

Australian Ocean Data Network

ANZ Metadata working Group – Meeting #6 Marine Community Profile (MCP) transition to ISO 19115-3

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Background

- Presented to MDWG #4 – June 2019
- Previous work on MCP to ISO 19115-3 mapping
- AODN Contributors Survey - 2019
- Presentation of proposed mappings – AODN TAG November 2019
- AODN Metadata Working Group created
 - 2 meetings (Dec 2019, Jan 2020), + next meeting on Wednesday.

Agenda

- Presentation of proposed element mapping
 - Data Parameters
 - Licencing
 - Revision Date
 - Sampling Frequency
- Presentation of proposed “non-mappings”
 - Temporal Extent – Currency and Temporal Aggregation
 - Taxonomic Coverage
- Presentation of proposed Codelist extension mappings
- AODN GeoNetwork upgrade timeline



MCP 1.4/2.0 to ISO19115-3 Mapping

2015

- “ISO 19115:2003 Marine Community Profile: Future Directions”(Document created by Kim Finney)
 - Distributed to AODN TAG previously

2019

- AODN metadata contributor survey
 - AODN Portal
 - AODN catalogue (and IMOS catalogue)
- AODN produced internal mapping specification
 - Based on “Future Directions” paper, and ANZLIC MDWG
- AODN performed audit of “catalogue-imos” and “catalogue-aodn” to determine MCP element usage
 - MCP elements
 - MCP codelist usage (including codelist extensions)

All contributed to suggested mapping.



MCP 1.4/2.0 to ISO19115-3 Mapping

Content of the AODN metadata contributor survey

- Survey sent out in July 2019
 - Responses received from all (but one) AODN contributors
- Current status of metadata catalogue
 - Harvesting by/from other catalogues
- Current status of metadata standards
- Use of AODN vocabularies
- Future plans
 - Metadata catalogues
 - Mainly interested in GeoNetwork upgrade plans
 - Metadata standards
 - Mainly interested in plans to transition to ISO19115



MCP 1.4/2.0 to ISO19115-3 Mapping

Data Parameters – mapping

MCP Elements	ISO 19115-3 Elements	Comments
Parameter name and Platform	MD_Identification Keyword and thesaurus name	Required to provide Portal functionality Parameter recommended for all metadata
Units of measure and Instrument	MD_Identification Keyword and thesaurus name	Optional
Parameter name, Units of measure, min/max values, definition	MD_SampleDimension <ul style="list-style-type: none">Parameter name paired with other elements	Optional Captures relationship
Platform and Instrument	MI_AcquisitionInformation <ul style="list-style-type: none">Simply listed, no nesting (IMOS)OR Nested	Optional Can capture relationship

AODN Contributors affected – all Portal contributors + IMAS, AIMS and NIWA (catalogue)



MCP 1.4/2.0 to ISO19115-3 Mapping

MD KeywordTypeCode codelist

- Discipline, place, stratum, temporal, theme, datacentre, featureType, instrument, platform, process, project, service, product, subTopicCategory, taxon.

Approaches (reference Evert Bleys)

1. Publish the “parameter” codeListValue as part of your community

As part of your community profile you need to define what a “parameter” is.

Refer to the lists of codeListValues in ISO 19115-1 as a template.

Use the form used in schemas.isotc211.org to extend the existing list, your community only needs to publish the single element.

When using the "parameter" in thesaurusName use your URL for the codeList attribute

2. Extending the codeList in ISO 19115-1

When ISO 19115-1 is considered for review, Australia will need to be willing to have experts word on the review as editors.

If there is a international acceptance that the standard needs amending (probable): the development of the amendment will take about 3 years.



