Australian Government

Geoscience Australia

ANZLIC ISO Metadata Profile: Experiences

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GEO Joint Workshop between data, metadata and products harmonization and data integration and analysis systems.

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What is ANZLIC?

- **Spatial Information Council for Australia and New Zealand.**

- **"ANZLIC's role is to facilitate easy and cost effective access to the wealth of spatial data and services provided by a wide range of organisations in the public and private sectors."**

- **Consists of representatives from: Australian Government, each of the Australian six state and two territory Governments and New Zealand.**

- **Coordinates intergovernmental spatial initiatives and projects.**

- **http://www.anzlic.org.au/**

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Why an ANZLIC Metadata Profile.

- **Recognition of the need to adopt international standards.**

- **Helps implement interoperability.**

- **Prompted by Australian Government, WA and New Zealand ISO Metadata Profiles**

- **Perth and Melbourne ANZLIC metadata meetings (2005-02-11, 2005-02-16)**

- **Resulted in about a 9 person team to develop the profile.**

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Procedures to develop profile.

- **Investigate relevant standards 19115, 19106 and existing profiles.**
- **Adopt these rules.**
- **Develop rules for selecting elements.**
- **Apply rules to elements.**
- **Develop profile document.**
- **Develop XML implementation.**
- **Develop Users Guidelines.**
- **Develop Metadata Entry Tool.**
- **Develop Search System.**

Rules to develop ANZLIC Metadata Profile.

- Apply ISO 19115 and 19106 rules.
- Adopt existing mandatory and conditional elements.
- Make all elements optional.
- Have minimal mandatory elements.
- Recognise for all resources and not just "datasets".
- If an element can be used in any scenario then don't exclude it.
- Don't mix business rules into profile.
- Business rules can be applied by application.
- Core metadata is important but only for "datasets".
- Minimal changes to ISO 19139 XSDs.
- Use Schematron to implement profile.
- Need to convert from one metadata standard to another using XSLT.

ANZLIC Metadata Profile.

ISO Elements

ANZLIC Dataset Core

ANZLIC Mandatory elements

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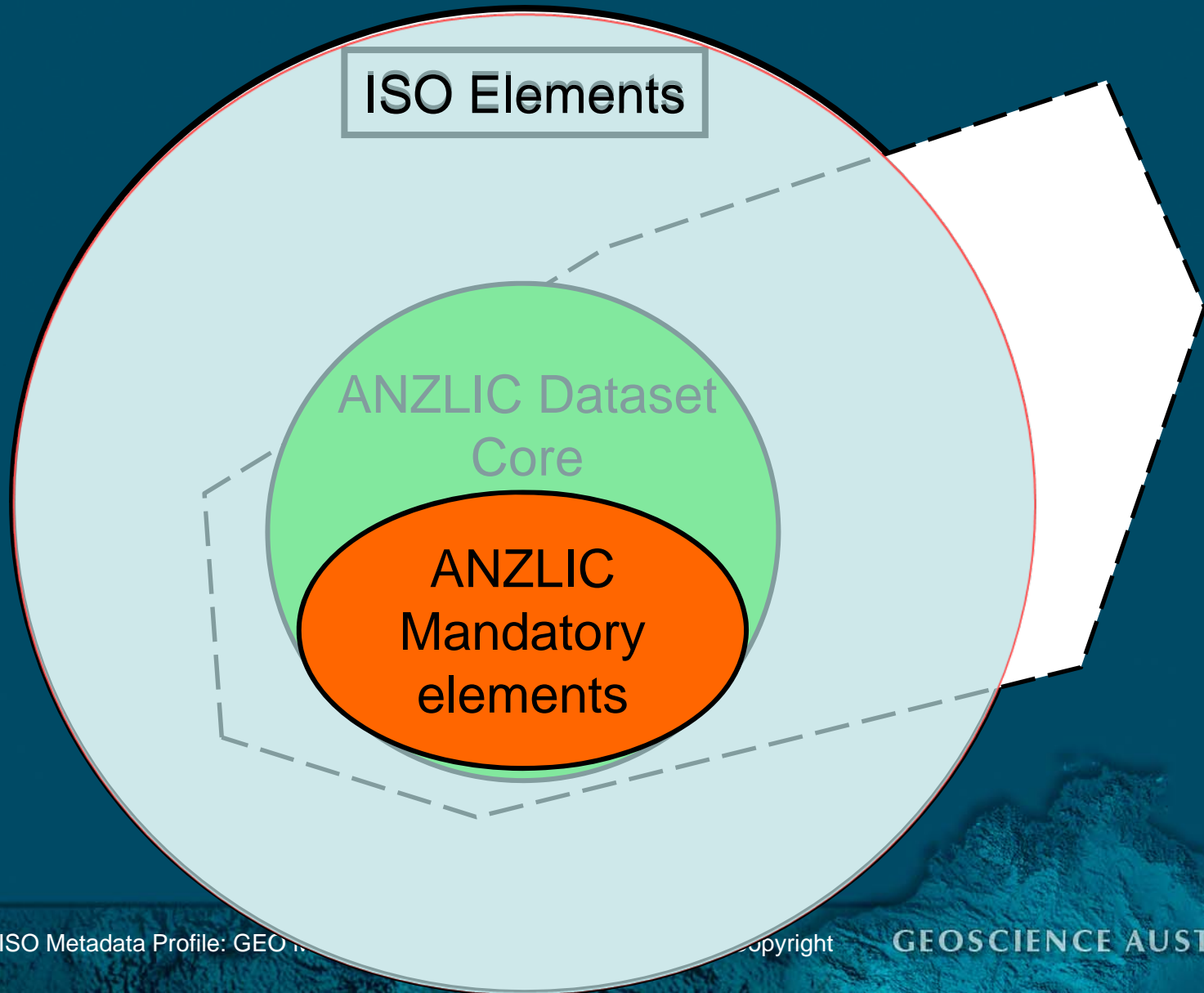
Differences between ANZLIC and ISO 19115

