

Summary This Policy provides direction to NSW Health Organisations about how to manage software assets used across NSW Health information systems throughout their life cycle.

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Distributed to Ministry of Health, Public Health System, NSW Ambulance Service Audience All Staff of NSW Health



POLICY STATEMENT

NSW Health organisations must effectively manage software assets and ensure that software asset related decisions represent a balance of cost, risk and performance, and are based on the software asset's current and future contribution to service provision and use a whole-of-lifecycle approach.

Like all assets, software must be managed to ensure it supports the delivery of organisational objectives across its entire lifecycle.

SUMMARY OF POLICY REQUIREMENTS

All NSW Health staff who are involved in the purchase, management and deployment of computer software are responsible for the effective management of software assets in line with this Policy. All asset management decisions must be informed by each NSW Health organisations' Asset Management Framework.

Software asset management involves five key lifecycle steps. These steps and the responsibilities of eHealth NSW and NSW Health organisations are outlined below.

1. Request for new software

NSW Health staff will submit software requests to their local NSW Health organisation ICT team, or to eHealth NSW through Search and Request Anything online for evaluation.

2. Software evaluation, approval and procurement

NSW Health organisations are responsible for the evaluation and approval of software within their environment. Software is only to be approved when it has successfully passed the software evaluation process.

If the software is not approved, the NSW Health organisation evaluator or eHealth NSW will inform the requesting staff member that the software did not meet approval standards.

Software that has successfully passed the software evaluation process will be added to the approved software list. NSW Health organisations are each responsible for their local approved software list. Only approved software can be deployed within NSW Health.

Each software purchase must follow a documented purchase process and incorporate the cost centre manager's approval to deploy the software. Only software on the NSW Health organisations' local approved software list is to be purchased.

NSW Health organisations are required to provide software procurement information to eHealth NSW so that purchase information can be recorded in the software asset register. eHealth NSW is responsible for procuring centrally managed software.



NSW Health POLICY DIRECTIVE

3. Software deployment and usage

Software of any type must not be installed unless it is approved and correctly licenced. NSW Health organisations are responsible for deploying software purchased and managed locally.

4. Software management and reporting

NSW Health organisations are responsible for managing software purchased locally and deployed within their organisations. eHealth NSW is responsible for the support and maintenance agreements for software purchased centrally, deployed or available to be deployed across multiple NSW Health organisations.

To effectively manage software NSW Health organisations must:

- legally comply with the vendor's Terms and Conditions which govern the use and deployment of their software
- conduct regular software reviews to reconcile software currently deployed against the software asset register.
- prepare reports and attestation statements when requested by vendors and the NSW Ministry of Health.

5. Software renewal or disposal

When an asset reaches the end of its useful life or is not able to support the service delivery requirements, the functionality, performance, and cost of the asset is reviewed.

NSW Health organisations are responsible for retiring and removing software purchased locally and deployed within their organisations. If eHealth NSW installed the software and it was purchased centrally, eHealth NSW is responsible for retiring and removing the software.

REVISION HISTORY

Version	Approved By	Amendment Notes
PD2022_027 July-2022	A/Secretary	New policy directive



Software Asset Management

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1. BACKGROUND

This Policy has been written to provide direction to NSW Health organisations on how to manage software assets. Software and ICT have been identified as key asset classes within the NSW Health Asset Management Framework (AMF).

Like all assets, software must be managed to ensure it supports the delivery of organisational objectives across its entire lifecycle. NSW Health recognises that adopting a robust whole of lifecycle approach is fundamental to achieving best use of assets. A well-designed whole of lifecycle approach has the potential to extend the life of NSW Health assets and reduce physical work scope and cost.

The NSW Government Asset Management Policy (TPP19-07) policy mandates NSW Government agencies adopt a whole-of-government and whole-of-asset-lifecycle approach to their assets.

