



Australian Government

Geoscience Australia

**AS/NZS 4819:2003 : Geographic information
- Rural and urban addressing
and
AS/NZS 4590:2006 : Interchange of client
information**

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Current Address standards.

- **AS/NZS 4819:2003 : Geographic information - Rural and urban addressing.**
- **AS/NZS 4590:2006 : Interchange of client information:**
 - Uses ISO 11179 to identify elements.
- **(Universal Postal Union) UPU S42 Standard on International Postal Address Components and Templates:**
 - XML implementation of UPU.
- **National Address Framework:**
 - Geocoded National Address File +

What is an address?

- The AS/NZS 4819:2003 address standard applies to:
 - Rural areas,
 - Urban areas,
 - Complex address sites,
 - Alias addresses, and
 - Geocoding
 - Addresses are unique identifiers for locations.
- AS/NZS 4590:2006 interchange standard:
 - Includes AS/NZS 4819:2003 addresses and
 - Legacy addresses that don't comply to above.

What is the definition of an address in current national address standards? (4819)

- Definition of **address** in AS4819:
 - “The conventional means of describing, labelling or identifying an address site.
 - Where **Address Site** is “An object, place or property. Unlike an address point, an address site occupies a real area.”
 - Where **Address point** is “A real or virtual spatially referenced point, characteristic feature or position, used to allocate geocode(s) to an address site (e.g., parcel centroid, building centroid, access point, first boundary point, letterbox, frontage midpoint).”
 - **NOTE:** Address sites may exist both above and below the ground. This Standard deals with the spatial or geographical address label and does not prescribe for aspatial addresses such as PO Box, RMB (Roadside Mail Box/Bag), MC (Mail Contractor), MS (Mail Service) RD (NZ Rural Delivery)

What is the definition of an address in current national address standards? (4950)

- **Address Details (4590):**
 - **Address usage code**
 - **Physical address indicator**
 - **Address status code**
 - **Client address currency details**
 - **Addressing within a complex (4819)**
 - **Primary address**
 - **Address site name (4819)**
 - **Road number (overlaps with 4819)**
 - **Road (overlaps with 4819)**
 - **Postal delivery (Australian Post Address Presentation Standard)**
 - **Locality name (overlaps with 4819)**
 - **State or territory code (overlaps with 4819)**
 - **Postcode (overlaps with 4819)**
 - **Unstructured address**
 - **Country name code**
 - **Location descriptor**
 - **Delivery point identifier**
 - **Geocode (4819)**

What is the scope of current national address standards? (4819)

- **Scope of AS4819: “This Standard establishes requirements and guidelines for a comprehensive rural and urban addressing system. It outlines the various elements of the system and provides guidelines for the application of those elements to a range of address site types in both urban and rural areas.”**
- **It covers rural and urban addressing, complex address sites, alias address management, geocoding (lats and longs), and management and transfer of address information.**
- **Some address site types are:**
 - **Residential or urban, rural property, flats or apartments, industrial complexes or shopping centres, military bases or education centres, national parks or recreational areas and utilities (eg. Substations, public toilets, tollgates).**
 - **It does not apply to postal addresses. (Australia Post’s Address Presentation Standards.)**

What is the scope of current national address standards? (4590)

- This Standard sets out requirements for data elements for the interchange of client information. The data elements covered comprise party identification, person details, organization details, addressing, and electronic contact details.
- This Standard focuses only on the interchange of Australian client information and any international client information is beyond the scope of this Standard.
- This Standard does not address data interchange syntax.
- This Standard applies to databases that require a standard definition of the format for datasets relating to the client information. Items such as person/organization details, addressing and contact details are given a data standard that can be utilized by databases.

Why do we need a national address standard? [\[benefits\]](#) [skip](#)

- **“The objective of this Standard [AS4819] is to provide users with a comprehensive guide that encompasses all aspects of rural and urban addressing. As such, this Standard incorporates and makes references to a number of existing Standards and jurisdictional guidelines relating to different aspects of addressing.”**
- **“The objective of rural [and urban] addressing is to provide clear and unambiguous information to users in order to assist them in reaching their desired destination within a rural [and urban] setting.”
(AS4819)**

Why do we need a national address standard? (cont.)

“This Addressing Standard provides the following benefits:

- (a) Provides users with an easy-to-use reference source that contains information on all aspects of addressing.**
- (b) Focuses a single Standard on addressing as opposed to being an ancillary aspect to an associated standard issue.**
- (c) Caters for the future development of a Geocoded National Address File (GNAF).**
- (d) Facilitates future amendments.”**

Why do we need a national address standard? (cont.)

