

Easier Access to Statistical Data - Collaborating for a Common Approach

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Questions



Data Standards

- What are they ?
- How can they help us ?
- DDI & SDMX
- Implementation and collaboration

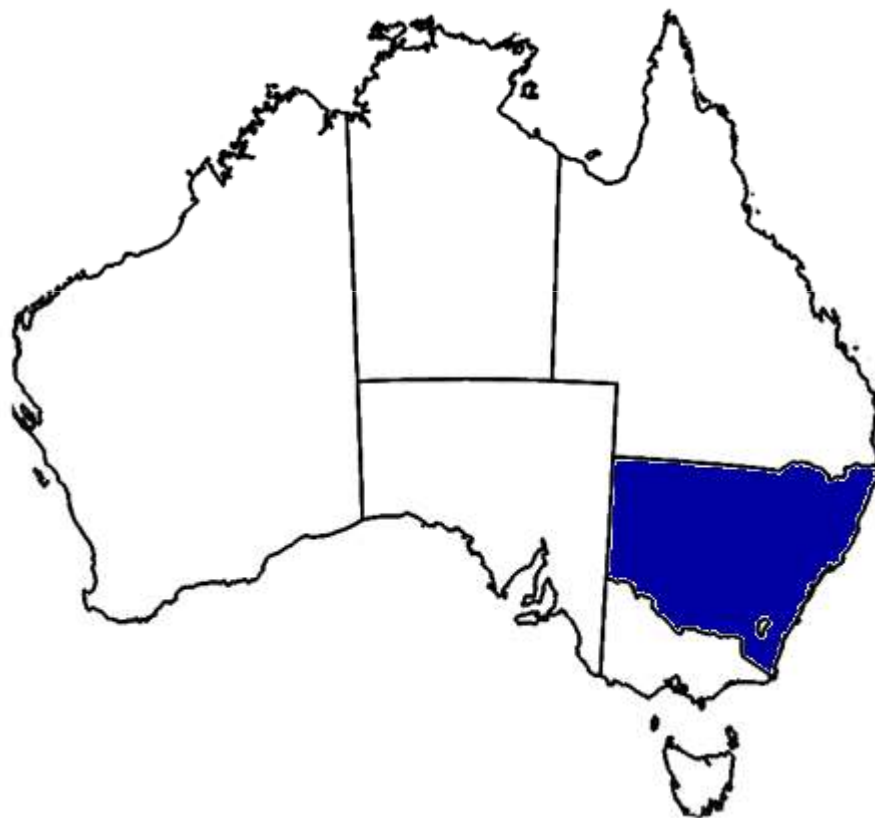


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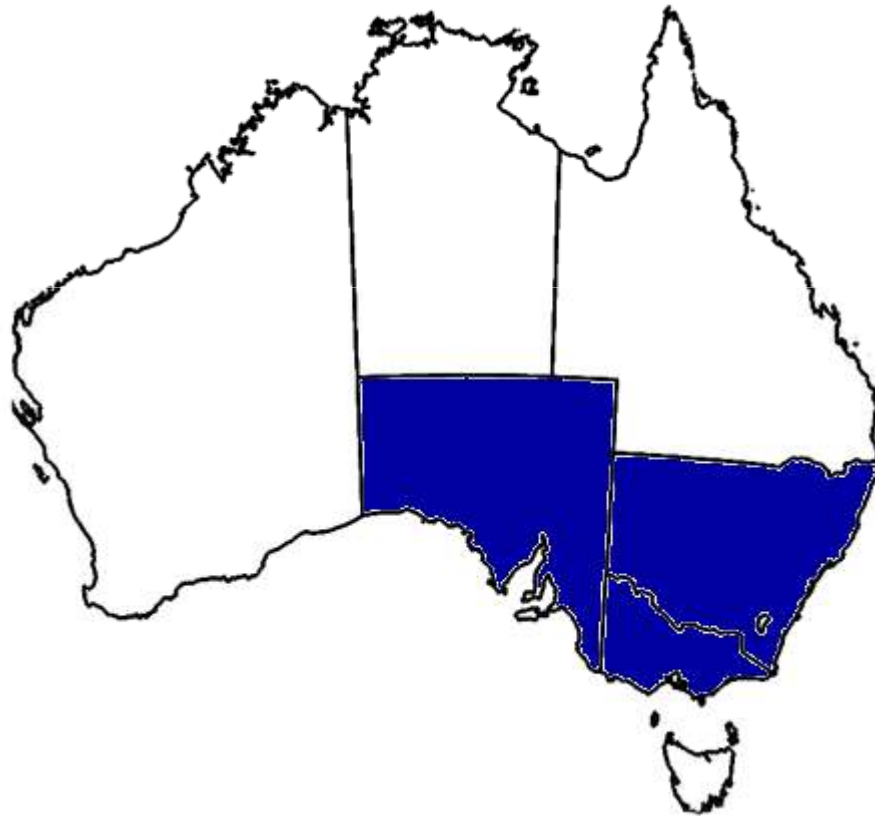
In **1848** NSW Governor Charles Fitzroy was advised by Secretary of State for the Colonies in London, Earl Grey, that one uniform rail gauge should be adopted in Australia, this being 1,435 mm (4 ft 8+1/2 in) standard gauge (English).



