



Western Australian Public Sector

Address Management Policy 2013

Framework and Standards



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Authority

This Address Management Policy is authorised under Public Sector Commissioner's Circular 2013-03 Policy Framework and Standards for Address Management in Public Sector Entities which can be accessed at www.psc.wa.gov.au.

Purpose

The purpose of this policy is to guide agencies of the Western Australian public sector in the establishment of a standards-based approach to the way address information is collected, verified, managed and exchanged across the public sector.

Definitions

Address - a textual representation of a physical or virtual point for the purposes of either identifying a physical parcel of land on the land surface of the earth or as a communication channel to a recipient. An address may refer to items other than a physical point such as an email address.

National Address Management Framework (NAMF) - is a national set of authoritative datasets of address information, a standard for the exchange and storage of that data to ensure its accuracy, and a set of national standards on how to use it most effectively through existing information technology systems. Further information can be found at: <http://www.anzlic.org.au/>

Australian Standard 4590 - 2006 Interchange of Client Information (AS4590) - sets out requirements for data elements for the interchange of Australian client information. These data elements are party identification, person details, organisation details, addressing, and electronic contact details. The standard can be purchased online from SAI Global at: <http://www.saiglobal.com/>

National e-Authentication Framework (NeAF) - encompasses the electronic authentication (e-authentication) of the identity of individuals and businesses dealing with the government, as well as the authentication of government websites. Further information can be found at: <http://agimo.gov.au/>

Policy Scope

The Address Management Policy should be adopted by all Western Australian government agencies that collect or use address information.

To ensure consistency for the public and deliver efficiencies in the interactions between State and local government, it is desirable that local authorities also adopt this policy.

It is recognised that where Western Australian agencies are required to exchange address data with other jurisdictions, the ability of those agencies to fully adopt this policy in those transactions may be limited by the ability of the other jurisdiction to conform to the relevant standards.

The policy is not retrospective, it requires that:

- new address management systems (those systems procured or developed subsequent to release of this policy) should be compliant with the policy; and
- existing address management systems should aim to be compliant as those systems are upgraded by a target date of August 2018.

It is recommended that any agency planning changes to their systems and databases that include address information give special consideration to adopting this policy.

While this policy articulates specific processes that should be undertaken in relation to address management functions, such as address verification, the policy does not include the detail of technical solutions or approaches.

Landgate has responsibility for coordinating the implementation of the Address Management Policy.

Policy Statement

Address information is a key component in the interactions between government and members of the public. There is a community expectation that those interactions will be managed efficiently and effectively by government.

Adoption of a standards-based approach to the management of address information will enable agencies to better capture, store, manage and exchange information that includes an address component. The benefits of this approach include:

- **Government business processes are efficient** – the exchange of address data between agencies is streamlined and the data is valid and accurate.
- **Address information provided to government is accurate** – the incidence and related cost of incorrect addresses is reduced.
- **Safety of the public and emergency response officers is optimised** – the potential for delays in emergency response and the exposure of officers to risk is reduced.
- **Citizens can easily notify government of changes of address** – the notification process is streamlined, and in the long term, citizens are able to provide that information only once and all agencies are advised of the change.

Policy

All public sector entities should implement a standards-based approach to address management through the adoption of the Address Management Policy.

The recommended approach is based on the NAMF set of authoritative datasets of address information. The NAMF includes data standards derived from AS4590, in particular section five, which relates to the interchange of Australian address details.¹

Implementation Timeframe

In recognition of the cost and resource effort required for agencies to adopt this policy, a five-year transition period is provided. Public sector agencies should establish implementation plans by August 2015 and aim to comply with the policy by August 2018.

Data Standards

The following data sets are recognised as the authoritative source of address information:

- **Street Address (Western Australia)** - Landgate Address Data Set (ADR)
- **Street Address (other States & Territories)** - Geocoded National Address File (GNAF)
- **Postal Address (all jurisdictions)** - Australia Post Postal Address File (PAF)

¹ Other sections of AS4590 may also be applicable to this policy. Section two of the standard relates to party identification details; section three relates to person details; section four relates to organisation details; and section six relates to electronic contact details. Where agencies record any of these details, the standard applies. Users of the standard should also refer to relevant privacy guidelines and legislation in practice.

These data sets comprise the standard that should be applied. Where agencies already use a commercial service provider for data cleansing and verification services, the provider should comply with the above standard.

Exchange of Data

All agencies should adopt the AS4590 for the exchange of address data. Agencies may elect to continue to store address data in non-AS4590 format beyond the implementation timeframe, but should aim to ensure that the address data conforms to AS4590 at the interface for data exchange within the timeframe.

Future address management systems procurement or upgrade should comply with the policy for both address data storage and exchange.