MCP 1.4/2.0 to ISO19115-3 Mapping



Linkage of SampleDimension and AcquisitionInformation

- Simon Pigot proposal at last meeting

```
<mrc:attribute>
```

```
<mrc:MD_SampleDimension>
```

```
<mrc:name>....
```

```
<mrc:maxValue>...
```

```
etc
```

```
<mrc:otherProperty>
```

```
<gco:Record xsi:type="mac:MI_AcquisitionInformation_PropertyType">
```

```
<mac:MI_AcquisitionInformation>
```

```
</mac:MI_AcquisitionInformation>
```

```
</gco:Record>
```

OR (less desirable for those that don't support xlink):

```
<gco:Record xlink:href="link to acquisition info"/>
```

```
</mrc:otherProperty>
```

MCP 1.4/2.0 to ISO19115-3 Mapping

Licensing

MCP Elements	ISO 19115-3 Elements
MD_Commons	MD_LegalConstraints
jurisdictionLink : URL	citedResponsibleParty: CI_Responsibility
licenseLink : URL	reference : CI_Citation
imageLink : URL	graphic : MD_BrowseGraphic
licenseName : CharacterString	reference : CI_Citation
attributionConstraints : CharacterString	otherConstraints : CharacterString
otherConstraints:CharacterString	otherConstraints : CharacterString

AODN Contributors affected – all

MCP 1.4/2.0 to ISO19115-3 Mapping

Revision Date

MCP Elements	ISO 19115-3 Elements
MD_Metadata	MD_Metadata
revisionDate : DateTime	dateInfo: CI_Date (value=revision)

AODN Contributors affected – all



MCP 1.4/2.0 to ISO19115-3 Mapping



Sampling Frequency

- Intention – was added to capture information about the frequency with which a data resource has been sampled.
- 2015 suggestion to map to SampleDimension otherPropertyType: Recordtype
- TBD at next AODN MWG – mapping. Defined as "smallest resolvable temporal period in a resource"

Sampling Frequency	ISO 19115-3 Element
MD_MaintenanceFrequencyCode codelist	
Continual, daily, weekly, fortnightly, monthly, quarterly, biannually, annually, asNeeded, irregular, notPlanned, unknown, hourly*	mri:temporalResolution Period duration - years, months, days, hours, minutes, seconds

AODN Contributor affected – IMAS, AIMS

MCP 1.4/2.0 to ISO19115-3 Mapping

Temporal Extent

- Currency

Intention – “to describe the temporal currency of the resource”

Currency Entire codelist MCP	AODN contributors affected (identified by audit)
mostRecent, historical, predicted, unknown	IMOS, IMAS (+RLS), e-Atlas

- Temporal Aggregation

Intention – “to describe the temporal aggregation of the resource”

Temporal Aggregation Entire codelist MCP	AODN contributors affected (identified by audit)
None, day, multi-year, year, month, multi-month, week, multi-day, three-day, six-day	IMOS, IMAS (+RLS), e-Atlas

We are proposing to **NOT** map this information to an element in ISO 19115-3. Ensure information is captured elsewhere in metadata.



MCP 1.4/2.0 to ISO19115-3 Mapping

Taxonomic Coverage

- Intention – this class was introduced to accommodate the taxonomic description of biological datasets, with its primary function to enable the encoding of the taxonomic coverage of biological datasets.
- We are proposing to **NOT** map this information to an element in ISO 19115-3. Ensure information is captured elsewhere in metadata.

AODN Contributors affected – none



MCP 1.4/2.0 to ISO19115-3 Mapping

Codelist extension – RoleCode

ISO 19115 with MCP2.0 extension	Suggested MCP -> ISO 19115 mapping
CI_RoleCode	
coinvestigator	collaborator
licensor	rightsHolder
researchAssistant	collaborator
IPowner	rightsHolder
moralRightsOwner	rightsHolder
metadataContact	pointOfContact

AODN Contributors affected – IMAS, CSIRO, AAD, e-Atlas, AIMS

MCP 1.4/2.0 to ISO19115-3 Mapping

Codelist extension – ScopeCode

ISO 19115 with MCP extension	Suggested MCP -> ISO 19115 mapping
MD_ScopeCode	
observed	LI_Lineage
derived	LI_Lineage (IMAS since removed)
publication	document
dataObject	dataset?
project	initiative

There is not a clean mapping available for ‘observed’, ‘derived’, or ‘dataObject’.