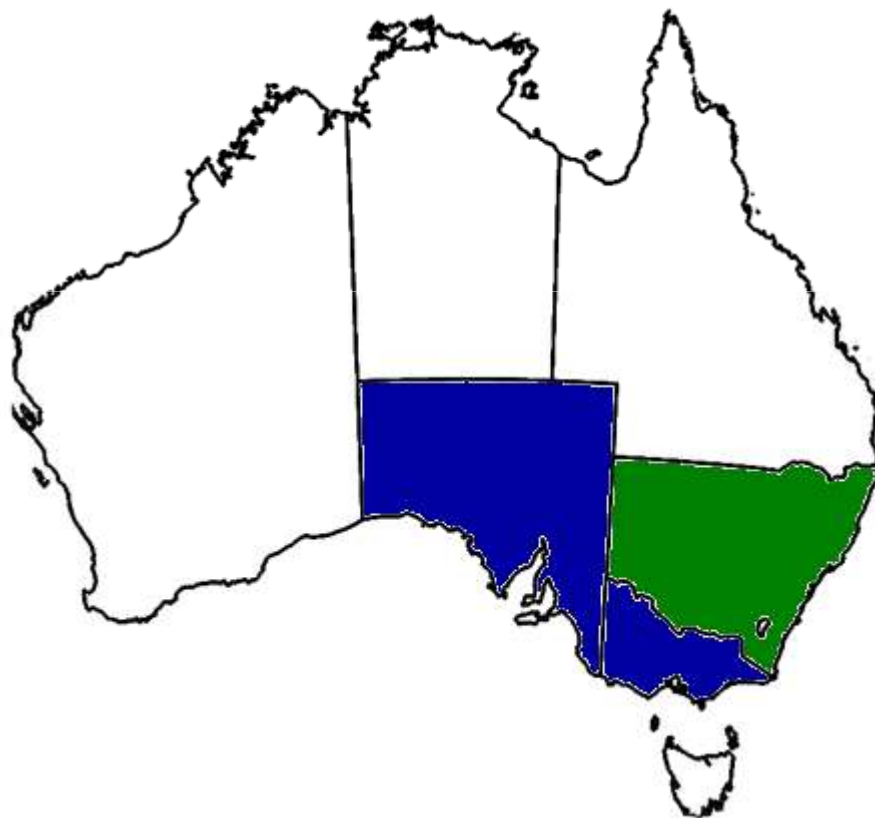
The chief engineer of the Sydney Railway Company was Irish-born Francis Webb Sheilds, who persuaded the company and the NSW legislature to adopt the 1,600 mm (5 ft 3 in) Irish standard gauge instead. This decision was endorsed by the NSW Governor and Secretary Earl Grey in London agreed in **1851**.