“This Standard will benefit the following:

- (i) Councils and local governments—by improved administration and service delivery.**
- (ii) Emergency services—by facilitating improved response to emergency situations.**
- (iii) Commercial interests—through enhanced customer service through more efficient delivery and distribution of goods and services.**
- (iv) The information industry—by facilitating easier transfer, maintenance and exchange of address information between custodians and users.**
- (v) The community—through improvement in the provision of the abovementioned services.”**

Can we benefit from an international address standard?

- **Benefits of an international address standard:**
 - A consistent method of locating and addressing addresses.
 - Good if an automatic sorting system is used for national and international mail.
 - Would be nice if AS/NZS 4819:2003 and 4590:2006 were adopted as ISO standards.
- **Disadvantages for Australia and New Zealand:**
 - Don't want to change the existing AS/NZS 4819:2003 and 4590:2006 standards.

Is there enough reason to move ahead with an international address standard?

- **No identified benefits seem to justify Australia and New Zealand to replace AS/NZS 4819:2003 and 4590:2006 with different standards.**
- **However, adoption of AS/NZS 4819:2003 and 4590:2006 as international standards would be beneficial to Australia and New Zealand for consistency throughout the world.**

How AS/NZS 4819 helped ACT Emergency Services Authority.

- Previously fire stations were allocated at level of suburbs.
- Now fire stations are allocated according to quickest response time to a location within suburbs.
- Can use GPS to determine closest unit to the emergency address.
- Better reporting regarding addresses and not just locations.
- Can do analysis at address location level rather than at suburb level.
- Availability of Gazetted locality boundary information.
- Can use distances along rural roads to find access points.
- More accurate identification of locations in rural areas. [\[skip\]](#)

Fire at Jo

Vision Operator [ACTG] - User [Jeff Dal
File Incidents Resources Despatch Areas Map