This procedure describes the desired policy outcomes of effective asset management for software used by NSW Health organisations to ensure:

- It is informed by their Asset Management Framework (AMF).
- The appropriate number of licences for each software application in use have been purchased, and the vendors' software licence terms and conditions are monitored and managed.
- The risks associated with the procurement, implementation, use and ongoing management of software are identified and mitigated.
- Software is not purchased without authority and approval.
- The lifecycle of software assets is effectively managed. This includes practices such as:
 - o Identifying and validating the software need.
 - Adequately evaluating software before any acquisition.
 - Reviewing software and licences, where appropriate, to ensure that NSW Health is not paying for software or support and maintenance agreements that it does not need.
 - Only deploying software that has been approved and correctly licenced.
- Effective physical and electronic controls are in place for the security of software media.
- Processes are adequately documented, communicated and understood by staff performing those activities.

All NSW Health organisations must use the state-wide ICT infrastructure services, standards and platforms listed in the NSW Health Policy Directive *NSW Health Foundation Information and Communication Technology (ICT) Services and Platforms Policy* (PD2021_043). In addition, NSW Health organisations must not procure alternative services or platforms if a service or platform has been identified as a foundational service and substantially performs the same function.



The NSW Health Policy Directive *NSW Health Procurement* (<u>PD2022_020</u>) requires NSW Health organisations to refer ICT-related goods and services procurements valued at more than \$250,000 to eHealth NSW. All activities referenced in this document must be completed in alignment with the NSW Health Policy Directive *Electronic Information Security* (<u>PD2020_046</u>).

1.1. About this document

All NSW Health organisations must ensure decision making related to software represents a balance of cost, risk and performance, and are based on the current and future contribution of the software asset to service provision and use a whole-of-lifecycle approach.

NSW Health is committed to the responsible purchase, deployment, and management of computer software (Software Assets) used across all information systems.

Cloud-based software or services, unless explicitly stated to the contrary, are to be treated in the same manner as software purchased and deployed to devices owned and managed by NSW Health.

Software developed and owned by NSW Health is not subject to this Policy.

1.2. Key definitions

Approved software list	The approved software list is a register of software applications approved for deployment throughout NSW Health. Software is typically approved after an evaluation process to determine its overall suitability for the organisation.
	NSW Health organisations will start with a local approved software list. The process for managing the state-wide software approved list will be determined as part of the NSW Health Software Community of Interest.
Application software (excluding operating system software)	Application Software is written to perform certain tasks or functions. Examples of application software include office suites, gaming applications, database systems and educational software. Application software can be a single program or a collection of small programs. This type of software is what consumers most typically think of as "software."
Asset Management Framework	The Asset Management Framework is the set of interrelated or interacting policies, objectives and processes required to achieve a NSW Health organisation's objectives through the management of existing and planned assets. The term and definition of 'Management Framework' is interchangeable with that of 'Management System' as used in the International Standard for Asset Management (ISO 55001).



Software Asset Management

Asset	All non-financial assets recognised by the organisation, including, but not limited to, ICT systems and digital services with a value greater than \$10,000.
Cloud (Cloud Computing, Cloud Services)	Cloud services are technology computing services, such as applications, storage, and server compute instances, which are accessed from third-parties via the web services, are delivered and used over the Internet, and are paid for on an as-needs or pay-per-use basis.
Definitive Media Library	A definitive media library is a secure repository for storing the physical media (such as CDs, DVDs, written material) and electronic information (such as licence keys and actual software executables) provided by a software application purchase vendor. Software purchased centrally that may be used throughout NSW Health are to be stored within a definitive media library.
Device	A device is anything that software can be installed on. This includes (but is not limited to) desktops, laptops, tablets, mobile phones, servers, storage systems, network equipment (including Wi-Fi routers) and access points.
Local Media Library	A local media library is a localised version of a definitive media library (refer to the definition of a definitive media library for more information). Typically, the definitive media library acts as the master with the local media library managing the localised requirements for storing and protecting physical and electronic software media. Software purchased by a specific NSW Health organisation is to be stored within a local media library.
Software Asset Register	The software asset register holds information on each software asset, such as its purchase date, licence details, deployment status, support status and investment lifecycle.
Vendor	A vendor is an organisation that develops and sells application software, either directly to consumers or indirectly via a partner (reseller) organisation.