- **fileIdentifier is mandatory:**
  - to identify duplicate metadata records,
  - to allow child metadata to have content in their parentIdentifier element.
- **parentIdentifier is core.**

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XML Implementation.

- ANZLIC XML includes:
  - ISO 19139 XSDs and CT_Catalogue resources.
  - Schematron to implement the ISO 19115 conditional statements,
  - CT_Catalogue XML for the ANZLIC Search words.
  - CT_Catalogue XML for each of the ANZLIC Geographic Extent Name category lists.
  - Schematron to implement ANZLIC Metadata Profile,
  - Schematron to validate the code list values against the code lists,
  - XSL to translate ANZLIC V2 XML to Profile XML.
- Available from http://asdd.ga.gov.au/asdd/profileinfo/

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Status of the ANZLIC Metadata Programme.

- **Profile (endorsed by ANZLIC Council 2006-12 and 2007-08). It contains:**
  - **ANZLIC Metadata Profile document.**
  - **XML to implement ANZLIC profile.**
- **ANZLIC Metadata Guidelines:**
  - **UML, element definitions, examples, etc.**
  - **Only has mandatory, conditional and core elements.**
- **Metadata Entry and Search Tool (GeoNetwork)**
- **ANZMET Lite - wizard type Metadata Entry Tool.**
- **GeoNetwork pilot for Australian Spatial Data Directory (ASDD)**
- **Translate ASDD nodes' metadata to profile (mostly done)**
- **Replace ASDD with GeoNetwork (to do)**

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Problems to overcome:

- **Educate people about metadata**
- **Forget the old way and think the new way.**
  - **Different types of resources**
  - **Not just for 'datasets'!**
  - **Applicable for all resources.**
- **Understand potential of inheritance.**
- **ISO 19115 "seems" complex but it isn't (UML)**
- **Must understand mandatory, conditional and optional obligations.**
- **XML to prove compliance and allows interoperability.**
- **Even the experts learn as they progress!**

What is metadata? What's in this Can?

Different Types of Resources.