Automatic Fire Alarm



Unit has arrived

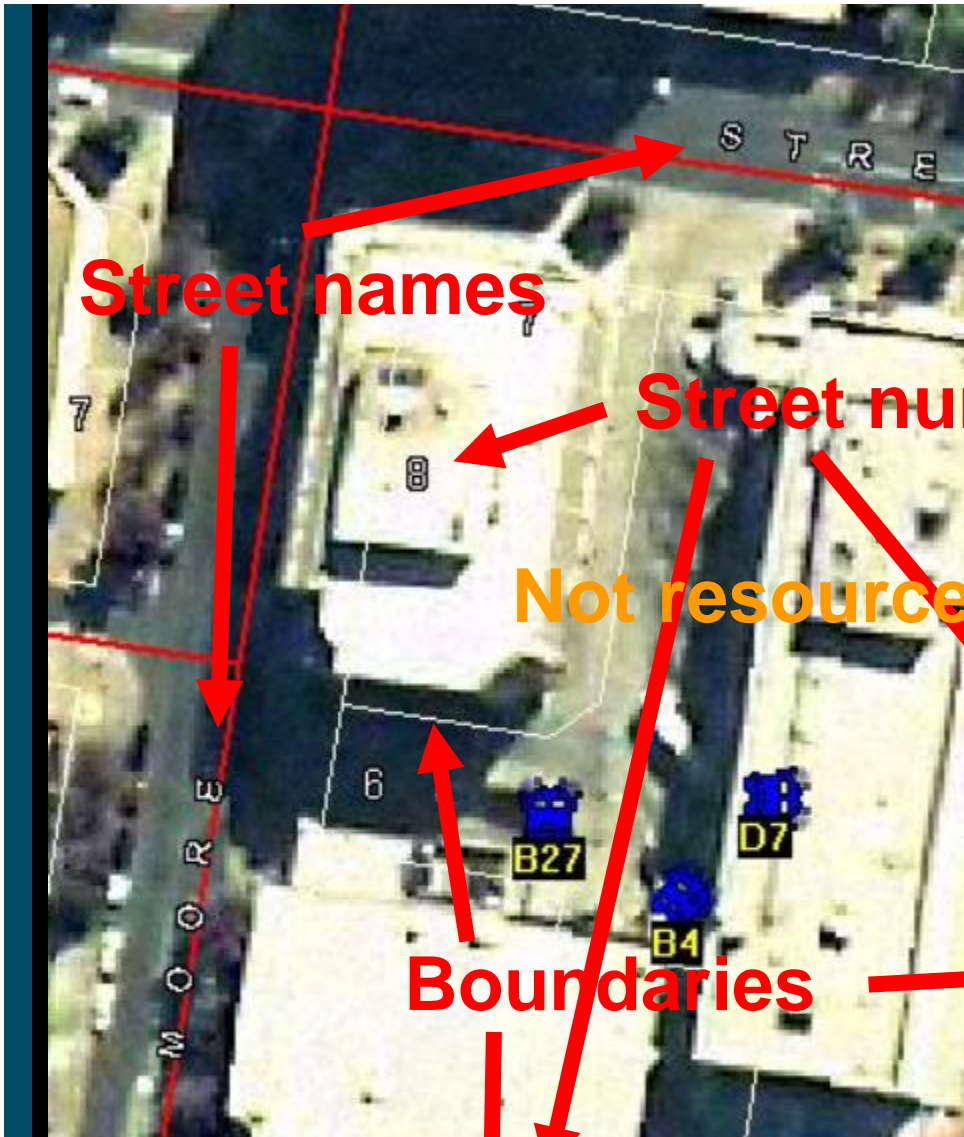
Monday 20 March 2008 - 09:53:36



Unit in transit

009796

LIA



D2	D1	D3	
D6	D7	D8	
D11	D12	D13	
B3	B4	B5	
B8	B9	B11	
B14	B15	B20	
B25	B27	B30	

Address JOLIMONT CENTRE , NOVOTEL CANBERRA , 61-65 NORTHBOURNE AV , CITY , 2601



B85	B86	B90	
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Map Incident Appliance Officer Stat

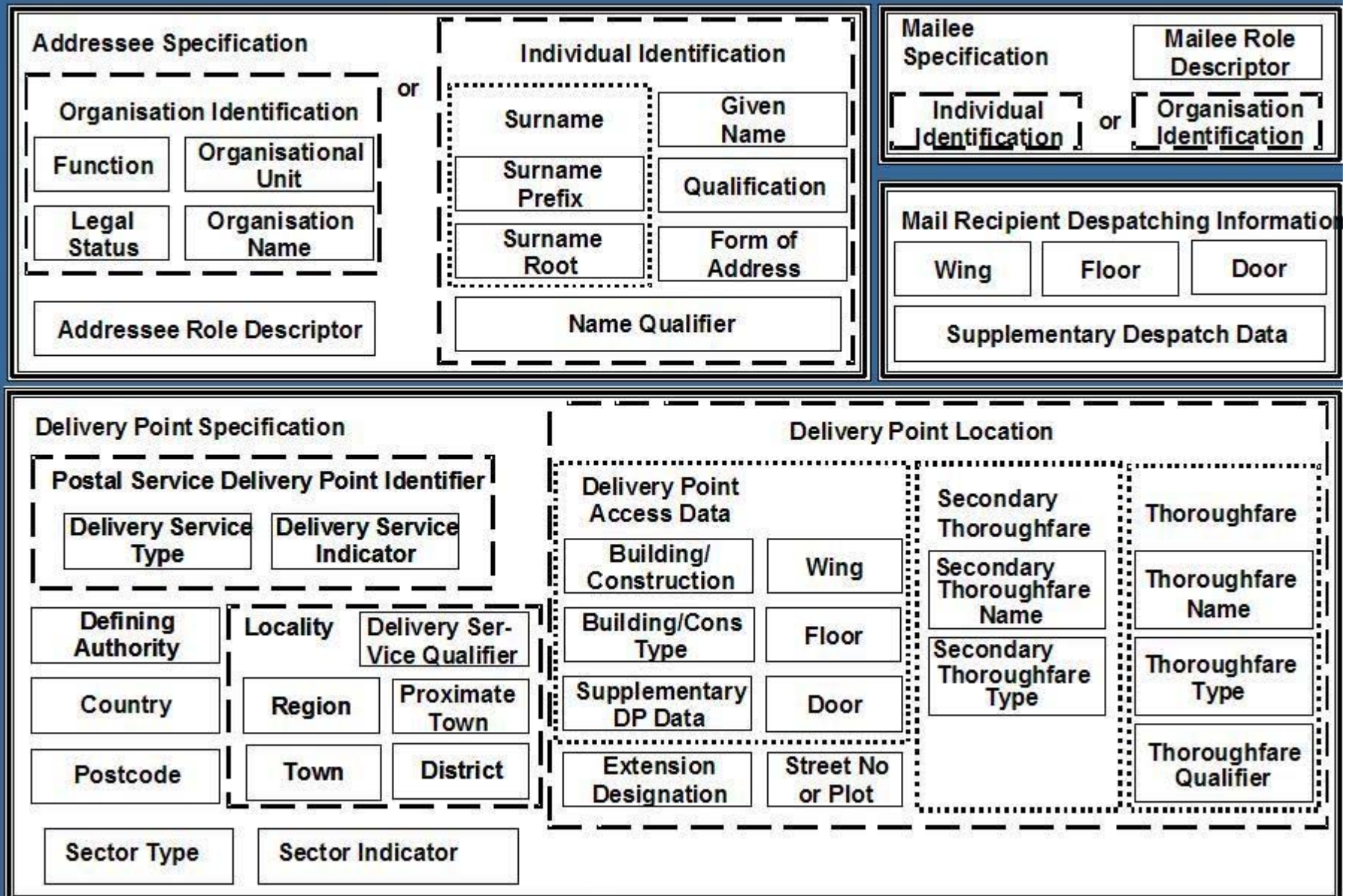
What does this Integrated Data Model Look like?