1.3. Legal and legislative framework

While computer software is considered an intangible asset, the ownership of the software remains with the individual that holds the copyright to the software. Purchased software must be used and managed per the terms and conditions specified by the software owner. Any valid contract is legally actionable if any party violates the terms of the agreement.

All NSW Health personnel and organisations are to be aware of their legal obligations. The breach of those obligations may result in prosecution and the imposition of a penalty or disciplinary actions.





2. ROLES AND RESPONSIBILITIES

NSW Health operates a federated model, where the NSW Health Secretary has overall responsibility for the management and oversight of NSW Health, while NSW Health organisations have accountability for the assets that support the delivery of their local health services.

The management of software assets deployed throughout NSW Health is shared between all NSW Health organisations and eHealth NSW.

eHealth NSW is responsible for the support and maintenance agreements for software purchased centrally, deployed or available to be deployed across multiple NSW Health organisations. eHealth NSW supports NSW Health organisations with these software products by managing risk and optimising software cost for NSW Health.

NSW Health organisations are responsible for software purchased locally and deployed within their organisations. This includes software purchased by NSW Health organisations and software purchased centrally, on behalf of the NSW Health organisations.

The following RACI (Responsible, Accountable, Consulted, Informed) table defines the role of each organisation depending on the function:

Function	eHealth NSW	NSW Health Organisations
Software evaluation – for centrally sourced software		A,R
Software evaluation – NSW Health organisations specific	С	A, R
Software purchases – made centrally	С	A,R
Software purchases – made by the NSW Health organisations	С	A, R
Managing the vendor relationship for software owned centrally	A, R	С
Managing the vendor relationship for software owned by the NSW Health organisations	С	A, R
Internal software review	А	R
External software review request – NSW Health organisation specific		R
External software review request – all NSW Health		A, R
Managing the local approved software list		A, R
Managing the state-wide approved software list		С
Managing the software asset register		С
Managing the definitive media library		I
Managing the local media library		A, R
Software deployment or licence usage for centrally purchased software (including the standard operating environment)		A, R
Software deployment or licence usage for locally purchased software		A, R
Software removal or retirement		A, R

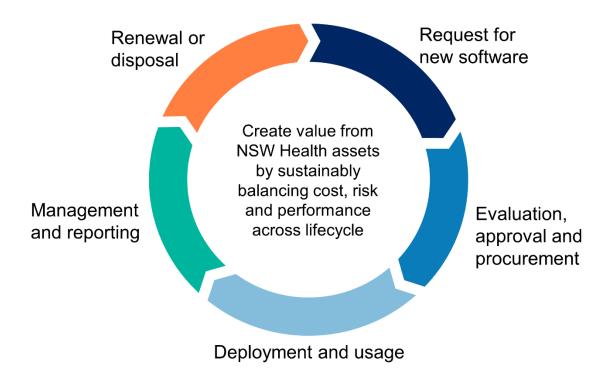


3. SOFTWARE LIFE CYCLE

The Software Asset Management lifecycle consists of five steps from the initial decision to obtain the software through to the retirement of the software from use. NSW Health organisations will collaborate with eHealth NSW throughout the five phases of the software lifecycle.

The five steps are:

- 1. Request for new software
- 2. Software evaluation, approval and procurement
- 3. Software deployment and usage
- 4. Software management and reporting
- 5. Software renewal or disposal



3.1. Request for new software

Asset planning is an essential stage of the asset management lifecycle, NSW Health staff are to research and consider how the software they are interested in meets their requirements before requesting new software

Each request for software must be submitted to the relevant NSW Health organisation's ICT team. The request form can be either a physical document or one that is stored and



managed electronically. The form will consistently capture all the necessary information, which will be used as part of the approval process.

The process for managing software requests is to be developed, or modified, and adopted by each NSW Health organisation to ensure the process is managed consistently and that help desk staff are trained in the process. A standardised form is being developed by eHealth NSW for the state-wide approach, and requests for new software can be lodged through Search and Request Anything <u>SARA</u> and the State-Wide Service Desk.

3.2. Software evaluation, approval and procurement

Requests for new software need to follow the NSW Health organisation's software evaluation process. NSW Health organisations are responsible for the evaluation and approval of software within their environment.