- **ISO 19115 currently allows metadata for:**

  - **Attribute, attributeType, collectionHardware, collectionSession, dataset, series, nonGeographicDataset, dimensionGroup, feature, featureType, propertyType, fieldSession, software, service, model and tile.**

- **Code list is extensible. GA has added:**

  - **document, dataRepository, profile, codeList, modelSession and project.**
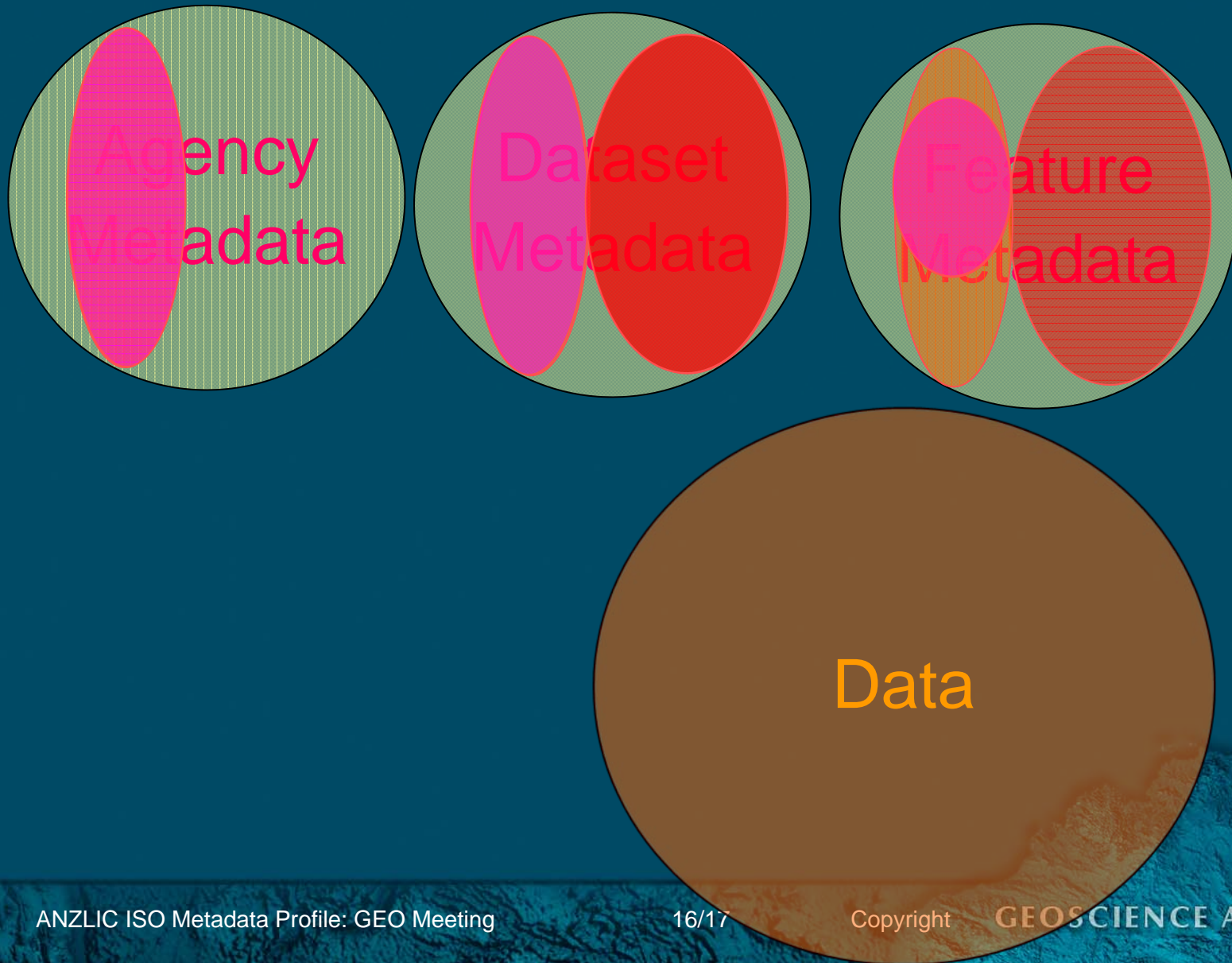
Metadata and Data Inheritance

Extract metadata from data

Make metadata
part of the data process

Metadata

Data

Manually fill in this bit

Metadata Inheritance

Question?

http://www.anzlic.org.au/metadata/

http://www.osdm.gov.au/Metadata/default.aspx

http://asdd.ga.gov.au/asdd/

http://asdd.ga.gov.au/asdd/profileinfo/

http://www.ga.gov.au/