Data Verification

New or amended addresses provided to agencies should be verified against the authoritative address data set on receipt.

All address information provided by one agency to another should be verified against the authoritative address data set before data exchange. Receiving agencies may seek assurance that data verification has been undertaken prior to them receiving address data. Agencies should identify technical solutions appropriate for their specific needs.

Data Cleansing

Address data held by an agency should be checked and cleansed against the authoritative data set at least once per year. Where this is not feasible, address data should be checked and cleansed in accordance with scheduling plans that are mutually agreed between the agency and Landgate. Agencies that need to exchange address data on a regular basis may need to explore shared technical solutions appropriate for their specific needs.

All address data less than five years old should be cleansed in accordance with this policy within the implementation timeframe. Agencies may determine how they deal with address data more than five years old, depending on their individual business needs.

Online Data Authentication

Agencies providing online services to citizens that allow modification to address information should ensure that authentication protocols and systems comply with the NeAF. Agencies may use the appropriate Department of Finance Common Use Arrangement for procurement of authentication solutions, if applicable.

Government Forms

It is desirable that Government online forms comply with the standard format for address components articulated in AS4590. This will make it easier for citizens to complete government forms, and facilitate a transition to electronic forms as agencies migrate to those technologies.

Policy Principles

The key principles of the Address Management Policy are:

Focus on citizens - services and information associated with this policy should be designed and focused on the needs of Western Australians.

Accessibility and choice - the service delivery model should enable Western Australians accessibility and choice of services to meet their individual needs and circumstances.

Trust, confidence and security - agencies should maintain the trust and confidence of citizens that government is collecting, using and disclosing their information in a manner that respects privacy and is consistent, secure, and ethical.

Collaboration and integration - agencies should work in a collaborative manner, prioritising the need for integration of services where this is relevant to the policy, and adoption of common standards, including those defined in the NAMF.

Accountability – implementation of the policy should be underpinned by the tenets of transparency, accountability and ethically responsible government.

Implementation Principles

When adopting the Address Management Policy, agencies should aim to comply with the following principles of best practice in address management:

- Agencies utilise the NAMF when redeveloping their addressing systems.
- The primary source of address information for agencies is the authoritative data sets listed in the policy.
- Any address information received or used by an agency is verified against the authoritative source of address information before recording in an agency system.
- Address data held by an agency is checked and cleansed against the authoritative source of address information at least once per year, or in accordance with scheduling plans mutually agreed between the agency and Landgate.
- Any change to the address component of a person's identity is authenticated before acceptance.
- In the long term, agencies aim to establish a system where citizens inform government once of a change of address and all agencies are automatically advised of this change.

Policy Context

Street and postal addresses are fundamental to a citizen's ability to interact with Government. However this information is often managed inefficiently throughout the public sector.

In June 2007 the Online and Communications Council² investigated the development of a National Address Management Framework (NAMF) which would comprise:

- a single authoritative address data set;
- a national standard for address data storage and interchange; and
- national standards for web services that support common address related functions.

The NAMF was progressed by the Australian Government Information Management Office (AGIMO), under the direction of the Cross Jurisdictional Chief Information Officers Committee (CJCIOC), and in collaboration with the Cross Jurisdictional Interoperability Group (CJIG). Western Australia was represented on both groups through the former Office of e-Government (then part of the Department of the Premier and Cabinet).

² At that time the Online and Communications Council (OCC) was the peak ministerial forum across the Commonwealth and State governments, whose role was to consider and reach agreement on strategic approaches to information and communications issues of national importance. The OCC operated within the protocols for Ministerial Councils.

The NAMF Proof of Concept³ concluded:

The case study evidence indicates that the current state of addressing practices across Australia is inconsistent, inefficient, susceptible to inaccuracies, protracted and represents a threat to public safety.

The NAMF package was endorsed by the OCC in December 2008, thereby committing all Australian jurisdictions to implementation of the NAMF.

In March 2009 the Public Sector Commission (PSC) and Landgate invited 28 agencies to participate in an address data quality survey. The twenty survey responses received⁴ identified the critical nature of address information to public sector entities, but also recognised that the allocation of resources to improve address management is generally of low priority. There is a risk that improvements will occur in a piecemeal fashion unless a focused whole of government approach is adopted.

The Street Address Improvement Program (SAIP) was a joint initiative between the PSC and Landgate to implement the NAMF in Western Australia (see the Public Sector Commissioner's Circular 2010-04). The original release of this policy in 2010 (Version 1.0) was a key initiative arising from the SAIP.