To be approved, software must be evaluated according to specific criteria defined by each NSW Health organisation. The NSW Health organisation ICT Team or the eHealth NSW Information Security Services team must be consulted to ensure a security and privacy assessment is completed for new software.

Once the new software has been approved, it will be recorded on the NSW Health organisation's local approved software list.

If the new software has not been approved, the NSW Health organisation evaluator or eHealth NSW will inform the requesting staff member that the software did not meet approval standards and to seek an alternative product.

3.2.1. Approved software list and addition to the approved software list

The approved software list is a list of software titles that have been approved for deployment within NSW Health. Software is only to be approved when it has successfully passed the software evaluation process. Initially locally approved software will be on the locally approved list, which will be managed by the NSW Health organisation. The process for managing the state-wide software approved list will be determined as part of the NSW Health Software Community of Interest.

Only approved software can be deployed within NSW Health.

3.2.2. Request for approved software

Upon receiving the request for software, the State-wide Service Desk staff or NSW Health organisation ICT Team will validate whether the requested software is on the NSW Health organisation's approved software list. The NSW Health organisation's ICT Team or State-wide Service Desk staff will then determine whether a licence will need to be purchased. Where a licence purchase is required, the NSW Health organisation's ICT Team or State-wide Service Desk Staff will make the appropriate arrangements to purchase the licence.

The NSW Health organisation's ICT Team and eHealth NSW will then need to confirm approval to deploy the software has been received from the appropriate cost centre manager and line manager.

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3.2.3. Software procurement

Unless using an existing procurement arrangement, NSW Health organisations must refer ICT-related goods and services procurements valued at more than \$250,000 to eHealth NSW. Further information on procurement can be found in the NSW Health Policy Directive *NSW Health Procurement* (PD2022_020). Each software purchase must follow a documented purchase process, to be determined by each NSW Health organisation. Purchases are only to be made after the software has been approved for purchase, incorporating the cost centre manager's approval.

Only software on the NSW Health organisations' local approved software list is to be purchased unless there is a requirement to purchase the software for evaluation purposes. This includes subscriptions to cloud-based services and software, including services such as Google Docs or Salesforce.

NSW Health organisations must provide eHealth NSW with software procurement information monthly. The eHealth NSW Software Asset Management team will record the purchase information and all relevant detail in the software asset register.

Any physical or electronic media and associated licence information must be securely stored in the media library. There are two media libraries:

- eHealth NSW state-wide media library this library contains media for licences purchased under state-wide licence agreements and provided to NSW Health organisation personnel upon request.
- NSW Health organisations local media library this library contains media for licences purchased by the NSW Health organisation.

A physical media library can be as simple as a locked cupboard or filing cabinet. An electronic media library can be as simple as a secure folder stored within a secure file system.

3.3. Software deployment and usage

Software of any type must not be installed unless it is approved and correctly licenced.

Cloud-based software must not be accessed, downloaded, or otherwise installed unless approved and purchased, as per the documented procurement process, including any relevant security evaluation.

All software, including software deployed to kiosk-style devices, multi-use devices, and cloudbased services and software, must be correctly licenced and approved.

All software is subject to a regular review to confirm compliance with the vendor's terms and conditions.

Software is only to be deployed on assets or devices owned by NSW Health or its agencies unless the vendor's terms and conditions allow otherwise. When the vendor's terms and conditions allow this, the process for managing and reporting on this is to be documented.

Software installed on devices that are not visible on the production network or discoverable using management tools, such as the Microsoft System Centre Configuration Manager, must



have their installation registered in the software asset register. These installations are to be reviewed regularly with a period not exceeding 12 months.

3.4. Software management and reporting

NSW Health organisations are responsible for managing software purchased locally and deployed within their organisations. eHealth NSW is responsible for the support and maintenance agreements for software purchased centrally, deployed or available to be deployed across multiple NSW Health organisations.

Software management covers several functions, which include:

- Maintaining the software asset register.
- Managing the vendor relationship.
- Responding to audit requests.
- Managing the physical and electronic media (local media library).
- Managing support and maintenance agreements.
- Software usage/metering.