AODN Contributors affected – IMAS, CSIRO



MCP 1.4/2.0 to ISO19115-3 Mapping

Codelist extensions – mapping not required

- MD_MaintenanceFrequencyCode – due to suggested mapping of Sampling Frequency

MCP Codelist – mapping not required

Due to suggested retirement' of elements in EX_TemporalExtent

- MD_CurrencyTypeCode
- MD_TemporalAggregationUnitCode

Due to loss of dataParameter element

- DP_TypeCode
- DP_RelationshipTypeCode

Due to change in Licensing element

- CommonsTypeCode



MCP 1.4/2.0 to ISO19115-3 Mapping

Summary of recommendations

Suggested ISO19115 mappings

- Data Parameters – optional bundling in SampleDimension and AcquisitionInformation
- Licensing
- Revision Date
- Sampling Frequency

Suggested ISO19115 codelist extension mappings

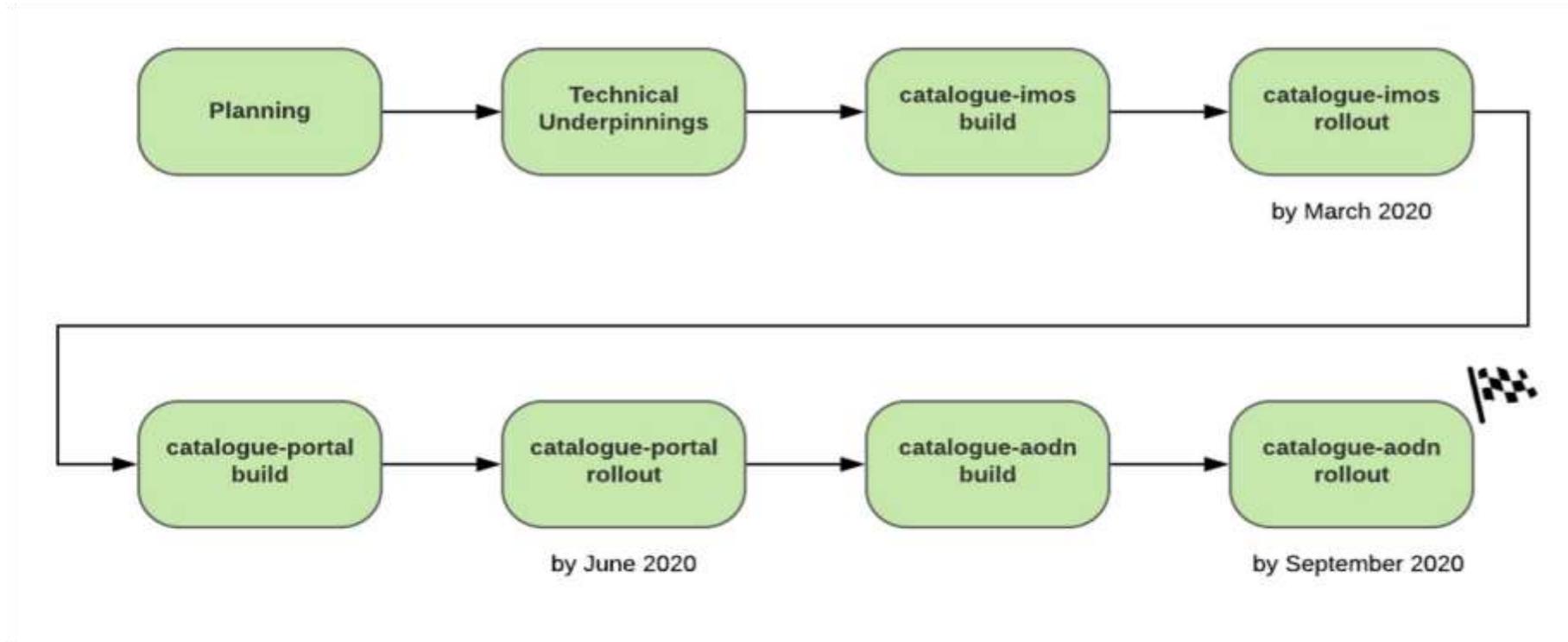
- RoleCode
- ScopeCode

No ISO19115 mappings (and associated codelists)

- Temporal Extent – Currency and Temporal Aggregation
- Taxonomic Coverage



GeoNetwork 3



January 2020 - Timeline shifted 2/3 months





Thank you !!!



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