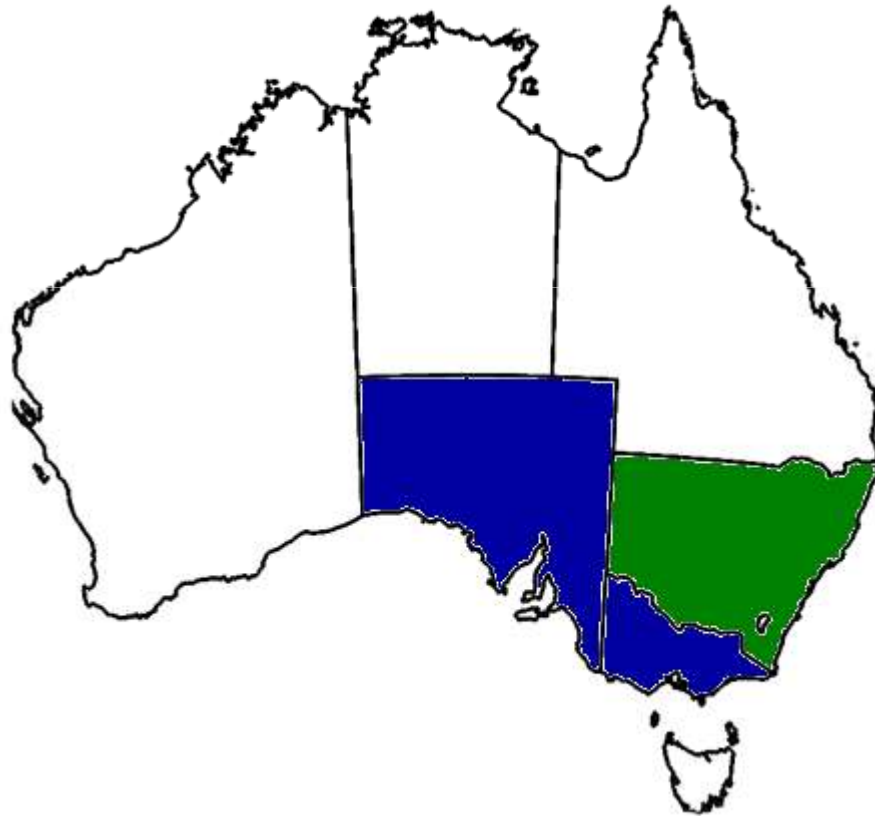
The other colonies also adopted this gauge, with the Victorian Railways opening a line in **1854**, and the South Australians using it on their first steam hauled railway in **1856**.



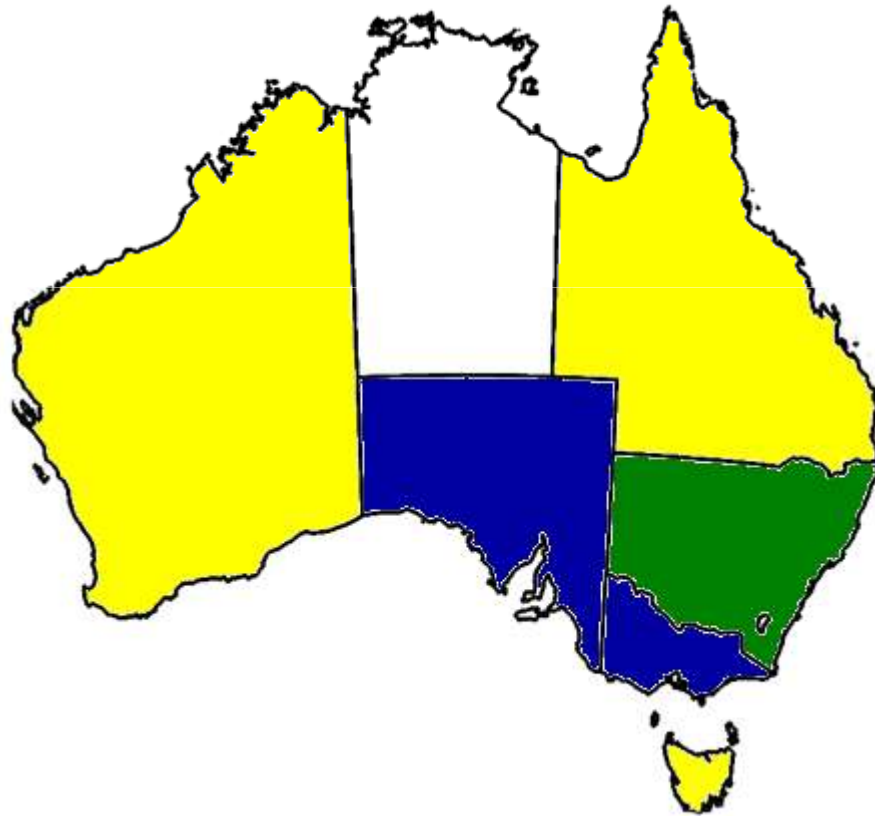
Meanwhile, the Sydney Railway Company gained a new Scottish engineer, James Wallace, who preferred standard gauge and convinced the NSW legislature to make the change. NSW Governor William Denison gave the go ahead in **1855**.



Unfortunately New South Wales failed to inform Victoria and South Australia of the change until, *after* the other states had ordered broad gauge rolling-stock. Both states subsequently refused to follow this change.



Queensland's first line opened in **1865**. In order to save money they chose 1,067mm (3 ft 6 in) "narrow gauge". They were subsequently followed by Tasmania and Western Australia.