The SAIP was endorsed by the Public Sector Commissioner and the SAIP Executive Committee.⁵

In 2013 custodianship of the Address Management Policy was transferred from PSC to Landgate, and the policy was revised and updated. Landgate has established a SAIP team to assist agencies to adopt the policy.

Key Contact

For further information regarding this policy, please contact:

Director, Location Knowledge Services
Landgate
(08) 9273 7144

Review

This policy will be reviewed within three years from issue (August 2016), or sooner if required due to technological developments or other changes.

³ *National Address Management Framework: Proof of Concept*, Ernst & Young. May 2008.

⁴ A list of participating agencies can be found in Appendix 1.

⁵ A list of SAIP EC representative agencies can be found at Appendix 2.

Version History

Version	Date	Description	Author
0_1	3/12/2009	First draft	Celia Chesney
0_2	12/1/2010	Second draft	Celia Chesney
0_3	13/1/2010	Landgate edits	Ian Hyde Brian Goodchild
0_4	13/1/2010	First discussion draft	Celia Chesney
0_5	18/1/2010	Revised (second) discussion draft for Reference Groups review	Celia Chesney
0_6	4/2/2010	Review comments incorporated For endorsement by SAIP Executive Committee	Celia Chesney
0_7	8/3/2010	Incorporating changes agreed by SAIP Executive Committee	Celia Chesney
1_0	18/3/2010	Final endorsed	Celia Chesney
1_1	6/5/2010	Further clarification on the use of AS4590 Update to Clause 9 in relation to authentication solutions procurement	Celia Chesney
2.0	25/7/2013	Revised by Landgate in liaison with PSC – text revised and reformatted, implementation timeframe updated	Bruce Roberts Caitlin Marson

Appendix 1: Participating Agencies – SAIP Survey 2009

SURVEY AGENCIES
Department for Child Protection
Department of Commerce (Consumer Protection Division)
Department of Commerce (Energy Safety Division)
Department of Education and Training
Department of Environment and Conservation
Department of Housing and Works
Department of Indigenous Affairs
Department of Planning (then Department for Planning and Infrastructure)
Department of Racing, Gaming and Liquor
Department of Finance - Office of State Revenue (then Department of Treasury and Finance)
Department of Fire and Emergency Services (then Fire and Emergency Services Authority)
Landgate
Metropolitan Cemeteries Board
Nurses and Midwives Board of Western Australia
Small Business Development Corporation
Synergy
Tourism Western Australia
Water Corporation
Western Australian Electoral Commission
Western Australian Local Government Association
Western Australia Police

Appendix 2: Participating Agencies – SAIP Executive Committee and Reference Groups

SAIP Executive Committee
Department of Commerce
Department of Environment and Conservation
Western Australian Electoral Commission
Department of Fire and Emergency Services (then Fire and Emergency Services Authority)
Department of Housing
Landgate
Metropolitan Cemeteries Board
Nurses and Midwives Board
Western Australia Police
Public Sector Commission
Department of Racing, Gaming and Liquor
Department of Transport
Department of Finance - Office of State Revenue (then Department of Treasury and Finance)

SAIP Reference Group
Department of Commerce
Landgate
Public Sector Commission
Department of Treasury (then Department of Treasury and Finance – Agency Resources)
Department of Treasury (then Department of Treasury and Finance – Online Solutions Branch of Shared Services)

SAIP Policy Group
Australia Post
Western Australian Electoral Commission
Landgate
Western Australian Local Government Association
Public Sector Commission
Department of Transport
Department of Finance -Office of State Revenue (then Department of Treasury and Finance)
Water Corporation

SAIP Business and Technical Reference Groups
Australia Post
City of Swan
Department of Commerce
Department of Environment and Conservation

Western Australian Electoral Commission
Department of Fire and Emergency Services (then Fire and Emergency Services Authority)
Department of Housing
Landgate
Western Australian Local Government Association
Metropolitan Cemeteries Board
Nurses and Midwives Board
Western Australia Police
Public Sector Commission
Department of Racing, Gaming and Liquor
Synergy
Department of Transport
Department of Finance - Office of State Revenue (then Department of Treasury and Finance)
Department of Treasury (then Department of Treasury and Finance – Online Solutions Branch of Shared Services)
Water Corporation

Appendix 3: Glossary

The following glossary of terms is provided as a standard and agreed way to explain the description of several forms of address, the technology structures that underpin address management and some of the organisations involved in address management.⁶

Address

An address is a textual representation of a physical or virtual point for the purposes of either identifying a physical parcel of land on the land surface of the earth or as a communication channel to a recipient. An address may refer to items other than a physical point such as an email address.

A single point may have many textual addresses associated with it. These can be different ways of representing the official address or, in the case of private estates, a way of addressing the internal structure of the estate.

