Engineering Manager	Managerial and ability to understand standards and specifications.
Officer	Knowledge and understanding of procedure, requirements of standards, competency to identify products and attributes which are non-standard and prepare specifications. Ability to identify appropriate stakeholders.
Technical Forum (Sydney Water Stakeholder representatives)	Competency in areas related to products and specifications e.g. operations & maintenance, installation, and ability to consult experts in those areas.

6. Ownership

Role	Title
Group	Asset Lifecycle
Owner	Norbert Schaeper, Engineering Manager
Author	Henry Pisanko, Senior Civil Engineer

Change history

Version	Issue Date	Approved by	Brief description of change and consultation
3	June 2023	Norbert Schaeper, Engineering Manager	Procedure unchanged. Updated to current procedure template with minor edits for current business structure.
2	July 2012	Peter Gillman	Significant changes due to process review following E ² S management meeting on 19/04/12 and subsequent discussion paper approved 16/05/12.
1	May 2011	Jansen Chan	New document.