3.4.1. Software asset register

The software asset register is to be kept up to date at all times.

eHealth NSW is responsible for recording all changes to software purchased centrally, deployed or available to be deployed across multiple NSW Health organisations.

NSW Health organisations are responsible for recording all changes to software purchased for their own use.

The software asset register will help improve ICT lifecycle assessment and clearer identification of the enabling ICT, vendors, and applications aligned with ICT Capability Blueprint for NSW Health.

Information contained within the software asset register includes:

- Application name
- Vendor
- Contract or agreement number
- Licence type
- Licence usage restrictions
- Cost
- Proof of purchase
- Purchase date
- Expiry date (for subscription-based licences)
- Licence count or quantity purchased

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- Quantity deployed
- Maintenance purchase date (if applicable)
- Maintenance expiry date (if applicable)
- Upgrade/cross grade licence (if used as part of an agreed post-purchase entitlement upgrade)
- Lifecycle status (buy, hold, or decommission).

3.4.2. Reviews and reporting

Internal reviews and reporting

A regular software review is to be conducted to reconcile software currently deployed against the NSW Health organisation's software asset register.

NSW Health organisations can utilise software asset management ICT software to assist in this reporting.

The software review is to, at a minimum, reconcile the following information:

- The number or count of applications deployed against the licenced number as per the vendor agreement
- The version of applications deployed against the version permitted under the vendor agreement
- The expiry date of the application (if required)
- The expiry date of any support agreement for each application.

If an under-licence position is detected during a review process, the under-licence position is to be addressed immediately, unless the vendor's terms and conditions allow for a true-up process to be conducted or the software has been deployed in error, and commercial advantage has not been received. The under-licence position may be addressed as follows:

- The number or count of the licence shortfall is purchased, such that the licensed number equals or exceeds the deployment number
- The number of deployed applications is reduced to a level that is at or below the number licenced, as per the vendor agreement
- A combination of the above actions.

External reviews and reporting

All external and vendor review requests are to be referred to the following:

- Chief Information Officer and Chief Financial Officer of the relevant NSW Health organisation
- eHealth NSW.

eHealth NSW is to be consulted prior to sending any correspondence or a work request to the vendor.



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A review request for software purchased by an NSW Health organisation for their own use is the responsibility of the organisation. eHealth NSW is accountable for the review results.

A review request for software purchased centrally, which is deployed or available to be deployed across multiple Health organisations is the responsibility of the NSW Health organisation. eHealth NSW is accountable for the review results.

In the event an under-licence position is detected during the review process, the underlicence position must be addressed in consultation with eHealth NSW and the software vendor.

The NSW Health Policy Directive Asset Management (PD2020_038) requires NSW Health organisations to annually attest to compliance with the core requirements set out in the policy. The NSW Ministry of Health (the Ministry) requires NSW Health organisations to prepare an annual Health Entity Attestation Statement for Asset Management in a format determined by the Ministry. The Attestation Statement must be returned annually for the prior financial year (the 'reporting period'). This Attestation Statement ensures the Ministry is compliant with the NSW Asset Management Policy <u>TPP 19-07</u>.

Governance

Every review report must be reviewed and approved by one or more senior staff members in the location where the review activity report was produced.

It is recommended that a Software Review Governance Committee be established across NSW Health, specifically within eHealth NSW and NSW Health organisations. The team comprises the Chief Information Officer (where appropriate) and representatives from procurement, finance, licence compliance and legal (if required).

3.5. Software renewal or disposal

When an asset reaches the end of its useful life or is not able to support the service delivery requirements, the functionality, performance, and cost of the asset is reviewed. If feasible, the asset is recommended for renewal and additional software can be purchased. When an asset reaches the end of its useful life and is not suitable for renewal or repurposing, the asset is the removed.

3.5.1. Software lifecycle status

A regular review is to be conducted of the approved software list to determine the lifecycle status of each software application according to the following criteria:

Buy	Hold	Decommission
Additional software can be purchased	Software can continue to be used but no new purchases should be made	Software should be retired and removed

The review process is not to exceed three years. Software products with a status of decommission are to be removed from the approved software list.