Related standards and specifications.

- **AS4212 Geographic information systems – Data dictionary for the transfer of street addressing information. (Superseded by AS 4950)**
- **AS4590:2006 Interchange of Client Information.**
- **UPU S42 Standard on International Postal Address Components and Templates**
- **[<http://www.wwtid.org/meetings/cctld/20040302.Rome-UPU-PostCode-StefanLindholm.ppt> (sited 2008-04-07)]**
- **[http://www.upu.int/direct_mail/en/2002-11-01_the_upu_proposed_standard_en.ppt (sited 2008-04-07)]**
 - **UPU address elements:**
 - **Street Number of Plot**
 - **Thoroughfare Name**
 - **Thoroughfare Type**
 - **Delivery Service Type**
 - **Delivery Service Indicator**
 - **Town**
 - **Region**
 - **Postcode**
 - **“An address template states how an address is to be written; in particular, it shows the order in which address elements are to appear, distinguishes between mandatory and optional elements and provides rendition instructions.”**
- **Australia Post’s Address Presentation Standards.**
- **GNAF (Geocoded National Address File)**
- **National name and Address Project**
[<https://www.govdex.gov.au/confluence/display/NameAddress/Address+Standards>]
- **OASIS CIQ xNAL** [http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ciq]

Postal Address Components : Dictionary



Post*Code: Standard S42 by XML.

- <?xml version="1.0" encoding="UTF-8"?>
- <!--
- This is the PATDL USPS template representing the street address, postal box, and rural route formats using UPU codes and rendition instructions. It has been validated using the Postal Address Template description Language (PATDL) v2.2 W3C schema. The file name is straddr.xml
- -->
- <!DOCTYPE patdl.xml SYSTEM "patdl.dtd">
- <patdl22.xml xmlns:xsi=<http://www.w3.org/2001/XMLSchema-instance>
- xsi:noNamespaceSchemaLocation="PATDLv2.2.2.xsd">
- <!-- -->
- <identifier>
- <referenceKey>UPU-US</referenceKey>
- <elementIdentifier>
- <type>code</type>
- <prefix>U</prefix>
- <system>UPU</system>
- <version>s42-3</version>
- <source>POST*Code</source>
- </elementIdentifier>
-
- <contentDefinition>
- <templateNumber>
- <countryCode>US</countryCode>
- <userId>USPS</userId>
- <templateType>ADR</templateType>
- <templateSeqNum>001</templateSeqNum>
- </templateNumber>
-
- <lineData>
- <lineName>lastline</lineName>
- <lineNumber>008</lineNumber>
- <linePriority>002</linePriority>
- <elementData>
- <elementId>E10.018</elementId>
- <elementDesc>city.name</elementDesc>
- <fldJustify>L</fldJustify>
- <posStart>001</posStart>
- <posLength>***</posLength>
- </elementData>
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- <elementId>E10.020</elementId>
- <elementDesc>state.postal.abbreviation</elementDesc>
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- <posStart>***</posStart>
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- </elementData>
- <elementData>
- <elementId>E10.025</elementId>
- <elementDesc>zip.code</elementDesc>
- <fldJustify>L</fldJustify>
- <posStart>***</posStart>
- <posLength>***</posLength>
- </elementData>
- ...
- </contentDefinition>

Acknowledgements and Further Information.

- **Intergovernmental Committee on Surveying and Mapping (Susie Salisbury)** [<http://www.icsm.gov.au/icsm/street/presentation/presentation.swf>].
- **Australian Capital Territory Emergency Fire Assessment Centre (Jeff Dau)** [<http://www.esa.act.gov.au/>]
- **Public Sector Mapping Agency (Dan Paull)** [<http://www.pasma.com.au>]
- **Australia Post (Rachel Smith)** [<http://www.post.com.au/>]
- **Australian Government Information Management Office (AGIMO – Liz Marchant)** [<http://www.agimo.gov.au/>]