In **1883** the broad and standard gauge lines from Melbourne and Sydney met at Albury, and in **1888** narrow and standard gauge from Brisbane and Sydney met at Wallangarra.





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Standards

- Narrow
- Standard
- Broad

Implementers

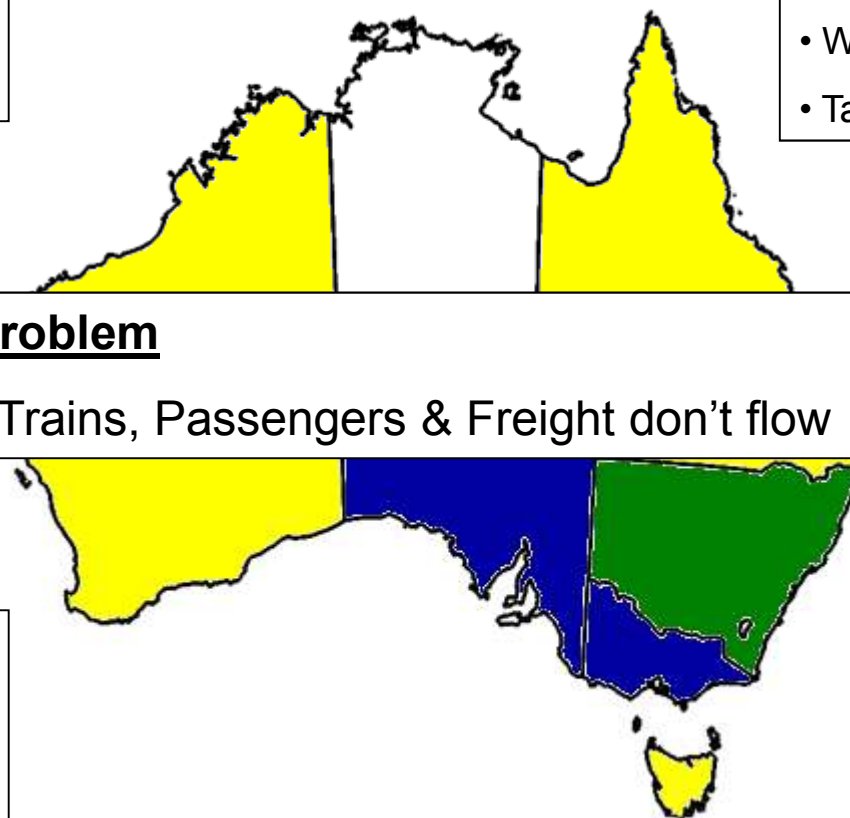
- New South Wales
- Victoria
- Queensland
- South Australia
- Western Australia
- Tasmania