3.5.2. **Retire**

When software is no longer required or has been inappropriately deployed it must be retired and removed from devices.

NSW Health organisations are responsible for retiring and removing software purchased locally and deployed within their organisations. If eHealth NSW installed the software and it was purchased centrally, eHealth is responsible for retiring and removing the software.

The process for software removal may be manual or automated. The timing and circumstance for software removal will be developed by eHealth NSW and must be applied consistently across each of the NSW Health organisations by their ICT teams. The criteria and processes are to be documented in a single document adopted by all NSW Health organisations.

Information on software that has been removed will remain on the software asset register. In addition, ICT staff are to follow any local data retention and archiving procedures.

Software products are to be removed from devices under the following circumstances:

- The software is unapproved and has been installed without authorisation.
- The software is illegal or unlicensed.
- The software subscription has expired, and a decision has been made not to renew the subscription.
- The software is under-utilised. Applications that have not been used or accessed for six months or more must be removed from the device and recorded in the software asset register as being available for re-use, subject to the vendor's terms and conditions governing licence transfers.
- The software or licence has been transferred to another user or device.
- The device itself is to be decommissioned.
- As part of the off-boarding process, when software previously assigned to a staff member that is now leaving the organisation.
- The software is no longer required.
- All software removals and transfers are to be recorded in the software asset register.

Reports will be generated for state-wide licences by eHealth NSW. Where eHealth NSW is responsible for the deployment and management of the software or device, such as centrally purchased software, eHealth NSW will be responsible for removing the software. Where an NSW Health organisation is responsible for the local purchase and management of the software or device, the NSW Health organisation ICT Team will be responsible for the removal.



4. **RELATED DOCUMENTS**

4.1. NSW Health policy directives

NSW Health Policy Directives		
(PD2009_057)	Records Management – Department of Health	
(<u>PD2020_038</u>)	Asset Management	
(<u>PD2020_046</u>)	Electronic Information Security	
(<u>PD2021_043</u>)	NSW Health Foundation Information and Communication Technology (ICT) Services and Platforms Policy	
(PD2022_011)	Bring Your Own Device and NSW Health Smart Devices	
(<u>PD2022_020</u>)	NSW Health Procurement	

4.2. NSW Government policies and directives

NSW GOVERNMENT POLICIES AND DIRECTIVES		
https://www.digital.nsw.gov.au/policy/cyber- security/cyber-security-policy	NSW Government Cyber Security Policy	
https://www.treasury.nsw.gov.au/finance- resource/asset-management-policy	Asset Management Policy for the NSW Public Sector	
https://legislation.nsw.gov.au/view/html/inforce/curr ent/act-1998-017	State Records Act 1998 (NSW)	

5. GLOSSARY OF TERMS

(Licence) Entitlement	Entitlements are the "right of use" of software for an individual or organisation. This right to use can consist of multiple services or products. It may also include rights to future upgrades and enhancements, or cross-grades to other products.
Operating System Software	Operating system software provides a platform on which other programs, or application software can run. Examples include Windows, Chrome, Linux, and macOS.
Proof of Purchase	Proof of purchase is typically a tax invoice, which may be a soft or hard copy, with the product stock keeping unit, description and quantity recorded. Proof of purchase may also include a warranty card showing the supplier's or manufacturer's details and the purchase information, or a serial number or purchase order number linked with the purchase on the supplier's or manufacturer's database.



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RACI Chart	The RACI chart is also known as a responsibility assignment matrix. It describes the participation of various roles in completing tasks or deliverables in a project or business process. It is especially useful in clarifying roles and responsibilities in cross-functional/departmental projects and processes.
Subscription-based Licence	Subscription-based Licence is a payment structure that allows a customer or organisation to purchase or subscribe to a vendor's IT services for a specific period for a set price. Subscribers typically commit to the services on a monthly or annual basis.
True-up	True-up is a process where licence usage/deployment is regularly reconciled against licences held. A shortfall is typically addressed by purchasing the required number of licences to make up the shortfall.