Many attributes may be associated with an address, such as, Australian Bureau of Statistics (ABS) Mesh Block/Collector District, Business or Private Use, Electoral District(s). Latitude and Longitude are also attributes of an address.

These attributes are often collected and stored multiple times (often in subtly different ways) by many client organisations and represent a significant opportunity for reducing complexity and increasing data availability by storing some or all in a central repository. Significant savings can be made by the use of common keys between datasets, especially cadastral and electoral data.

Postal Address

A physical or virtual address used by a recipient for the purposes of receiving correspondence. Postal Address is a specific form of location address developed for postal delivery. Australia Post has progressively refined and developed postal address to meet its operational requirements, including the creation of a unique identifier (see DPID).

Location Address

A physical address which would typically include an address label of a real area, which includes street number, road name, locality and state, address site name, centroid, datum point (for rural areas), link to a real property description, alias address and geocode that spatially defines the address point. A location address point should be defined in three dimensions, where appropriate.

Location addresses are used by many people and applications to provide clear, unambiguous information to common users in order to assist them to identify a point on the earth's surface where a good or service is usually required to be delivered.

Address Consumer

An address consumer is an organisation or individual which requires accurate addressing data as part of their normal operations.

Address Maintainer

An address maintainer is an organisation or individual with primary responsibility for the collection and maintenance of addresses.

⁶ This glossary of terms is part of the suite of NAMF documents and can be found on the ANZLIC website at: <http://www.anzlic.org.au/>

AMAS

The Address Matching Approval System (AMAS) is a certification program that has been developed by Australia Post to improve the accuracy of postal addresses. The software prepares addresses for barcode creation, ensures quality addressing, and enables mailers to qualify for postal discounts for pre-sorted letter lodgements. More information can be found on the Australia Post website: <http://auspost.com.au/index.html>

ANZLIC

The Australia New Zealand Land Information Council (ANZLIC) develops agreed policies and guidelines for both Australia and New Zealand aimed at achieving best practice in spatial data management. See <http://www.anzlic.org.au/>

API

Applications Programming Interface is an interface to a software application for access by other computer systems.

Australian Address Reference File (AARF)

A collection of deliverable addresses with Residential, Non-Residential and No Advertising Material indicators. A deliverable address is an address to which Australia Post delivers and/or recognises through its delivery network.

Australian Addressing Standard AS/NZS 4819 – 2011 Rural and urban addressing

This is a comprehensive guide for all aspects of rural and urban addressing assignment, updated in 2011. The standard can be purchased online from SAI Global at: <http://www.saiglobal.com/>

DPID

Delivery Point Identifier is a randomly generated, unique 8-digit number, which is associated with a postal address. See PAF.

GNAF

The Geo-coded National Address File, or G-NAF, is an index of physical Australian addresses, each with a geographic coordinate.

NAMF

The National Address Management Framework is comprised of:

- Guidelines for the use of industry datasets;
- A national standard for address data storage and interchange; and
- National standards for web services for address parsing and validation.

PAF

The Postal Address File (PAF) is a list of Australian addresses used for postal purposes. The PAF is only available through the AMAS Program and is used to support the efficient processing of mail through Australia Post's operational network.

The PAF contains Australian addresses in a correct address format, along with their corresponding DPIDs. Each DPID can be processed through conversion software to produce the corresponding barcode on the associated mail piece.

PSMA

PSMA Australia Limited, formerly known as Public Sector Mapping Agencies, is an unlisted public company wholly owned by the State, Territory and Australian Governments. It combines reliable spatial data from Australia's governments with leading-edge technology to create national spatial information datasets. It presents the data in meaningful and useful ways for a wide range of industry, government and community uses that deliver economic, environmental and social benefits to Australia.

For example, PSMA Australia's digital mapping information includes:

- roads;
- street addresses;
- cadastral boundaries;
- administrative boundaries; and
- points of interest - such as police stations, fire stations, post offices, hospitals, churches and museums.

Parsing

The process of separating individual components within a string of text into separate parts; for example breaking up an address line into parts, such as Thoroughfare Number, Name, Type, Locality, State and Postcode.

UML

Unified Markup Language (UML) is the industry standard language for specifying, visualising, constructing, and documenting the architecture of a software system.

XML

eXtensible Markup Language (XML) is a standards controlled framework for the interchange of data. Its primary purpose is to facilitate the sharing of data across different information systems, particularly via the Internet.

XML Schema

XML Schema are a way to define the structure, content and, to some extent, the semantics of XML documents.

Vanity Address

This is an address given by a member of the general public containing an error that is perceived to enhance the status of the address, such as "complex address" and "rural address" which are invalid addresses. For example, a person may change their official locality to one that has a higher social status.

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