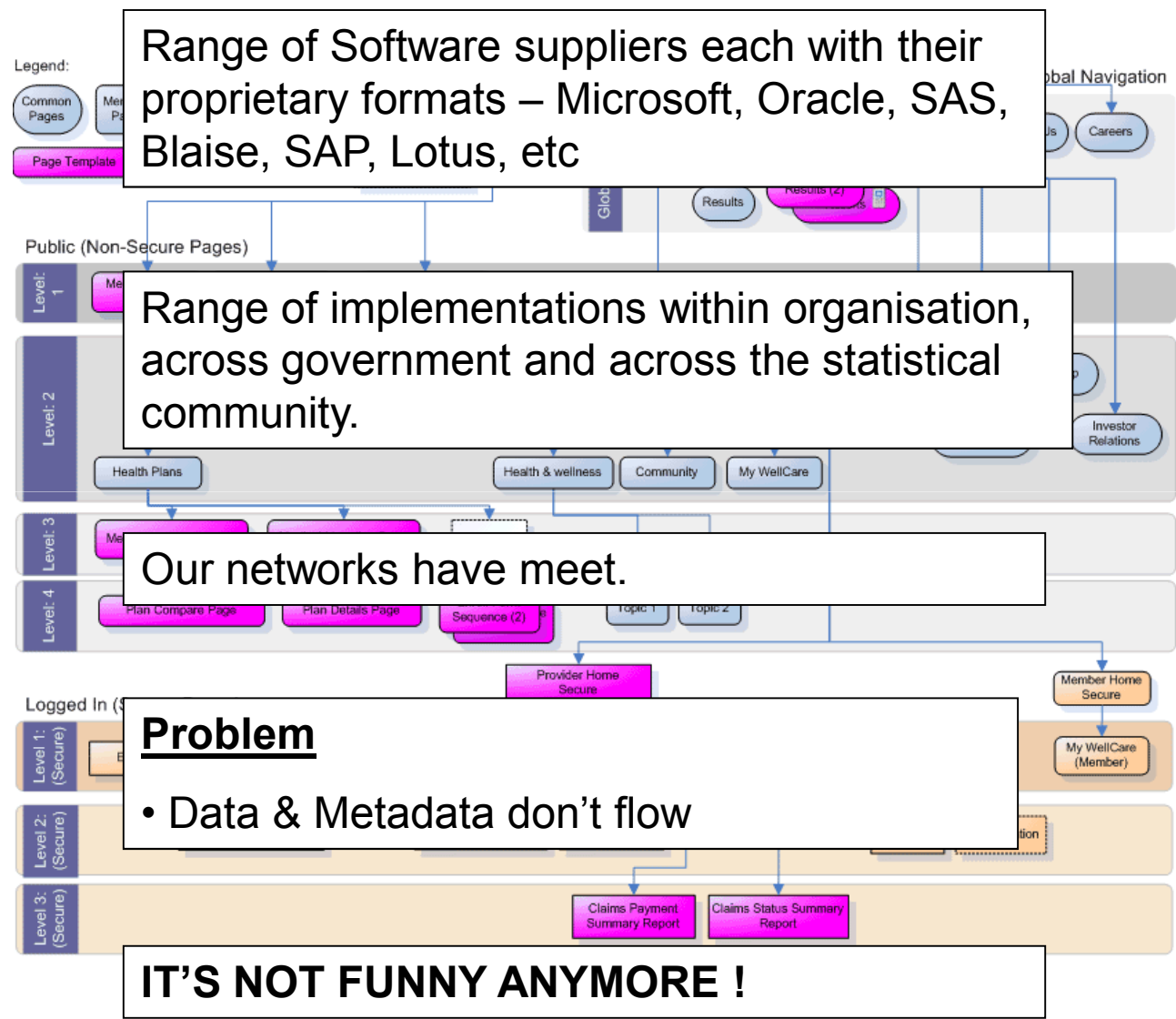
Problem

- Trains, Passengers & Freight don't flow

Suppliers

- England
- Scotland
- Ireland





Standard Gauge for Information

- Is there a standard ?
 - Yes, there are several
- DDI (Unit Record Data)
- SDMX (Aggregate Data)
 - Both XML based
- ANZLIC (ASO 19115)
(Geographical Metadata)

Metadata ?



Labelled Stuff



Unlabelled Stuff

XML

- Created late 90s
- HTML to control presentation
- XML to control content
- Tagging of data

```
<person>
```

```
  <name>Edmund Percival Hillary</name>
```

```
  <sex>Male</sex>
```

```
  <dob>20 July 1919</dob>
```

```
  <dod>11 January 2008</dod>
```

```
  <cob>New Zealand</cob>
```

```
</person>
```

XML

- Why Now ?
- Tagging of data

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- Computers are faster and storage is cheap.

XML Schemas

- Users agree on the “rules” for how they will use XML to exchange information
- Maths – MathML
- Business – XBRL
- Music Playlists – XSPF
- Statistics – DDI & SDMX-ML

Data Documentation Initiative (DDI)

- Started in 1995
- Data archivist & social researchers
- 2000 - DDI version 1.0 published
- 2003 - DDI 2.0 published

Data Documentation Initiative (DDI)

- 2008 - DDI 3.0 published as an XML schema (rules + template)
- Information captured (concepts, classification, questions, coding, derivations)
- 2008+ - Statistical Agencies get seriously interested.

SDMX

- Origins – Bank for International Settlements, European Central Bank, Eurostat, IMF, UN, OECD, and the World Bank.
- Format for statistical returns for aggregated data.
- Version 2.0
- Overlap between DDI & SDMX

So what does this mean for me ?

- Internally
- Externally
- Sharing
 - Architecture
 - Tools

Internally

- Single Source – “Actionable”
- Grows as the process continues
- Controlling your metadata
- Integrating systems

Externally

- Accessing information
 - 10 years ago
 - Now
 - 10 Years time.
- Web Services – evolution of access

Sharing Tools

- We shouldn't have to all build our own versions of applications
- Exposing information via the internet should become a viable option for agencies big and small
- ABS
 - TableBuilder
 - REEM
- SNZ
 - Business Toolbox

Key Messages

- I'm not saying you have to do this
- I am saying "If your going to do it, consider doing it this way."
- Standard Gauge - there for a reason.

Questions

